AGRARIAN REFORM IN SYRIA

1958-1973

by

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ABSTRACT

This thesis studies agrarian reform in Syria from 1958 to 1973, examining the hypothesis that the reform has been used by successive governments to impose a new political and economic structure on the country. One particular province, Hama, is studied in detail.

The first chapter outlines the political and economic developments that led up to the agrarian reforms in 1958.

The second chapter is concerned with the land ownership structure in Syria in 1958 and the extent to which inequalities in land holdings existed.

The third and fourth chapters deal with the provisions of the agrarian reform laws. Modification of the laws resulting from changes of government and the implementation of the laws are also studied.

The development of planning and state control of the agricultural sector is dealt with in Chapter five. In this chapter the extent to which planning and investment has been integrated with the agrarian reforms is also studied.

In Chapter six the development of agricultural production from 1958 to 1973 is discussed in the context of the agrarian reform laws and agricultural planning and investment.

Chapters seven, eight and nine deal with the agrarian reform in the province of Hama. Chapter seven is concerned with the expropriation and distribution of land.

In Chapter eight the setting up of co-operatives and the work of the Agricultural Co-operative Bank is studied.

Chapter nine contains a study of the Ghab irrigation scheme in the province of Hama and also includes a detailed study of the development of agricultural production in the province.

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Finally I must record my gratitude to relatives and friends who encouraged and helped me to produce this thesis.

GLOSSARY

Bedu/beduin	:	Arab from the desert, usually a keeper of livestock.
Egyptian pound (L.E.)	:	In 1960 L.E. = approximately L.S. 7.50 (see below).
Jebel	:	Mountain or hill.
Mantika	:	Administrative sub-division of a province.
Mohafazat	:	Province.
Mukhtar	:	A village headman.
Musha	:	A form of communal land ownership by a village involving annual redistribution of land holdings.
Nahiya	:	Administrative sub-division of a mantika. A village area.
Noria	:	Roman water wheel.
Syrian pound (L.S.)	:	In 1960 £1 = approximately L.S. 10.

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INTRODUCTION

This thesis is an attempt to describe and analyse the agrarian reforms in Syria between 1958 and 1973. In Syria, as in many other countries in the Middle East, the ownership of land has been a most important element in the political and economic control of the country. From 1945 to 1958 the traditional ruling oligarchies of landowners owned the land and therefore dominated political, economic and social life of the country.

However, in 1958 the union with Egypt resulted in the hold of the landowners on the political and economic life of Syria being broken. The agrarian reform that accompanied the union was the principal means through which the new regime, controlled from Egypt, tried to achieve this. Successive regimes after 1958 saw land ownership and the agricultural sector as the most important element in their own control of the political and economic life of the country. Throughout the thesis the overriding importance of the political aims and consequences of the policies in the agricultural sector of successive governments will be stressed.

In the first part of the thesis the political and economic developments in Syria prior to 1958 will be outlined. In the period up to 1956, the expansion and prosperity of the agricultural sector continued and despite interventions by the military in government and some pressure for agrarian reform from Leftist groups the large landowners and businessmen maintained their domination of the political and economic life of the country.

After 1956 the rapid growth of the Syrian economy, particularly the agricultural sector, slowed down. The inadequacies and inequalities in the

sector therefore became more obvious at the same time as political and military events elsewhere in the Middle East gave encouragement and impetus to Leftist and revolutionary forces. The combination of these factors will be examined in order to present the political and economic situation in Syria when the first major agrarian reform laws were promulgated.

In the second chapter the land ownership structure of the country in 1958 will be outlined and an assessment made of the extent to which the land ownership reflected the inequalities of land holdings and incomes and the predominance of the powerful oligarchies. The argument that a small number of land owners dominated land ownership, and that there was a large, landless, underemployed rural population and wide disparities in incomes will be put forward. At the same time the lack of detailed knowledge about land ownership and the absence of trained manpower or an economic and institutional infrastructure on which to base a rapid and radical agrarian reform will also be outlined.

In the third and fourth chapters the provisions of the agrarian reform laws will be described in detail. The argument that the reforms were fundamentally political in nature will be put forward and the analysis of a number of aspects of these reforms will be made to substantiate this. This will include a study of which individuals and families were the main targets of the early expropriations. It will also include a comparison of the legislation with that of the Egyptian agrarian reforms. It will be argued that the agrarian reforms closely followed those of Egypt but because of the different agricultural and tenurial conditions in Syria produced a far more radical and disruptive agrarian reform with serious political and economic consequences for the country.

In the third and fourth chapters the political struggle between the political factions in Syria from 1958 to 1963 and the associated conflict over the agrarian reforms will also be outlined. It will be argued that the further radicalization of the reform laws in 1963 and the provisions made to prevent landowners from regaining their lands or participating in the state sector were politically motivated. It will also be shown by a study of the distribution of expropriated and state land that the state was unable to carry out the agrarian reforms on schedule or to cope with the financial and manpower demands of the reforms.

The failure of the government to provide trained manpower, but instead to set up the General Union of Peasants and the Co-operative Union, both political organizations, will be put forward as further evidence of the political priorities of the agrarian reforms.

In Chapter V the development of planning and state control of the economy in Syria will be examined. This will be with particular reference to the agricultural sector and the way in which planning and investment has been integrated with the agrarian reforms will be studied. It will be argued that, as in the agrarian reforms, the consolidation of the government's political position and prestige was the principal factor in the allocation of investment funds rather than the expressed aims of full employment, the rapid growth of production and the development of socialism. The analysis of the investments in the agricultural sector will show that an overwhelming commitment to large scale, prestige projects such as the Euphrates scheme was at the expense of many essential but small scale and unglamorous investments in local projects, the provision of working capital and research and training.

The shortfalls in investment and delays in implementing the large scale projects, reflecting failures in the governments chosen policy priorities, will be analysed.

The role and performance of the Agricultural Bank will also be studied in Chapter V. The dual political and commercial role of the Agricultural Bank will be assessed and an analysis of the provision of credit through the Agricultural Bank will show the difficulties the government created for itself in the economic sphere by the political nature of the agrarian reforms. It will be shown that investment in the Agricultural Bank failed to reach planned levels and that a large and expectant sector of smallholders demanding credit and assistance from the government was created but the government was unable to supply the credit and support required.

In Chapter VI the development of agricultural production from 1958 to 1973 will be analysed. Planned increases of production in each of the five year plans were laid down and it was essential that production increased in order to raise income and help finance agricultural projects. It will be argued that the planned increases were unrealistic, that the planned consolidation and intensification of the cultivated area did not take place and that the diversification of production, essential to supply industries based on agricultural raw materials did not take place either. With the shortfalls and failures in planned levels of investment and production it became evident that essential alterations were needed to both the agrarian reform laws and investment policies. However, these could not be carried out for political reasons. It will be argued that instead the government attempted to recoup its very substantial losses in the agricultural sector by cutting back on investment and developing monopoly controls in the pricing and marketing of agricultural products.

In Chapters VII, VIII and IX a detailed study of the agrarian reforms and agricultural policies in one province, that of Hama, will be undertaken. The province of Hama, in the main agricultural belt of central Syria, includes a cross section of areas of different agricultural conditions. It was also an area dominated by the landowning oligarchies and therefore affected by the agrarian reforms.

In Chapter VII a study of the expropriations re-emphasises the political motivation of the reforms. It will also be argued that the radical nature of the laws meant that many smaller families which might otherwise have supported attacks on the position and power of the largest landowners were also affected.

Following the expropriations, evidence will be submitted to show that the distribution of expropriated and state land and the setting up of co-operatives lagged behind the expropriations. The lack of trained manpower and inadequacy of the institutions to deal with such a radical reform, it will be argued, were problems that were set aside for political considerations when the reform laws were enacted.

The distribution of expropriated and state land has led to further conflict between the government and the beneficiaries, those to whom the government has looked for political support. Governments of the Baath in particular have sought to exert an increasing control over cultivation in the state sector, aiming eventually towards the setting up of state run farms in all such land. Smallholders and beneficiaries of the reforms have been determined to retain their right to private land ownership and operation and have obstructed the attempts of successive governments to impose their

policies in this area. The way in which this has occurred and its effects on government policy and the performance of the agricultural sector will be examined in detail.

In Chapter VIII the setting up of co-operatives and the financing of the agricultural sector over the period of the agrarian reforms will be studied. It will be argued that the co-operatives were set up long after land had been expropriated and distributed in most cases. Furthermore, the quality of services and management offered by the co-operatives was inadequate. As a result the attempt to introduce co-operative planning and working of this sector of agriculture was unsuccessful. Progress in the co-operatives was restricted by the subsequent suspicion and disillusionment of both government and beneficiaries of land.

Associated with the difficulties in the co-operative sector has been the problem of the financing of the agricultural sector through the Agricultural Co-operative Bank. While the bank was set up to take over the financing of the agricultural sector from private hands it will be shown that poor management and insufficient funds resulted not only in a continuing role for non-institutional sources of credit but also serious problems of debt for the bank itself.

In Chapter IX a large scale irrigation scheme, the Ghab, will be studied in order to assess the settlement and investment policies associated with the agrarian reforms. It will be suggested that the large scale investment in the scheme was insufficient and that a number of small scale investments to complete various aspects of the scheme would have greatly increased productivity and therefore income to both the state and the cultivators. It

will also be shown that, despite detailed proposals by agricultural specialists of both the United Nations and the Ministry of Agriculture and Agrarian Reform, the settlement of the Ghab area was determined largely by political considerations. The failure to redistribute land since settlement or re-organize the co-operative cultivation has also been the result of the priority given to political considerations by successive governments.

In Chapter IX an analysis of the development of production in the province and in the four mantikas, Hama, Salemiya, Massiaf and Ghab will also be made. In each mantika agricultural conditions vary and the agrarian reforms and investment in agriculture have faced differing problems. However, it will be argued that in all these areas little significant improvement has been made in the consolidation of land or the intensification and diversification of production. Failure in these aims reflects the failure so far of the agrarian reforms and the associated investments in the agricultural sector.

Since 1973 there have been a number of further laws and decrees promulgated on agrarian matters, the latest being Decrees Nos. 297 and 31 of May 1980 which introduced further adjustments to Law No. 88. While the new laws and decrees have been important none of them have reflected a change of direction in agrarian policies which have been substantially the same since 1973. Legislation introduced after 1973 is not within the scope of this thesis and has not been studied in it.

CHAPTER I Prelude to Reform 1945 to 1958

(a) The development and growth of the economy

The post-Second World War Syrian economy was characterised by a rapid though uneven growth rate. While this rapid expansion has already been dealt with in a number of works[1], it is worth looking at briefly because the rate and nature of the growth of the economy led to problems in the political and social as well as economic spheres. These problems developed as a result of the particular nature of the growth of the economy, which was controlled by two relatively small groups, who generally confined their activities to the sectors of the economy which engaged their interest.

As economic growth faltered in the mid 1950's, those parts of the economic and social sectors that had been neglected needed serious attention. However, even those sectors of the economy that had been booming showed serious deficiencies which had, to a great extent, been masked by the rapid and successful growth rate.

The small groups that largely controlled the Syrian economy were made up of merchants and businessmen, and the large landowners and landowning families. Although their interests did not always coincide, both in general opposed the development of Public Sector or Civil Service roles in the economy, except in a purely service or regulatory capacity, and had little concern for the development of social services, education or infrastructure, or in fact any investment that would not bring either a rapid and substantial return, an increase in prestige or power, or would involve greater taxation.

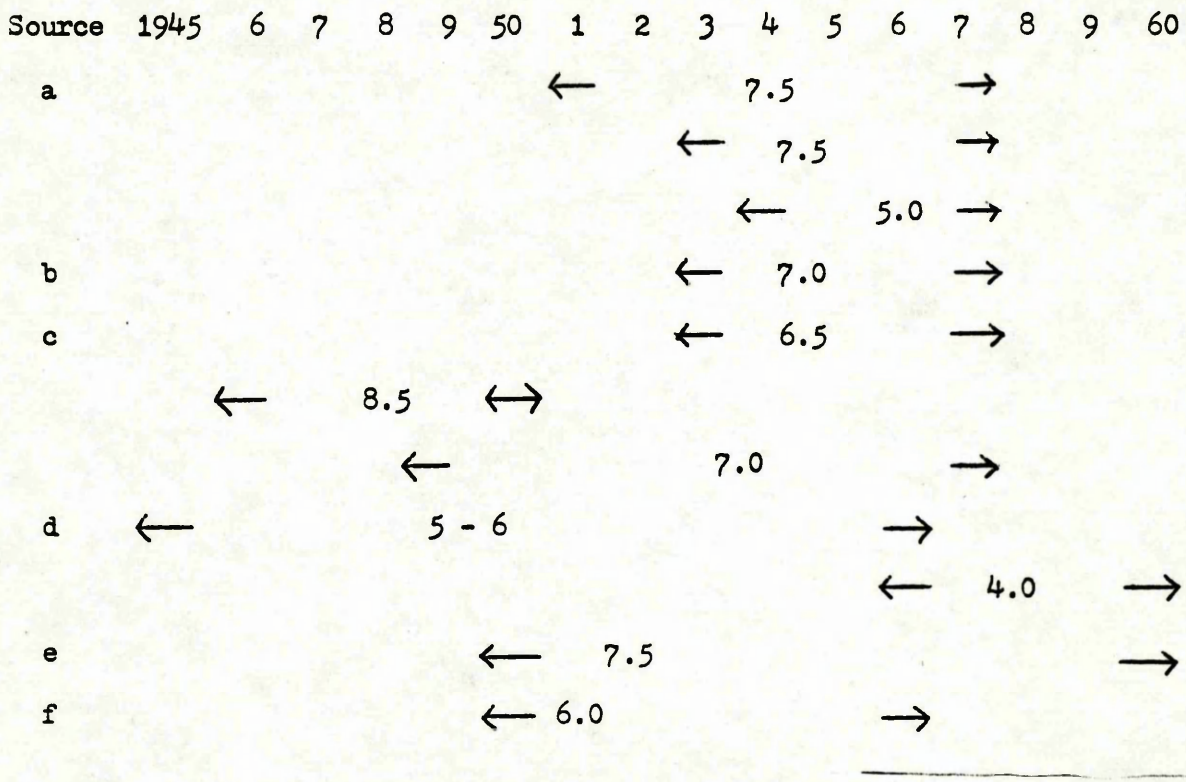
As these groups dominated politics, their political, economic and social position allowed little consideration of reform or change in any of these spheres. Consequently, as the economic expansion of the early 1950's fell away, many serious problems emerged. These included the question of political participation and representation, the lack of social services, the stagnation of agricultural and industrial production and investment, the lack of employment, maldistribution of income and of the ownership of land and deteriorating rural conditions, all of which were growing internal issues.

Attempts to solve these problems were made by the radical and reformist groups that were emerging in Syria and at the time they gained much of their popular appeal from their stand on these questions. But the long and disruptive struggle between the reformists and the traditional ruling groups, although it ended eventually in victory for the former in 1963, exacerbated the economic and social problems and hardships in the country in many ways.

(b) <u>The growth of the National Income</u>

Though statistical information about the economy is extremely poor, various estimates have been made for the 1945-1958 period. Table I brings together some of the estimates of the growth of the National Income of Syria. While the figures are from different sources, it is interesting that despite the inadequacy of the data, most of the sources agree that National Income was growing at between 5 and 7.5%, probably more rapidly than at any time except during the Second World War. They also show that the growth rate began to decline after 1955/6 to perhaps 3 or 4%.

TABLE 1 Percentage growth rate of National Income, 1945-58;
A comparison of estimates



Sources:

a: F.A.O. Mediterranean Development Project, (UAR - Syrian Region), F.A.O., Rome, 1959, p. 43.

b: S. Kaylani, The Role of Agriculture in the Economic Development of Syria, 1948-62, M.A. Thesis, Department of Economics, American University of Beirut, unpublished, 1964, p. 20.

c: S. Makdisi, The Public Sector and Economic Growth, 1945-57, op. cit., p. 42.

d: B. Hansen, Economic Development of Syria. Chapter 7 in Economic Development and Population Growth in the Middle East, Editors C.A. Cooper and S. Alexander, New York, 1972, p. 342.

e: M. Diab, National Income Accounting Practices in Syria, in T.M. Khan, Ed., Middle Eastern Studies in Income and Wealth, London, 1965, pp. 121-134.

f: United Nations Department of Economic and Social Affairs, Economic Developments in the Middle East, Supplement to the World Economic Report, 1954-5, New York, 1955, p. 90.

(c) The growth of the economy by sectors

The agricultural sector played the major part in the growth of the Syrian economy during the 1945-58 period. Not only did it contribute the largest amount to the National Income, but it was also the basis for industrial and commercial activity, the main component of exports, and the major source of employment. The contribution of the agricultural sector as a proportion of total National Income can be seen in Table 2.

TABLE 2 National Income estimates for Syria in millions of Syrian pounds (L.S.) (1956 prices)

	Sector	National Income													
		1953	%	1954	%	1955	%	1956	%	1957	%	1958	%	1959	%
1	Agriculture	824	44	927	43	636	33	936	41	1067	44	702	34	721	34
2	Industry	227	12	246	11	264	14	267	11	288	11	304	15	315	15
3	Building & Construction	60	3	80	4	95	5	98	4	75	3	90	4	79	4
4	Residential Dwellings	116	6	122	5	130	7	137	6	144	6	155	7	163	8
5	Finance	22	1	37	2	41	2	44	2	48	2	46	2	45	2
6	General Government	114	6	117	5	140	7	150	7	157	6	168	8	178	8
7	Transportation & Communication	129	7	142	7	139	7	137	6	124	5	130	6	136	6
8	Wholesale & Retail Trade	270	14	349	16	319	17	375	16	386	16	335	16	320	15
9	Services	130	7	146	7	156	8	159	7	162	7	172	8	175	8
	Total	1892		2176		1920		2303		2451		2102		2133	

Source: Ministry of Planning, Statistical Abstract, 1960, Damascus, 1961 p. 402.

Unfortunately, figures for the pre-1953 period are not really reliable and not comparable to those in Table 2. However, an estimate made by the Ministry of Finance for 1950 and quoted by M. Diab shows agriculture as contributing 44.3% of National Income, industry 10% and real estate and construction 8.3%[2].

(d) Agricultural development

The scale and rapidity of the growth of the agricultural sector from 1945-58 was quite remarkable. It was due to the coincidence of suitable conditions: The availability of land and capital, more or less adequate supply of labour, favourable political and economic conditions, and up to 1955 or 1956, above average rainfall.

Availability of land and labour

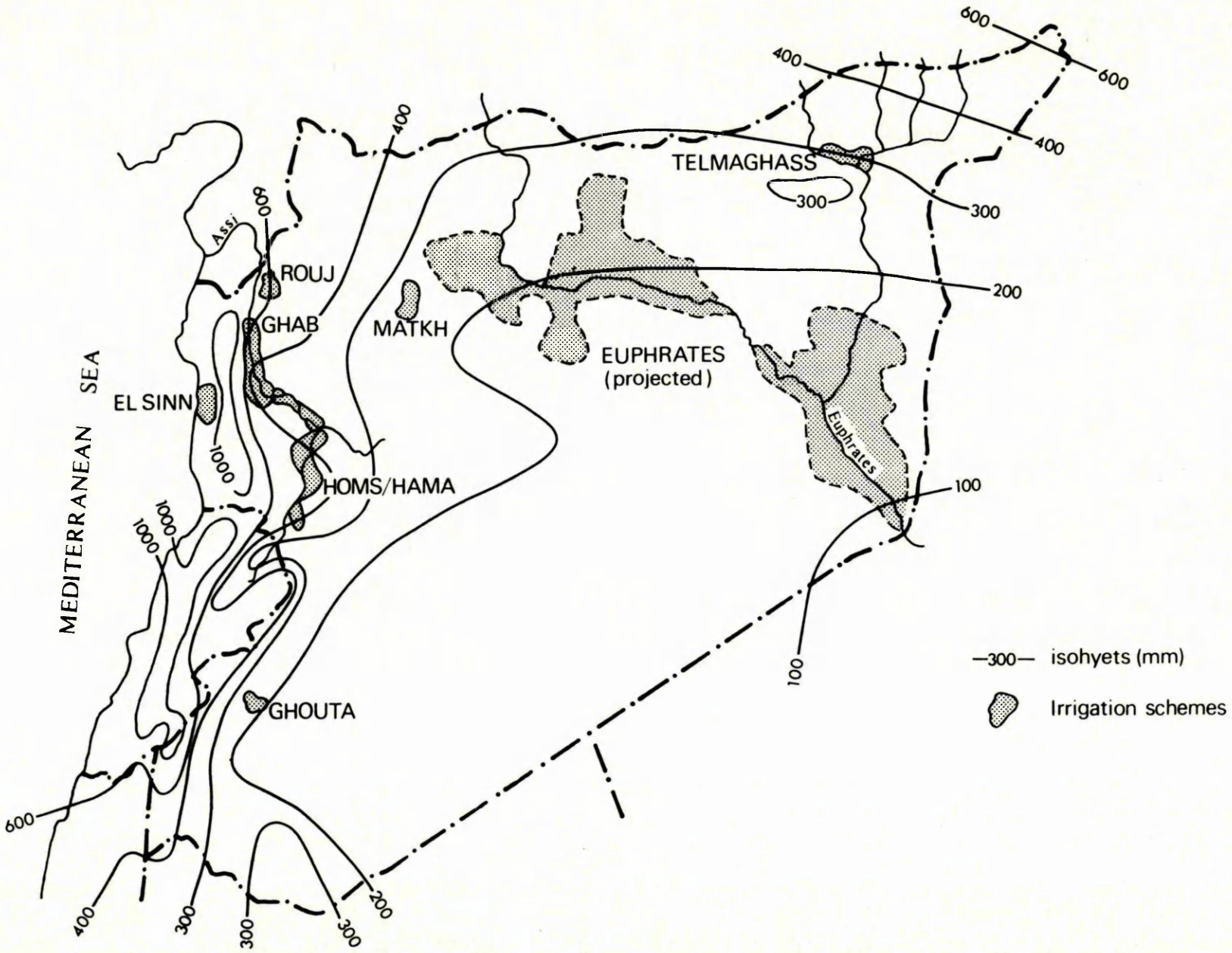
The development of agricultural production took place in the east and north east of the country rather than in the traditional agricultural zones. The latter were concentrated in the high rainfall areas, and in the places where well water was easily obtainable - the Ghouta, the Orontes Valley, and to some extent, the Euphrates and the valleys of its tributaries (see Figure 1). Here actual methods of cultivation changed relatively little, (though this will be discussed later) but new crops, particularly cotton, were introduced.

The expansion of agriculture, however, was possible because there existed further large areas of potentially cultivable land along the Euphrates and its tributaries, and in the interior plains of Homs, Hama and Aleppo. It was based on extensive, mechanised cultivation,

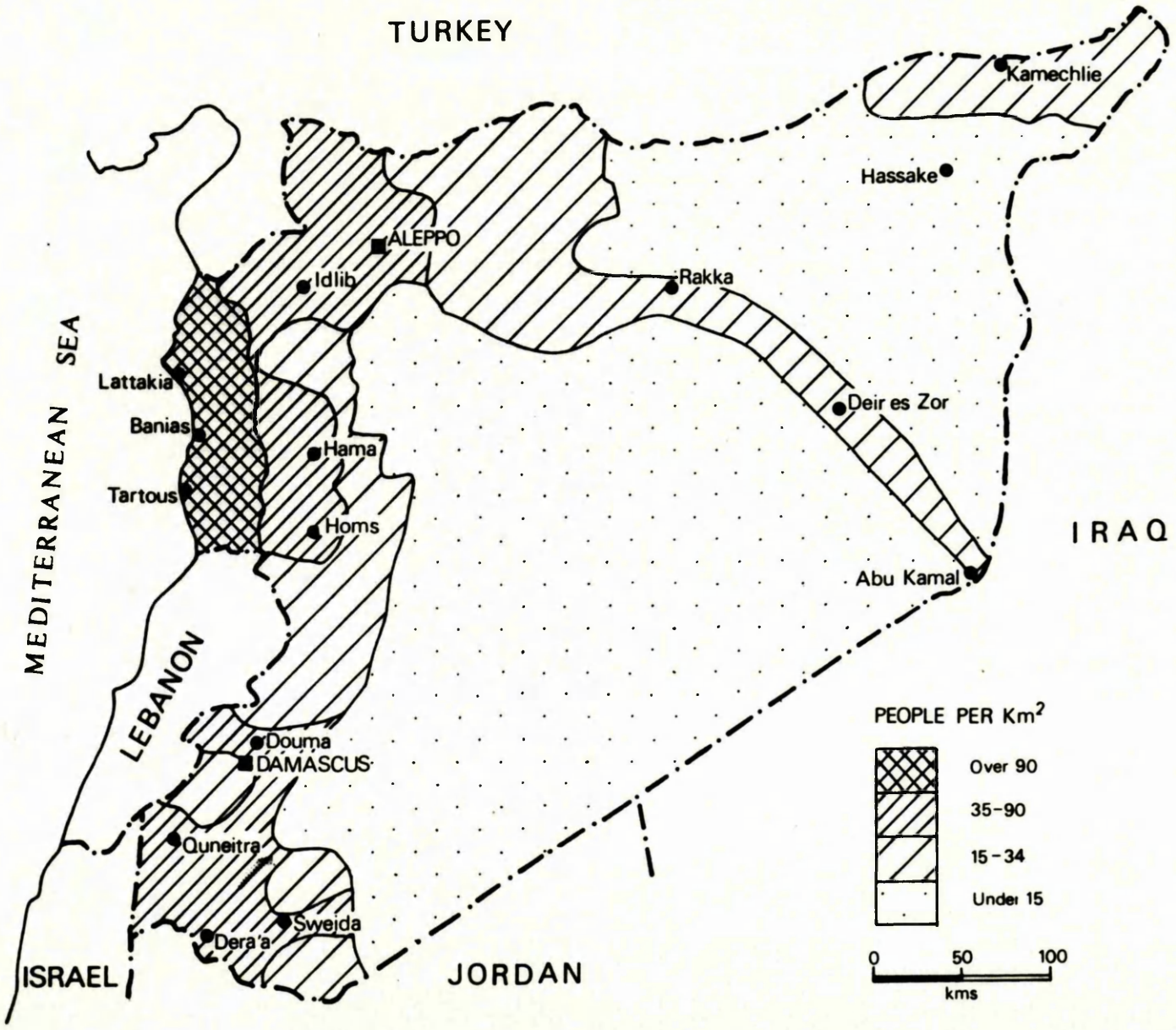
concentrating almost entirely on wheat, barley and cotton. In the immediate post-war period these areas were lightly populated, as can be seen from Figure 2. However, migration from the west and north and temporary employment of agricultural labourers meant that the supply of labour kept up with demand. As Figure 2 shows, changes in the estimated population, as well as the development of cultivation in the north eastern and eastern mohafazats, meant that a major re-distribution of population was going on, and hitherto almost empty areas were being integrated with the national economy.

Availability of capital

The development of the modern agricultural sector, which was largely speculative, was financed largely by merchants and businessmen taking advantage of favourable economic and political conditions. Business skill combined with black marketeering had enabled many of the Syrian business community to profit from the Second World War, which saw a rapid growth of demand leading to a rise in the prices of foodstuffs and clothing. After the war, these profits were used, in part, to finance the production of cotton and grain which offered good opportunities for profitable investment as world prices rose. As land could be easily and cheaply rented from the large beduin land-owners or the state, and labour could be seasonally recruited at fairly low cost around Aleppo or in the west, merchants and businessmen invested in agricultural production on an increasing scale. Many purchased or hired machinery and pumps which were usually easily available on the open market and large numbers of small and medium as well as some large scale operators were responsible for the investment and production of a growing part of the agricultural sector. It is estimated, for instance, that the 1951 cotton crop cost some



MAP 1. Rainfall and main irrigation schemes in Syria.



MAP 2. Population density and main towns in Syria.

LS 200-300 million to cultivate and market and that half to two-thirds of that came from private business and landowning sources, the rest coming from bank loans and from smallholders in the agricultural sector[3].

Indeed, the scale and pace of the expansion of the cultivated area and crop production meant that production of food and raw materials (principally cotton) outstripped population growth, providing a surplus of both that could be put onto the very favourable world market. This occurred in spite of a fall in yields. It has been estimated that the cropped area grew at 5 to 6% per annum from 1945 to 1956, and that value added in agricultural production increased at about the same rate. Table 3 shows how per capita increases in agricultural output occurred over the period.

TABLE 3 Index of per capita changes in agricultural output

		per capita production		
1948	1952/6:	total agriculture	crops	livestock
100		129	139	106

Source: F.A.O., Mediterranean Development Project, (UAR - Syrian Region), op. cit., p. 19.

Importance of the Syrian political atmosphere

The suitable economic conditions were matched by favourable political conditions encouraging a "free enterprise" type of economy within Syria. This is hardly surprising as the political leaders were almost entirely made up of members of the landed or business classes who served their own best interests by the liberal approach to economic activity.

Thus state lands could be easily and cheaply rented, and registration of lands was a mere formality. The import of machinery and other goods was permitted, except after poor harvest years when some restrictions were introduced. In fact, the role of the government of this period was comparable to that played by the Government of the Lebanon. It was concerned to ensure suitable conditions for private enterprise, for instance by the protection of home industries*, taking over to state control some parts of the infra-structure (ports, railways) and setting up a Central Bank, which was essential for the pursuit of an adequate supervisory role in financial matters.

In fiscal and financial matters, the government concerned itself with trying to keep the balance of trade in credit, and trying to finance what limited investments and expenditures it did make largely from internal sources. After 1950, it was not generally able to succeed in the first, as Table 4 shows.

TABLE 4 The balance of trade in Syria, 1951 to 1958, in millions of Syrian pounds

Year	Balance
1951	- 158
1952	- 139
1953	- 86
1954	- 168
1955	- 203
1956	- 174
1957	- 68
1958	- 319

Source: Office Arabe de Presse et de la Documentation, Etude sur le Commerce Exterieur Syrien, Damascus, 1969, p.2

* Tariffs on imports combined the functions of protecting home industries and contributing a large proportion of the Government's income.

The deficit for trade, as for government expenditure, was financed out of a reserve fund, bank loans, and later, foreign loans. However, though sometimes with some difficulty, the government managed to achieve economic stability through this period of rapid economic growth as far as price inflation was concerned, at least till 1956[4].

(e) Other sectors of the economy

In this political and economic atmosphere, industry and commerce flourished. Both were closely connected to the agricultural sector and dependent on it, partly because most industries were based on agricultural raw materials, but also because a large part of the profits from agriculture went into commerce and industry, though construction as well.

Industry, though of course starting from a low base, grew very rapidly after the war, stimulated by the high prices for industrial products, the lack of supplies from traditional suppliers and the desire and capability of local private investors to invest[5]. Table 5 shows the growth rate over the period.

TABLE 5 Change in Industrial Production: Index of Value Added in Industry

1950	1953	1956
69	100	154

Source: F.A.O., Mediterranean Development Project, (UAR - Syrian Region), op. cit., p. 28.

Imports of industrial machinery reached a peak in 1951, and private enterprise was responsible for setting up a large number of small and medium sized firms. Most of these were closely linked with agriculture; between 1945 and 1953, the number of cotton ginneries rose from 30 to 110, and in fact cotton and food processing dominated the industrial sector, as Table 6 shows.

TABLE 6 Distribution of value added in industry in 1950 in millions of Syrian pounds and percent

	Value	Percent
1. Textiles	58.0	46
2. Food Industries	35.5	28
3. Shoe making	6.0	5
4. Carpentry) Blacksmithing)	6.0	5
5. Others	19.5	21
	125.0	100

Source: M.Diab, National Income Accounting Practises in Syria, op. cit., p. 32.

Commerce, too, was also dependent on agricultural products, machinery and supplies, or goods connected to or derived from agriculture. In 1950, an estimated 13.3% of the National Income of Syria derived from trade alone, 42.2% of which came directly from trade in agricultural production. This excludes other commercial fields such as trade in supplies, machinery and transport that were to a greater or lesser extent dependent on the performance of the agricultural sector[6].

(f) The onset of political and economic problems in Syria

Although the development of the Syrian economy was very rapid it was founded on a combination of external and internal political and

economic conditions that were extremely uncertain. As external factors became less favourable, so the instability, imperfections and injustices in the internal scene became more obvious. The principal external factors were two-fold. The first was the uncertainty and decline of world prices, particularly in cotton and commodities, which affected the the prices which could be obtained for Syrian products, as is shown in Table 7.

TABLE 7 Index figures of export prices obtained for Syrian agricultural products, 1950 to 1959 (1953 - 100)

Product	1950	1	2	3	4	5	6	7	8	9
Cotton	123	186	124	100	111	98	93	81	80	68
Wheat	78	85	126	100	85	104	104	85	80	107
Barley	89	144	122	100	83	122	106	83	102	138

Source: International Monetary Fund, International Financial Statistics, Washington D.C. (various years)

This trend had serious implications for the balance of payments of the Syrian economy as is shown in Table 4. Furthermore, private investors depended to a large extent on good prices, as well as good crops to sustain their investments in internal industry and commercial construction activities. Poor prices for agricultural products made further investment in "new" lands and agricultural improvements a financial risk that most private investors were unwilling to take. Finally, the fall in prices was inevitably passed on to the cultivators and landlords by merchants and traders.

Secondly, regional political events, particularly the Israeli war and Suez crisis of 1956, encouraged a certain amount of speculative hoarding, especially of foodstuffs. To some extent the shortages following the poor harvest of 1955 were therefore artificial, but they had the effect of maintaining high internal prices, although 1956 and especially 1957 were good harvest years. Higher prices in themselves were desirable for the merchants and businessmen, but by 1956 were accompanied by serious anxieties about the internal as well as external political situation. Rising prices, falling per capita income and increasing imports led to a rising cost of living which gave the reformist parties growing support. In fact, the cost of living index for 1956 was 14.1% up on 1954 and 1955, and for 1957 18.6% up on 1954 and 1955. The rate of increase of consumption, which was probably up to 6% per annum from 1950 to 56, fell back to around the rate of population increase, 2 to 3% or even less[7].

(g) The instability of agricultural production in Syria

The increase of the cultivated area in central and north eastern Syria meant that an increasing proportion of the agricultural production took place in areas of uncertain rainfall. Production of crops in these areas fluctuated widely, with serious effects on the whole Syrian economy.

Crops that were extensively cultivated had low yields even in the best rainfall years. However, while the irrigated area did increase during the 1950's, the contribution of improved yields to production increases was non-existent in the food crop sector and only very slight in the industrial crop sector.

Table 8 shows the increases of area, production and yield of the three main crops. The area of wheat and barley increased steadily over the period at least till 1956/7 and yet production and yields fluctuated increasingly. Even the production of cotton, at least 75% of which was on irrigated land over this period, shows very marked, but not increasing fluctuations. The contrast between 1955, which was a particularly bad rainfall year, and 1957, which was good, are reflected in Table 8.

Low yields were not only caused by the extension of cultivation into marginal rainfall areas, but also by the cultivation of crops in areas that were unsuitable for reasons of soil type, humidity and slope. Cotton, for instance, was grown extensively in the Hauran in 1953/4 in unsuitable soil and climatic conditions. As the price obtainable declined, so did cultivation of the crop in that area[8]. As the area of maize cultivated declined from 19200 ha. in 1952 to 9700 ha. in 1957 so the yield rose[9].

Not only was the agricultural production unstable, but Syria depended almost entirely on the state of the world market in these three products for its income. Syria had virtually no influence on world prices of wheat, cotton or barley as its production in world terms was minimal. A comparison between Tables 7 and 8 shows that years of high production of wheat and barley in Syria coincided with lower export prices. Syria, however, had virtually no facilities to store its products.

TABLE 8 Area, production & yield of wheat, barley and cotton, 1949 to 1959

	wheat			barley			cotton		
	area '000 ha	production '000 tons	yield	area	production	yield	area	production	yield
1949	745			348					
1950	992	830	.8	416	322		78	100	
1951	1037	510 -320	.5	344	155 -167	.5	217	175 +75	.8
1952	1167	900 +390	.8	397	467 +312	1.2	189	176 + 1	.9
1953	1314	870 - 30	.7	439	472 + 5	1.1	128	126 -50	1.0
1954	1347	965 + 95	.7	543	635 +163	1.2	187	221 +95	1.2
1955	1463	438 -527	.3	614	137 -498	.2	249	233 +12	.9
1956	1537	1051 +613	.7	636	462 +325	.7	272	253 +20	.9
1957	1495	1354 +351	.9	813	721 +259	.9	258	292 +39	1.1
1958	1461	562 -792	.4	769	228 -493	.3	261	250 -42	1.0
1959	1422	632 + 70	.4	727	218 - 10	.3	227	265 +15	1.2

Source: Statistical Abrastract, opp. cit., various years .

TABLE 8 Area, production & yield of wheat, barley and cotton, 1949 to 1959

A further problem for the Syrian economy can be seen in a comparison of the export price and production of cotton. While the figures for wheat and barley suggest a certain amount of speculative planting of these crops after years in which prices were high - probably not a profitable venture during this decade - cotton was seen as a stable cash crop which might provide the basic income of the estate or farm. Table 7 shows that world prices declined slowly but continuously from 1952 to 1959, with the result that incomes to most investors and farmers also declined. The problems of low investment in the agricultural sector from 1955 to 1958 can be at least partly attributed to this trend.

Finally, when prices on the world market were low, Syrian products were not able to compete against those of many other countries. In general Syrian cereals were uncleaned, ungraded, and poorly presented. Landowners tended to insist on large profits, as did middlemen. Transport costs, especially from the Jezeireh, were extremely high; in 1957 they were estimated to be 40% of the total cost of wheat, and 50% of barley production[10]. In years of low prices and increased competition for markets Syria was less able to compete on world markets.

To some extent this was also true of cotton production and exports. However, in 1953, after the very low production of that year, the sale of seed and marketing and export of cotton was taken over by the State in an attempt to improve the quality of production. This measure, however, was exceptional, and most other crops were not subject to controls or checks of any sort.

(h) The inadequacy of the agricultural sector and institutions governing the politico-economic structure, 1956 to 1958

By 1956/8 it was becoming increasingly obvious that the private sector, which had been responsible for the type and extent of agricultural growth up to that time was not willing or able to take the measures that were now required. The development of productivity in areal rather than per capita terms had been seen as a priority as early as 1947[11], and it had been claimed that, given security and support, the businessmen and merchants would have pursued the intensification of agriculture as they did the extension of its area[12].

However, the declining world price for cotton, the main cash crop, and the increased costs of a policy of intensification over one of extension of area in agriculture make this unlikely. Many of the small scale, low cost projects intensifying cultivation that offered rapid returns had already been made.

By 1955 or 1956, as Table 1 suggests, per capita production was beginning to fall, with serious implications for Syria's agriculturally based economy. The policies that were now necessary to develop agriculture depended on more controls in the type and area of crops, the control of trade and prices of agricultural products and of their quality, and large scale investment in reclaimation and irrigation projects. However, the governments of that period were neither able nor willing to introduce such major policy changes which would have been resisted strongly by the landed and merchant groups that controlled the agricultural sector. In 1952 the government did set up the Cotton Board, but few other attempts to develop the institutions necessary to carry out the above policies were made.

By 1956 the economic situation in the country was such that major economic reforms had become necessary, particularly in the agricultural sector. The deteriorating economic situation also brought the inequalities and injustices in the institutional structure of the agricultural sector to a head. Some price inflation of basic food-stuffs and ordinary consumer goods after 1955/6, and falling incomes to cultivators from the sale of agricultural products were encouraging many tenants and landless rural workers to support the reformist political groups that were playing a more and more important part in Syrian politics from the middle of the decade. The reformist politicians deliberately sought the support of the discontented rural population and when they came to power they found that redistribution of land was only one of the many conflicting problems in the reconstruction of the agricultural sector which by 1960 had reached a crisis in terms of policies, investment, manpower and structure.

NOTES

1 These include: E.Y. Asafour, Syria : Development and Monetary Policy, Harvard, Middle East Monograph Series, Cambridge, Mass., 1959. M.A. Zarka, Product, Capital and Productivity in Syrian Agriculture, 1937-63, Ph.D. Thesis, University of Pennsylvania, unpublished, 1969. S. Makdisi, Syria : The Public Sector and Economic Growth, 1945-57, Ph.D. Thesis, Columbia University, unpublished, 1960.

2 M. Diab, National Income Accounting Practices in Syria, in T.M. Khan, Ed., Middle Eastern Studies in Income and Wealth, London, 1965, p.132.

3 U.N. Department of Economic and Social Affairs, Economic Developments in the Middle East, Supplement to the World Economic Report, 1953-54, New York, 1955, p.184.

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6 M. Diab, National Income Accounting Practises in Syria, op. cit., p. 132.

7 B. Hansen, Economic Development of Syria. Chapter 7 in Economic Development & Population Growth in the Middle East, Editors C.A. Cooper and S. Alexander, New York, 1972, pp. 341-359.

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11 Office of Foreign Agricultural Relations, U.S.D.A., Report of the United States - Syria Agricultural Mission, I.A.C. Series No.4, Washington D.C., 1947, p.2.

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CHAPTER II Legal Categories of Land and Land Ownership before 1958

The importance of the agricultural sector in the national economy and in employment has already been stressed. Ownership and control of the means of production was therefore of particular significance, and the question of who benefitted from the ownership of land, the control of labour and access to capital must be examined. Other factors that must be taken into consideration in the years immediately before the land reform legislation include the way income from agriculture was distributed, and what trends there were, if any, in the ownership of land, in incomes, and in access to capital either for agricultural development or simply for annual requirements.

(a) The ownership and control of land

Legal categories of land

A summary of the legal categories of land before 1958 is difficult, partly because by 1958 only 5.05 million hectares had been surveyed[1], (2/3 of this before 1943)[2], and the rest, a mixture of registered and unregistered, claimed and unclaimed, privately and communally cultivated was in a chaotic condition. The principal division is between land of full private ownership (mulk) and state land. Most mulk land in Syria was in built up areas. The small amount in agricultural areas was usually in small irrigated holdings and concentrated in the Ghouta or around Homs[3]. Table 9 shows the relatively small area of agricultural land that is classed as 'mulk'.

State land can be divided into a number of categories. The largest is 'unoccupied' (mawat) and includes the desert areas; the second largest is 'miri' land, which was in effect by this time private land, though

theoretical ownership was in the hands of the state. The principal legal differences between 'miri' and 'mulk' land now lie in the different laws of inheritance, and in the right of the state to take 'miri' land left uncultivated for five years. Furthermore, 'miri' land may be claimed by cultivating a certain area for five years, but the particular conditions that lead to 'mulk' land have not pertained since 1908.

Since 1846, when communal land working was officially abolished, 'musha' land has theoretically normally fallen into the category of 'miri'. The system, whichever form it takes, is extremely unproductive and wasteful and has been gradually eliminated, usually during surveying and registration when consolidation was imposed, as well as by the voluntary agreed subdivisions of the area concerned by the joint owners. Estimates of the area of 'musha' land are difficult to find, but in 1957 the practice of communal land working still occurred frequently in villages in areas of marginal rainfall[4]. It also occurred in many more fertile unsurveyed areas where the consolidation of holdings had not been carried out and fragmented land ownership was still widespread.

Other state land includes 'unoccupied' and 'matruke'. The former is self-explanatory, though in the new Land Code of 1930 it was made easier to obtain permission from the state to occupy such land and so after years to own it. 'Matruke', often called 'public domain', which includes various categories of land consisting of roads, public land in villages, rivers, communal pastures and woodland and almost all of which is uncultivated. 'Private state domain', on the other hand,

includes lapsed 'miri' land, and land that before 1918 was owned personally by the Sultan and became state land after the 1923 Treaty of Lausanne.

TABLE 9 Categories of Land Ownership, 1958

Category		Area (in sq.kms)	% Total Area	% Occupied Area	% Agricultural Area
Private (mulk) land		1250	.67	1.57	2.39
State land:	unoccupied:	106022	57.13		
	miri:	39644	21.36	49.82	73.00
	matruke:	25334	13.64	31.84	
	lapsed miri:	793)	7.2	16.77	24.61
	ex-Sultan:	12637)			
	Total	185680			
	occupied area	79581			
	agricultural area	54245			

Source: P.J. Klat, The Origins of Land Ownership in Syria, op. cit., p.64.

Although the origin of this structure of land tenure has been dealt with in detail elsewhere, one or two points are of particular interest in the context of reform of the land tenure arrangements.

'Miri' land, although belonging to the state, gradually became like private land. This had not been the original aim of the 1858 Land Code, which intended the state to take full control of the management and taxation of state lands. However, a lack of qualified personnel, corruption and the fact that the rate of increase of revenue from these measures was very disappointing, resulted in the failure of this policy. 'Miri' land took on the characteristics of private land, with sub-

division and inheritance, sale and mortgaging of land, and the laws enforcing cultivation lapsed. However, the state's retention of the title of the land, which was never in question, has arguably given much greater legal and moral authority to the state's expropriation and redistribution of land.

The Ottoman reformists also made a serious effort to end communal forms of tenure, particularly 'musha'. The decree of 1846 officially abolishing communal ownership of land was followed in 1860 by a decree making the registration of land compulsory. As will be discussed below, the latter led to the emergence of very large holdings, rather than the end of the 'musha' system, which was still widespread, though declining in 1958. The 'musha' arrangements led to delays in the land survey programme after 1958 and posed problems for land reform officials, not only because many owners may have been trying to evade expropriation but also because of the confusion and ignorance about the various claims in each village.

As in the case of 'mulk' land, 'waqf' land in Syria was mostly confined to built up areas. In the Ghouta and in the Mohafazat of Tartous, however, some 'waqf' agricultural land existed, but the development of 'waqf' did not reach the levels of Egypt. During the mandate the French permitted and even encouraged the sale of waqfs to business enterprises and landowners, but the Civil Code of 1949 prohibited the creation of family waqfs and during Husni Zaim's rule in 1949 family waqfs were abolished.

Land ownership before 1958

The inadequacies of the survey and registration of land in Syria makes analysis of the characteristics and trends in land ownership, meaning usufructuary rights, extremely difficult. Records of the registration that was done in Ottoman times were mostly destroyed by the Turks in the First World War or taken to Istanbul. The French carried out a certain amount of surveying after 1923, but registration was carried out against a background of conflicting historical claims and political intrigue.

It has been claimed that the development of large holdings is of recent origin stemming from the failure of the 1858 Ottoman Land Code. The Land Code intended that the land ownership pattern should be one of smallholdings under direct supervision of the state with a single tax system. This failed for a number of reasons. The state lacked the manpower or expertise to carry out or administer such a centralised system. Merchants and others interested in obtaining land, while they could no longer seize land for non-payment of taxes, controlled the means of production and in a bad year, peasants could easily find themselves with debts they were unable to repay and forced to forfeit their only asset - their land. The compulsory registration of land, although it was designed to ensure small holdings, in fact led to larger owners gaining more land. In areas of 'musha' cultivation, the whole village might be registered under one name, and fears of increased taxation and military service probably led to peasants asking a more powerful local person to register their land. Even in areas where peasant and land owner interests conflicted, bribery and intimidation usually resulted in the landowner obtaining the registration.

In any case, the failure of the Ottoman administration to implement its policies on taxation, registration or in the management of agriculture and services, which proved to be far too ambitious, left the field open to existing merchants and land owners to purchase or register land or seize it as security for outstanding debts, and to increase their wealth and the size of their estates at the expense of smallholders.

Under the French administration, the chaos of Ottoman land ownership was compounded by the loss of registration documents during the First World War. Many took advantage of this to register large areas of hitherto unoccupied state land, and to claim other occupied areas too. In exchange for political support, the French administration frequently gave registration to such claimants.* In the Jezeireh and in many parts of Aleppo, Hama, Homs and the Jebel Druze, tribal chiefs were given registration of vast areas of marginal land in exchange for co-operation with the Mandate Authorities.

Between 1946 and 1957, survey operations fell far behind schedule and the politically powerful oligarchies in the older agricultural areas, and the businessmen based in Aleppo, Damascus and Homs continued to take advantage of the disorganised condition of land registration as a means of obtaining land. By this time, land ownership not only had the

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*The Land Code of 1930 has already been mentioned in this context. Further measures facilitating the registration of unoccupied state land were put forward in 1940 and 1941.

political and social importance that is the hallmark of a subsistence, undercapitalised, traditional society, though in the older agricultural areas these characteristics were still dominant. It was also the most important means of production in the agricultural boom that was taking place in the country. From 1946 on, as has already been mentioned, agricultural expansion was characterized by extensive cultivation which meant that the ownership of land even in the marginal agricultural areas became more and more important. The businessmen and landed families that played a major role in the agricultural boom therefore did their utmost to obtain ownership or leases of land whether it was unoccupied and state owned or owned by smallholders.

By purchasing land, the continual increment from seizure for debt, and the registration of state land (both illicit and legal) large land holdings therefore increased up to the 1958 reforms.

Exact figures of land ownership at various stages of this evolution are impossible to obtain, a result of the inadequate and conflicting survey and registration information. By 1952 some 2.2 million hectares of cultivated land had been surveyed and registered. Table 10 shows how this land was distributed in holdings of different sizes.

A large proportion of this surveying was done in Homs, Aleppo and Hama, and as all three were characterized by large estates, the category 'large holdings' in Table 10 may give an incorrect idea of the distribution of land holdings in the country as a whole. More general estimates for 1946/7 and 1955 for the whole country are shown in Table 11.

TABLE 10 Distribution by size of land holdings covered by Cadastral Survey, 1952

Classification of holdings (ha)		Percentage of area
small holdings:	less than 1	1
	2-5	5
	5-10	7
	total	13
medium holdings:	10-25	17
	25-50	11
	50-100	10
	total	38
large holdings:	100-500	24
	500-1000	9
	over 1000	16
	total	49

Source: International Bank for Reconstruction and Development, The Economic Development of Syria, Baltimore, 1955, p.354.

TABLE 11 Estimates of the distribution by size of land holdings, 1946/7 and 1955, in hectares

Category	1946/7 (1)	%	1955(2)	%	Change of total 1946/7-55
less than 10 ha	1158000	15	1097490	12.5	- 60510
10-100 ha	2626000	33	2892410	36.5	+ 266410
over 100 ha	2313000	29	2348780	29.7	+ 35780
Total	6097000		6338680		
State land	1816000	23	1593000	21.3	- 223000
Total	7913000		7931690		+ 18690

Sources: (1) A. Mourad, La Propriété Agricole en Syrie, in Office Arabe de Presse et de Documentation, L'Agriculture Syrienne, Damascus, 1969, p.24.

(2) Bureau des Documentation Syriennes et Arabes, Etude Sur L'Agriculture Syrienne, Damascus, 1955, p.24.

However, these figures do not show the distribution of irrigated land. Secondly, as Warriner points out[5], the cultivated area in 1955 was about 3.9 million ha., so the important issue as to who owned the productive land is unclear. As the above figures combine irrigated and non-irrigated areas and the areal divisions do not coincide with the 1958 reform limits, it is impossible to determine what area would be subjected to reform. Furthermore, land ownership itself includes a number of categories. As the IBRD states, 'the landowner group is composed of full owners, part owners, debt-encumbered owners and owners with undetermined title'[6].

Table 11 suggests that the trend towards very large holdings is a minor factor, and that that category has changed little, either relatively or absolutely. The small increase of holdings over 100 ha. suggests that the 1946/7 estimate largely post dated the allocation of very large areas to tribal sheikhs.

The largest increase occurs in the 10-100 ha. category, and reflects the speculative accumulation of land of businessmen, merchants, money-lenders and medium scale landowners. Much of this land must have been state land, therefore probably unoccupied and marginal. All these groups would have been in strong competition with large scale owners not only for this land but also for the land in more fertile areas which came on the open market. Both medium and large scale owners no doubt benefitted from the forfeiture of land by smallholders because of debt.

Where small holdings (under 10 ha.) have declined, there is no way of telling whether they became amalgamated into the largest or the middle

category, and this to a large extent must have depended to whom they were in debt.

Figures of the numbers of owners in each of the above categories are difficult to assess. From the figures available from which only general deductions may be made, as the figures divide owners into those owning irrigated and non-irrigated land, as shown in Table 12.

TABLE 12 Number of landowners by size of land holding, irrigated and non-irrigated, 1958

Land Ownership	Number of Owners	
	non-irrigated	irrigated
1-50	225424	42752
50-100	15364	780
100-500	5297	552
500-1000	1581	209
over 1000	333	95
Total	248466	44388

Source: Le Bureau de Documentations Syriennes et Arabes, Etude Mensuelle Sur L'Economie et le Marché Syriens, no. 21, Damascus, 1959.

While Table 12 gives a picture of the number of owners in each category, the usefulness is limited for a number of reasons. Due to the incomplete survey and registration and the prevalence of the 'musha' system, the figures must be general ones. The figures give only general indication of the total number of landowners, or how holdings that included irrigated or non-irrigated land were distributed, an important factor when the numbers liable to land reform are considered, though an attempt will be made below to estimate these in the context of the reforms. Indeed the categories include such great differences

in the sizes of land holding that the table can only show that there are many small and a few large holdings in both irrigated and non-irrigated areas: Nor does the division have the advantage of being in any way related to the maximum permissable holdings of each land type.

Land ownership and the working of the land

Apart from the confusion over the numbers in the various categories of land holding, only the most general idea existed in 1958 as to the size of the population that were dependent on or engaged in agriculture, and the numbers of those who were tenants or landless. Any assessment depends on balancing informed guesses of the time, and in working back from more recent surveys and censuses which were obviously not available to the new government in 1958.

Estimates of the population that was dependent on or engaged in agriculture vary in different sources, depending on the estimate that was made of the proportion of the whole population living in rural areas, and the age taken as the minimum for employment. In 1955 an estimate made by the Ministry of Agriculture suggested that about 60% of the population was engaged directly in land cultivation or animal husbandry, and a further 10% in crafts and services related to agriculture and carried out in rural areas. It went on to suggest that of 2.9 million over the age of 12, 1.8 million were agricultural workers.

In 1953 the I.B.R.D. put the numbers gaining their livelihood directly from agriculture slightly higher at 65 to 75%[8]. It also points out that although the village population of nearly two million comprises

the most important part of the agricultural population, many agricultural workers also lived in towns.

These two sources are clearly not comparable, although their figures do not conflict. The 1960 census (the first in Syria) gives general confirmation that the agricultural workforce may have been in the region of 1.8 to 2 million in 1958[9]. The 1960 census figures largely ignore female employment in agriculture (only 50,413 women are listed as being employed in agriculture, a totally unrealistic figure). If about two thirds of the men over 15 who appear in the classes "activity inadequately described" and "without activity", a proportion approximately equivalent to the proportion of the workforce engaged in agriculture as a whole, are included with those that are classed as being engaged in agriculture, approximately 950,000 men over 15 were probably engaged in agriculture in 1960.

Important though it was to have a clear idea of numbers in the agricultural sector before the planning and execution of land reform, the preceding section shows the difficulties, even with hindsight, in trying to estimate numbers working in the agricultural sector and therefore the proportion of landowners, tenants and landless tenants. The estimate of 2 million workers in agriculture can only be taken as a rough guide for the total population figures, the percentage working in agriculture, and the age limit can arguably be altered. Apart from anything else, little was known about the rate of total population growth, which may have been in the region of 3% per annum during the 1950's, or the rate of growth of the agricultural population.

A closer estimate of the number of owners of land can be made, however, and Table 12 shows that between 248,000 and 268,000 actually owned land in 1958. There is no way of finding out how many of these owners were over 12 years old and therefore helped to account for the 500,000 or more which the Ministry of Agriculture estimated in 1955 either held land or were tenants. These rather uncertain figures suggest there may only have been 250,000 tenants, though there is no doubt that many of those who owned land were also tenants, or that many of the tenants and owners of land also got employment as labourers. There are few estimates on the turnover of tenants, and of those that do exist most concern themselves with one particular village where special circumstances may have prevailed.

The number of landless agricultural workers may therefore have been about 1.5 million in 1958. The Ministry of Agriculture estimate for 1955 was 1.3 million - a figure that was growing at least as rapidly as the overall population growth. With such a large and growing landless rural population, the pressures and need for redistribution of some private lands was becoming stronger as it was clear that the cultivable part of state held land would be inadequate even for the settlement of the beduins.

The situation of the landless agricultural labourer became more serious as their numbers increased. Not only did landowners have a greater selection for tenants and labourers, particularly after 1956 when agricultural expansion to some extent stagnated, but underemployment led to poverty and depressed wages even in the periods of peak labour demand. The problems of employment were not alleviated by urban or other rural

employment, though many travelled to the cities to search for work. In fact, the FAO estimated that the Syrian labour force was employed at about 40% to 50% of its theoretical full employment capacity[10], and Table 13 below gives the FAO figures for underemployment and its regional importance for the rural population in Syria.

TABLE 13 Underemployment in the rural population, 1960, by mohafazat

Mohafazat	Total Rural Pop. ('000)	Cultivable Area (ha.)	Density per km²	Rank	Estimated % Underemployed (FAO)
Sueida	97.6	121,280	81	2	52.7
Dara'a	154.5	397,405	38	5	
Damascus	410	526,520	77	3	47.5
Homs	266	794,340	33	6	
Hama	136.9	581,375	23	7	
Aleppo	1,150.5	1,870,177	61	4	38.3
Deir ez Zor	249.7	1,344,474	18	8	34.1
Hassakeh	217.2	1,236,000	17	9	
Lattakia	244.3	237,040	103	1	56.3
Total	2,926.8*	7,108,611	41		43.9

*Out of a total population of 4.5 million

Source: FAO, Mediterranean Development Project, (UAR - Syrian Region), op. cit., p. 134.

Table 13 shows that by 1960 underemployment in rural areas was serious in every region in Syria. Even in the recently developed agricultural areas of the Jezeireh underemployment was estimated to have reached 34% by that year. In the traditional areas of population and agriculture in central, western and south western Syria, underemployment had reached very high levels.

(b) Incomes in the agricultural sector

The division of the gross agricultural income before 1958 showed wide disparities between on the one hand the landowners and on the other hand the tenants and labourers. Landowners, especially large landowners, had virtually complete control over rural employment so wages for labourers and sharecropping arrangements with tenants were in their hands.

Tenancy conditions

Almost all tenancy arrangements in Syria were on a sharecropping basis. However, sharecroppers in general were unprotected by written agreements or contracts and had to submit to the most exploitative sharecropping agreements. The amount taken by the tenant depended on what services and inputs the landlord supplied. In irrigated lands, the landowners usually supplied more inputs and took a half to three quarters of the product. In non irrigated areas, the landlords supplied fewer, and often no, inputs and took perhaps as little as 30% of the product. In some areas, notably the Jezeireh, managers employed by absentee landlords also took a share. In other areas, owners of wells or other essential inputs took shares. In fact, sharecropping arrangements depended on local conditions and individual landlords, but it is safe to say that in all cases the landlords did extremely well.

One other characteristic of land relations throughout Syria is that there was very little direct renting. A fixed rent allows the tenant to work for a surplus, and thus may encourage him to improve his land and output. But the generally poor agricultural conditions in the

rainfed areas and the unpredictability of output make fixed rents unsuitable, unless fixed at a very low level. In bad years, the instability and hardship caused by meeting a fixed rent would not suit the interests of most landlords who in general were prepared to share the burden of poor years to some extent as long as stability and their secure position could be maintained.

The incomes of landlords, tenants and landless in the agricultural sector

It has been suggested that in the mid 1950's, as production per capita in Syria stagnated and world prices for Syria's main agricultural products began to decline, that average per capita incomes in the agricultural sector declined. In any case, the contrast between the incomes of the mass of the landless rural population and the landed class (and merchants and moneylenders) remained marked and probably increased.

In 1959, the F.A.O. estimated that the total national income in 1958 was L.S. 2,000 million, 1,000 million of which went to the agricultural sector[11]. The average income per capita in the agricultural sector was therefore about L.S. 345*, compared to L.S. 714 in the non-agricultural sector.

In the agricultural sector, however, the concentration of land ownership meant that incomes of landowners were far above the average, and of landless workers far below it. It has been suggested that in Syria in

*The F.A.O. suggested that this estimate was somewhat generous.

1950 about half the land holdings between 10 and 100 ha. were cultivated by owner operators[12]. If this was still so in 1958, and if it is assumed that all the holdings between 1 and 10 ha. were owner operated and none above 100 ha. were, than using Table 11, it can be estimated that about 60% of private land was in the hands of owners who had tenants or labourers working their land.

Because sharecropping arrangements varied so greatly from irrigated to non-irrigated areas, and between different landlords, it is difficult to estimate the proportion of agricultural production that was taken by the landlords as a whole. With the share of landlords varying from 30% to 75% of the crop, they may have taken 55% to 65% of total production in their lands.

As production in state lands, which in 1958 covered about 20% of the land holdings was so low (state lands were usually in less fertile and drier areas), the distribution of the proceeds from agricultural production may have been as follows: landlords 30% to 35%, other landowners 35%, tenants and full-time agricultural labourers 20% to 25%, the state 10%. These figures do not of course include other wages, taxation, investment and other expenditure so only represent gross incomes.

Unfortunately, it is impossible to calculate accurately what proportions of income from agricultural production went to owners with holdings of different sizes, and therefore to assess closely the extent to which the incomes of owners of large, medium and small holdings varied. This is because the figures of Tables 11 and 12 are not directly comparable.

These tables do show, however, that some 7000 to 8000 landowners owned more than 100 ha., or 37% of the private land. These landowners, who were almost all landlords, therefore probably received about 37% of the income of the agricultural sector, or about L.S. 300 to L.S. 350 million. The average incomes of these landlords in 1958 may, therefore, have been in the region of L.S. 14000 to L.S. 17000. The gross income of all other landlords and owner operators may have been about L.S. 540 million, and in 1958 would have averaged between L.S. 2000 and L.S. 2400.

Turning to the incomes of tenants and labourers, it is important to note that in the land holdings owned by landlords about 90% of the land not worked by the landlords themselves was worked by tenants rather than labourers. The gross income of tenants, therefore, may be estimated as being about L.S. 200 to L.S. 250 million. It has been estimated that some 250,000 to 300,000 tenants existed in Syria[13], so incomes to tenants may have been between L.S. 650 and L.S. 1000. However, it is clear from another source that the income to the agricultural sector of L.S. 1000 million estimated by the FAO is based on 1957 figures. As has been pointed out, 1957 was a particularly favourable year for agriculture, as Table 14 shows.

TABLE 14 National Income estimates in Syrian Region in L.S. million (in 1956 prices): The agricultural sector

Year	1953	1954	1955	1956	1957	1958
	824	927	636	936	1067	702

Source: Statistical Abstract, 1961, op. cit., p. 402.

Table 14 indicates that the incomes calculated above for landlords and tenants may have been rather higher in 1957 than might have been expected in most years. For the large landowners such fluctuations would have been unfortunate but for the tenants and smallholders the fact that their incomes were probably between 10% and 40% lower than that in 1957 would have had a very serious effect on their livelihoods.

These above estimates, though only approximations of incomes, indicate the great disparities of income between the largest landowners, the majority of medium and smallholders and tenants. However, even the incomes of tenants and smallholders were far above those of agricultural labourers, the majority of whom received incomes below the average annual agricultural income of L.S. 345. Most agricultural labour was not employed on long term conditions, except in a few of the newer agricultural areas of the Jezeireh, but by the day or on a piecework basis. These arrangements suited the landowners and tenants who were faced with a few peak periods of labour requirements. An adequate supply of labour was usually available at these times.

Employers were in a very strong position as they had a virtual monopoly control over rural employment. The pool of labour, as Table 13 shows, exceeded requirements in all areas of Syria, although in peak periods of labour demand underemployment would have been smaller*. Furthermore, with the population increase of perhaps 3% per annum, the pool of landless labour in the countryside was increasing.

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*At peak periods of demand the labour force was usually augmented by temporary workers from the Bedu tribes.

This increase may have been balanced to some extent during the 1950's by the development of more labour intensive irrigated summer crops, and wages in the agricultural labour force may have risen slightly before 1958. The legal minimum wage did rise during the 1950's. In 1952 it was L.S. 2.25 a day, and in 1954 L.S. 2.75 a day[14]. By 1958, however, the average daily wage in most areas was probably not more than L.S. 3 a day, or the equivalent in crops, for an unskilled male agricultural labourer. Orgels, in his 1958 regional study of agricultural conditions, found wages of L.S. 2 to L.S. 3 a day in the Jebel Druze and Jebel Alawi regions, L.S. 3 a day in Hama, and L.S. 4 a day in the Jezeireh and in the Mohafazat of Aleppo[15].

The low wages, which were of course much lower for women and children, combined with the difficulty of agricultural labourers in getting work outside the busiest periods of the year meant that average family incomes were low. On the basis of a study carried out by a Commission of the Ministry of Agrarian Reform to examine the effects of the first two redistribution orders, a family of five could expect annual incomes of L.S. 250 to L.S. 700, the equivalent of 80 to 230 man working days at L.S. 3 a day[16]. These figures underline the low average incomes of agricultural workers, the severe problem of underemployment and the great difference between the mass of agricultural workers and landowners and even tenants.

(c) Investment in the agricultural sector

Investment from within the sector

The distribution of income as suggested above has very serious implications not only for standards of living, in which there were

clearly enormous disparities, but also in the ability of various groups to invest productively in the land.

The only group actually engaged in agriculture that had the ability to save and invest was the landlords. The tenants and labourers and even small scale owners were rarely in a position to save at all. The tenants suffered from the exploitative sharecropping arrangements and the insecurity of tenure and had neither the ability nor incentive to invest over and above the inputs supplied by the landlord. Small scale landowners, like tenants, were very often in debt, their surplus production going to moneylenders at harvest time.

Many of these moneylenders were of course landowners in their own right, but many were also merchants and businessmen. Between them these groups controlled almost all the surplus production in the agricultural sector.

It is worth noting at this point, however, that the subsistence element was still of great importance in Syrian agriculture. It has been estimated that in the immediate pre 1958 period only about half the agricultural production moved through the market economy, in other words, about half was 'subsistence'. Table 15, which is derived from an analysis of agricultural tax statistics shows the 1949 to 1956 figures. The extent of evasion of the agricultural tax which is based on a levy of 7% of wholesale prices on products leaving villages, is not known.

The ability of landlords to invest did depend to a large extent on the variable annual yields and on world prices. The state provided little protection from the influence of world market prices for agricultural

products except in the case of cotton. However, even in poor years most large landlords had large surpluses. For the rest of the agricultural population increased incomes in good years would have been largely taken up by the repayment of debts, and increased consumption. Saving or investment in agricultural improvements was a very low priority, and such investments that were made were often kept separate from the land, for instance, many invested small profits in sheep.

TABLE 15 Percentage of total agricultural production subject to the Agricultural Tax

Crop	1949-52	1952-56
Wheat	35	50
Barley	25	59
Millet	36	25
Maize	9	13
Rice	65	62

Source: S. Makdisi, Syria, the Public Sector and Economic Growth, 1945-57, op. cit., p. 48

The use that landlords made of their wealth can be divided into broadly agricultural and non-agricultural investments. Before 1958, or for many perhaps before the political troubles of 1956, agricultural investment by landowners was largely confined to the acquisition of further lands, for the size of a family's estate had social and political, as well as economic, importance. Few technical innovations in agriculture can be noted in the older agricultural areas of Syria before 1958, as large scale investment on land improvement and increasing production was not generally of interest to the landowners. In fact, only two major developments occurred in the older areas, the introduction of a large scale of cotton which, at least for a time in the early 1950's, was extremely profitable, and the development of irrigation. This was principally in the form of wells

and pumps and was a cheap way of being able to increase the number of tenants and share of the crop, though of course id did help improve physical conditions for agriculture.

On the other hand, fertilisers, machinery, improved seed, modern rotations and other modern agricultural practices were virtually unknown in the older agricultural areas of Syria. For instance, chemical fertilisers are estimated to have been used by only about 2% of cultivators, and even by the end of 1957 there were only about 4000 tractors in the whole country[17]. Landlords were in general against innovation and improvement, afraid that it might upset the dependence of their tenants and labourers on them. Few encouraged or allowed tenants to improve their farms. The type of crops was restricted to the traditional few and fallow remained the principal method of resting and rejuvenating the soil. Furthermore, landlords did not usually build rural schools or provide other services for their villagers.

Productive investment, other than simply the annual requirements of the crops, was limited to irrigation. Indeed, a large proportion of the profits made by agricultural landlords were invested in other sectors of the economy, principally commerce and construction, that were becoming more profitable than agriculture.

Private investment, however, began to decline as a whole after 1954, with investment in agriculture falling off even more quickly. Table 16 shows this decline, and the growing importance of public investment, particularly after 1954.

TABLE 16 Index figures of public and private investment, 1950 to 1956 (1953 = 100)

	1950	1951	1952	1953	1954	1955	1956
Private	77	84	73	100	149	147	134
Public	71	92	100	100	111	161	214
Total	76	86	78	100	142	150	149
Public as a % of private	17	20	24	19	14	20	27

Source: United Nations Department of Economic and Social Affairs, Economic Developments in the Middle East, Supplement to the World Economic Report, 1954-5, New York, 1956, p.90.

The movement away from private investment in agriculture and also industry, in view of the part played by the private sector in total investment, was serious as the expansion achieved in both sectors, particularly 1945 to 1954, was not consolidated. In agriculture, the lack of productive private investment left the agricultural sector undercapitalised and in a state of low productivity, technologically backward and in no condition to fact the problems of falling world prices or rising local demand.

Non-institutional investment in agriculture from outside sources

In this category can be included businessmen of all types, and all interests and scales of operation from the local village shopkeeper, through the landlords themselves to the important businessmen based in Aleppo and Damascus. Three principal functions were served by this group - lending money, involving themselves as contractors in crop production and making concrete commercial investments in the agricultural sector, mainly irrigation and machinery.

It has been estimated that in 1957, about half of all agricultural credit came from non-institutional sources. Much of this went to tenants and small-scale landowners to enable them to buy the essential inputs for their agricultural production, or to buy themselves the basic necessities of life. Those who lent money on this scale were normally landowners, local merchants and shopkeepers. Normally, they advanced loans, whether for agricultural purposes or not, and were given a share of the crop as repayment.

There is no doubt that in many cases the conditions of loans were usurious, even ruinous. However, they fulfilled an essential and growing need for credit in an agricultural sector which was becoming slowly more market and money orientated, a need which was almost totally unmet by the inadequate institutional sources that existed. In some areas, there was competition between moneylenders, so interest rates may have been lower, but in general, near monopoly or cartel conditions existed both in the advancing of loans, and in the advance buying of crops*. High rates of interest were, of course, partly a reflection of the high risk of lending against the security of a crop as well as a reflection of these monopoly conditions. In the case of labourers, loans would have been advanced against less tangible security than the crop - a sense of obligation, family honour and the detailed knowledge of the lender's circumstances.

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*These labourers, tenants and even smallholders who managed to avoid borrowing were still at the mercy of the merchants and shopkeepers. They would have to sell their products almost immediately after the harvest, and the prices they received would be determined by the merchants in almost the same way as the loan arrangements were.

Usurious loans with rates of interest up to 50% or more on the original loan, and the profiteering by merchants buying crops in advance at the expense of a practically helpless rural population can only be partly excused by the high risk of loans and by the flexibility in terms of repayment deadlines*. However, the lack of institutional sources of credit and unfair sharecropping arrangements and wage levels as well as the general problem of low productivity left the field wide open for the type and extent of non-institutional operations that existed throughout Syria.

The role of private capital investment in the financing of the annual cotton crop has already been mentioned with reference to the 1951 cotton crop. Large and medium scale private contractors, often renting land from absentee landlords and the state, using labourers and machinery rather than tenants played a growing role in agricultural production in the new agricultural areas particularly in the Jezeireh. However, their efforts were confined almost exclusively to the cotton crop and to wheat and barley that was grown in rotation on the same land. Their operations were largely exploitative - they payed low rents and wages, and profits were only reinvested in a very limited way. These contractors indeed were principally interested in profits rather than longer term improvements to the land. In the Jezeireh land was available, extensive and cheap. It was considered by many to be more profitable to rent land in this area than try to intensify production in the older areas of cultivation. The increase of the cultivated area in the

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*Lenders who wanted to secure their sources of revenue frequently tempered exploitation with moments of generosity. A secure and steady income was as important for moneylenders and merchants as a regular source of credit was for a tenant or labourer.

mohafazat of Hassakeh from 219000 ha. in 1938 to 1.7 million ha. in 1958 shows the scale of the expansion in the Jezeireh[18].

Although the investments made by the contractors were considerable, they were concerned almost entirely with the maximization of profits. For that reason the improvements in transport, irrigation and machinery introduced by these people were short term, and their benefits accrued largely to their owners.

In the Jezeireh, for instance, the construction of a transport network was essential to the long term development of the region. Private owners, sometimes the contractors themselves, invested in fleets of lorries that transported supplies to the agricultural areas and took out the products. The low initial cost of lorries and their flexible use made such an investment desireable for private owners, but it helped put off the construction of a road and rail network that could really only be undertaken by the state.

Other investments made by the business community in the agricultural sector were usually in agricultural machinery and irrigation equipment. Machinery, mainly tractors and harvesters, was bought by contractors who rented land or by others who hired out machinery to such contractors.

Though such investment in machinery was an important innovation in the Jezeireh, where it has been estimated that as early as 1949 more than half the tractors and harvesters in the country were in use[19], landlords in the traditional agricultural areas were not usually keen to introduce such improvements, and the state, of course, had no policy to do so.

For reasons already stated, however, irrigation equipment was introduced into these older agricultural areas, although as with machinery the development of irrigation was particularly important in the Jezeireh. Between 1945 and the middle 1950's private enterprise readily took advantage of the opportunities for productive and profitable investment in irrigation. Investment in this sector was considerable but confined to relatively low cost small scale investments which usually involved the supply of a pump or digging of a well, but as little construction work as possible. As Table 17 shows, thousands of pump units were introduced, particularly in the Jezeireh, with pump owners taking up to 50% of the crop because of their monopoly control over the vital water supply, although the cost of irrigation rarely surpassed 8 to 10% of yield value[20].

TABLE 17 Pump units in Syria, 1952 to 1965 ('000)

Year	No. of New Pump Units (2)	Total no. of Pump Units (1)
1952		7.5
1956	2.2	15.8
1957	1.1	
1958	1.7	
1959	1.2	
1960	1.1	
1961	1.1	
1962		22.1
1964		22.7
1965		24.0

Sources: (1) R. Hillan, Culture et Developpement en Syrie (et dans les pays retardes), op. cit., p. 197.
(2) Statistical Abstract, 1961, op. cit., p. 290.

By 1958, an estimated 500,000 out of 550,000 ha. of irrigated land was privately owned, with pumping from rivers being the principal method of

irrigation[21]. But from about 1956 onwards, investment of this type began to decline as so many of the low cost sites were being used. Longer term capital investment in larger irrigation projects with uncertain returns was not of interest to, or indeed, within the scope of most of the investors into pump irrigation. Such investment, which was essential if irrigation was to be available to the majority of cultivators, was the state's responsibility, but until 1958 the state made little progress in this direction.

From investment in pumps, some of the more enterprising private investors moved into land reclamation and very considerable areas of the Ghab, for instance, were drained and exploited by private operators. But, as in the case of irrigation, by 1956 medium and large scale projects were essential if the physical conditions in agriculture were to be markedly improved. This could only be done by or through the state, and again state involvement was not forthcoming.

From 1955 to 1957 interest in further expansion and investment by the private sector began to stagnate, and this was not only in the case of irrigation equipment. Although investment and the area under cultivation did increase, it was much more slowly than before. This was partly a reaction to the decline of cotton prices, which led to a stagnation in the area of cotton produced (see Table 8). Other factors in this stagnation have been mentioned above, and, as a result, most businessmen began to invest in other, more profitable sectors of the economy[22].

Private investment in agriculture, then, was in general concentrated in the Jezeireh and confined to specific types of investment, mostly low cost, and with immediate or almost certain return. It is particularly

interesting to note that the investors were often not the owners of the land, and therefore had no stake in its long term improvement, but were interested entirely in immediate and substantial return on capital. Some of the relatively small number of landowners who did invest in agriculture invested in irrigation, machinery and reclamation for rented areas outside their own estates. In the traditional agricultural areas of Syria, the maintenance of a stable, or static agricultural scene was considered to be of crucial social, political and economic importance by the landlords, and even those who wished to speculate in agricultural investment often preferred to pursue them outside their own spheres of control, anxious to avoid the possible instability that technical innovations might bring. This attitude had serious implications, as will be seen later.

Institutional investment in agriculture

Institutional investment in agriculture came from three main sources: governmental development and other expenditure, the Agricultural Bank and private banks. Inflow of capital from these sources rose slowly during the 1950's but was inadequate in most respects in that total investment, the type of recipient and the use to which the loan was put were not usually in accord with the pressing needs of the agricultural sector.

Government development and other expenditure in the agricultural sector was very restricted. It has already been suggested that the role of the state in the agricultural sector, and indeed in the economy as a whole was "laisser faire". Government policies were loosely supervisory, though occasionally circumstances forced a more interventionist policy

to be adopted. Examples of this were the setting up of the Cotton Office after the problems of the 1951 cotton crop, and the intervention in prices and trading in cereals after poor crop years, for instance 1955, by the Cereals Office.

The Cotton Office was a qualified success, doing much to improve the quality of seeds, controlling to some extent the area of cotton cultivation through licenses, and co-ordinating the marketing and exporting of the crop. The inadequacies of the cereal pricing policies, however, were symptomatic of the problems of the public sector, which not only made a more politive and important role for the state in the economy difficult, but impaired the running of an economy based on private enterprises and market forces. There was a lack of manpower and institutions to provide an accurate statistical service or to advise on market conditions or production prospects.

The introduction of new methods of raising capital and an overhaul of the taxation system, and the state's involvement in the planning and execution of policies to support the private enterprise system were out of the question given the number and quality of the state's employees and its financial resources. Despite this, governments before 1958 did attempt to plan and implement some development expenditures. These were financed by foreign loan or public debt rather than by any changes in taxation.

The Ordinary Budget allocation to the Ministry of Agriculture was very small, reflecting the numbers engaged in administering the agricultural sector, and the lack of state involvement in it. Expenditure from the

Ordinary Budget went mostly for administration and veterinary schools, and is shown in Table 18.

TABLE 18 Expenditure for the Ordinary Budget of the Central Government on the Ministry of Agriculture, 1945 to 1954, in Syrian pounds

	1945		1948		1951/2*		1954	
Ministry of Agriculture	2,929	3.5%	3,894	4.3%	3,676	3.4%	5,781	4.3%
Total	82,663		91,547		107,678		133,648	

*Annual rate arbitrarily derived from figures for 18 months, July 1, 1951 to December 31, 1952.

Source: I.B.R.D., The Economic Development of Syria, op. cit., p. 257.

The development expenditures on agriculture during this period appear in separate statistics in 'Extra Budgetary' outlays. From 1945 to 1953 these totalled L.S. 215.9 million of which agriculture, excluding the Agricultural Bank, received about 35%. The details are shown in Table 19.

TABLE 19 'Extra Budgetary' outlays in agriculture, 1945 to 1953

Item	Total - L.S. Million
Major irrigation projects	8.4
Ghab project administration	1.0
Wheat Office: capital	50.0
Cereals Office, purchase of pesticides	6.0
Total	75.4
(Agricultural Bank)	(29.3)

Source: I.B.R.D., The Economic Development of Syria, op. cit., p. 258.

Table 19 shows that development expenditure was almost entirely confined to irrigation and the setting up of Cereals Offices, although four research stations were also set up. For the Wheat Office investment was

largely for setting up the organisation and providing salaries for its staff.

The investment on irrigation was divided between several schemes, including El Sinn, Rouj, Homs - Hama, Matkh and Tel Maghass. (See Figure 1). By 1954, however, only the first two were not experiencing serious delays and difficulties.

Altogether, Tables 18 and 19 show the very limited investment in the administration and development of the agricultural sector. They reflect the insignificant role of the state in the sector, the result of the determination of the influential and powerful landlords and merchants to prevent interference in or erosion of their dominant economic and political position in the countryside.

Turning to the operations of the Agricultural Bank, until 1958 these were on a small scale. The number of loans given out was limited, and the Bank's capital was increased slowly. After 1955, when Agricultural Bank was used to distribute relief loans to compensate for the poor harvest, its activities became rather more important.

Before 1955, the amount of credit that was extended did not exceed L.S. 10 million per annum. The special circumstances of that year resulted in a further L.S. 53 million being given out as relief, and by 1958 the amount given out each year in loans had reached L.S. 20 million[23].

Until 1955, the Agricultural Bank, although it did contribute towards fulfilling the need for credit in the agricultural sector, was run to a

great extent like a private bank. The only security allowed was that of land ownership, and loans were only given out to 60% of the value of the borrower's land. The mass of tenants and even many smallholders, as well as the rest of the agricultural labour force were therefore unable to obtain loans from the Agricultural Bank.

Furthermore, at least half the total credit extended was in medium and long term loans. Although the maximum loan extended to any one person was L.S. 7500, the emphasis of the bank was clearly to extend credit to the more secure, more wealthy minority who owned land[24].

After 1955 credit was extended on slightly more relaxed security. Other guarantees than land, such as receipts from grain stores and joint guarantees were also accepted. This still precluded cultivators who did not own their land from obtaining loans, and as the limit on each loan was increased it seems likely that larger landowners may still have taken much of the credit available. Furthermore, few small scale cultivators would have had the time to go through the process of obtaining a loan; although there were branches of the Agricultural Bank in at least 30 provincial towns by 1958, obtaining a loan was a long and laborious business.

Even by 1958, therefore, the Agricultural Bank had a very restricted role in the supply of capital and credit to the sector. Its cautious policies did, until 1955, prevent it from having to face the problem of large scale debts.

The loans it did extend, though comparatively secure, were not necessarily used for productive purposes. The lack of skilled manpower, which was one reason the Agricultural Bank's operations were so limited, made it difficult to supervise the use of loans, whether given as cash or not. Small scale loans, whether cash or 'kind', were often used to buy food and clothes or pay debts, and other loans were probably used to acquire land or livestock.

Most of the agricultural population, however, continued to use non-institutional sources of credit. Even though the Agricultural Bank had started to give out seasonal credit as early as 1951, tenants and smallholders, who needed such credit, were not able to get it from the Bank until after 1958.

Most private banks lent into the agricultural sector, and the Banque de Syrie et du Liban (BSL) also lent to the Agricultural Bank. The I.B.R.D. estimated that in 1953 the private banks provided some 10 to 15% of the credit outstanding in agriculture (compared to the figure of 30 to 35% of the Agricultural Bank).

Private banks only lent money to creditworthy farmers who owned land. Such credit of course was confined to a small percentage of the agricultural population. Some of it was short term working capital, but much was medium and long term and was used for acquiring land as well as more productive uses. The private banks also made loans to merchants and others who imported pumps and machinery, particularly before 1955/6. They therefore played an important part in the agricultural expansion of the 1950's, but their credit was restricted to

an even smaller and wealthier strata than that of the Agricultural Bank.

(d) Political power and the agricultural sector

Landlords and merchants in parliament

It has been shown that the landlords and merchants and businessmen held a dominant position in the economic life of the country. These groups, and particularly the landlords, sustained their position by also dominating the Chamber of Deputies and forming the basis of almost every government from 1945. Although reformists did manage to get seats in the Chamber of Deputies, it was only through the army, which the landlords did not dominate, that the power of these groups was eventually broken.

Among the so-called 'parties' in Syrian politics after 1945, the Nationalists and the People's Parties predominated. Both of these were landlord and merchant parties, separated by foreign affairs and regional affiliations rather than economic or social policies. In almost every election, the large percentage of 'independents' were also landlords. It has been estimated that in 1948, 85% of Syrian deputies were landowners[25], and that after 1949, nearly half were landowners[26]. In elections from 1947 to 1954, at least 35% of the deputies were independent, with 69/136 and 66/142 in 1947 and 1954 respectively[27].

This dominance by the landlords came about for a number of reasons. They gained support through traditional allegiance to the landowning families which, in many rural areas, was very strong. Other factors included control of the local police and authorities by landlords,

intimidation of other candidates and of voters (secret ballotting was not introduced until 1954), and rigging of elections in most of the possible ways ensured a regular and predictable return for most of the landlords.

Attempts at reform 1945 to 1958

Unfortunately, the anxieties felt by these groups about political and economic trends did not result in effective attempts to modernise or improve the free enterprise system, the protection of which was their principal concern. To some extent, their ability to keep reformist elements out of the Chamber of Deputies may have encouraged them in their belief that major political and economic changes could be avoided. Most of the reforms that were put forward by the Baath, Socialists and Communists drew attention to the needs of the political and economic structure, but these were watered down or rejected for their political content as well as their implications for the ruling interests.

The landlords in general were unwilling to implement increasingly necessary changes, which might invite instability. They wanted to keep out innovations and social development in their domains, and protect political, social and economic dominance of the ruling oligarchy. The merchants and businessmen also preferred a political and economic structure that would not interfere in trade and private enterprise.

Given these attitudes, and the political power that maintained the economic structure they represented, the reforms and changes that were increasingly necessary were mostly resisted. These changes can be summarised as greater medium and long term investment, particularly in

infra-structure, irrigation and in social services. Secondly, a more positive co-ordinating role and service role for the state in agriculture and the whole economy (including more trained and specialist civil servants). Thirdly, the introduction of policies to raise national income by increased production in short as well as medium and long term, and, fourthly, the need to spread wealth and political power more evenly through the population, by the development of the industrial and other sectors, but most important, through the redistribution of land and protection of the rights and incomes of tenants and labourers.

Most of these required changes were at the centre of political debate during the 1950's. The political opposition to the establishment came mostly from the three reformist "parties", the Syrian Socialist Party (SSP), the Baath and Communists. Serious opposition occurred as early as 1951, when the Republican Socialists, who later merged with the Baath, organized demonstrations and rallies in central Syria, in Hama and Homs, culminating in a three day rally in Aleppo in September[28].

Active opposition was largely curtailed during Shishakli's regime. However, the renewed demonstrations and violence of 1955 and 1956 showed that although the leadership of the reformist "parties" came mostly from middle class intellectuals and army officers, they had widespread support for their policies, particularly in the traditional agricultural areas[29].

After 1955 and 1956 the demands for change became more and more insistent and the traditional ruling parties found it more and more difficult to

resist these demands. The changes that came about were partly the result of political pressure from reformists, and partly of the growing political power of the army whose leadership was drawn from among the peasantry and small landowners*, and who were often influenced by Baathist and Socialist ideas. But what changes were introduced, as has already been mentioned, were generally watered down or defeated, or if passed, were not followed through with the necessary determination or financial and technical support.

The measures affecting agriculture that were put forward included the setting up of a central economic planning body and the initiation of an economic plan, the development of the Agricultural Bank, the development of co-operatives, the distribution and control of state lands and attempts to reform tenancy conditions. Some progress was made after 1955 with the setting up of a state co-ordinating body for the economy. In 1956, the Central Bank was founded, an essential pre-requisite for dealing with and co-ordinating the more complicated financial problems and greater commitments of the Syrian Government which up to that time had been dealt with by the BSL.

Between 1955 and 1957 the Economic Council and Economic Development Committee was set up to co-ordinate planning, though only as an advisory body. This may have reflected a genuine appreciation of the need for economic planning, but the lack of executive power for the body shows

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*Shishakli himself, as a number of other army officers, came from one of the largest landed families in the country. A number of army officers and reformists came from lesser branches of the great landed families.

clearly that no planning body would be able to interfere with the general economic structure. Even so, after 1955/6 the state did play a markedly greater role in investment, as was shown in Table 16, and a number of projects were started by the government.

The development of the Agricultural Bank has already been discussed. The development of co-operatives, however, which should have been co-ordinated with the setting up of the Agricultural Bank, was very slow. The lack of trained manpower, capital allocation and determined policies led to a very slow development of co-operatives, although a co-operative service was to have been set up under the Co-operative Law of February 1950. As neither the farmers nor the government service had any experience of co-operative activity, there were obviously going to be difficulties in the setting up of working agricultural co-operatives. Although the first agricultural co-operative was set up in 1942, by 1958 there were only 38 registered co-operatives[30]. These were concerned mostly with obtaining loans at lower interest rates or as a means of obtaining private loans, getting discounts on seeds and so on rather than pursuing co-operative cultivation or pooling machinery and other resources.

In 1956 a more serious attempt to set up co-operatives was made when a new co-operative law was passed, but lack of training, capital and administrative and executive co-ordination in the whole co-operative policy continued to delay its implementation which might have benefitted tenants and smallholders.

The slow development of co-operatives was also partly due to the opposition of landlords and merchants to them. They feared that tenants

and others would be able to obtain credit from alternative sources than the traditional ones and so gain a measure of independence. In any case, the fact that co-operatives were advocated by the reformist groups was in itself sufficient to attract opposition from the landowners and merchants.

After 1950, the issue of the distribution and settlement of state lands became an important one, and perhaps the one in which the self-interested and ultimately disastrous attitudes of the powerful and wealthy groups was most apparent. The conflict was a crucial one for both sides, involving the right of privileged families to take over, legally or illegally, large areas of state land. The issues involved were threefold. The first concerned the right of individuals or families to take over new areas of large holdings, a question which related to private land already owned as well as new state lands. The second underlined the problem of maximum land holdings, and whether limits introduced on the acquisition of state lands should be retroactive. The third was the need to deal with the large and increasing landless rural population by distribution of state lands in small plots, and by extension from that by the redistribution of private lands.

Although changes proposed by the reformists in private land ownership were avoided, controls over the acquisition and size of holdings of state land became more and more restrictive during the 1950's. This reflected the growing pressure on successive governments for some reform in this area.

While the principle of the settlement of state land and its cultivation constituting a right to ownership after a specified time is old

established, the exact terms for ownership have varied. In 1950, the first serious attempt was made to try to control not only the amount of land that could be obtained in this way, but also to allocate state lands to landless agricultural workers and others whether they fulfilled the previous requirements of cultivation and settlement or not.

The 1949 Civil Code made no stipulations as to the maximum amount that could be obtained by settlement and cultivation for three years. However, the 1950 Constitution, in which Hourani, the leader of the Arab Socialist Party (ASP) and then Minister of Agriculture, played an important part, laid down the principles of the state's right to limit landholdings, as well as the reversion of neglected land to the state, and distribution of state land.

This first principle was one of the subjects of Decree No. 96 issued by Shishakli in January 1952 in which occupation of unregistered state land over 50 ha. (or 150 in the Jezeireh) was declared void, and the area of land which could be settled, cultivated for three years and claimed was limited to 50 ha. (or 150 in Hassakeh and Deir es Zor). This policy did not have the desired effect of quietening the ASP inspired peasant unrest, so Shishakli turned to more repressive measures and later decrees reduced the radical nature of Decree No. 96. In Decree No. 135 of October 1952 the area that could be held was increased to 200 ha. per person in a family, with the rest theoretically reverting to the state. Later attempts by the ASP and Baath to cut back large scale acquisition of state lands were in general defeated, as occurred in 1955.

Attempts to make legislation on the acquisition of state lands retroactive, which had the most important implications for land ownership in general, had less success, though in the debate on the 1950 Constitution in the Chamber of Deputies, Hourani's demand that the state's right to limit landholding be retroactive was defeated by only two votes[31].
Decree No. 96 stated that unregistered state land occupied in excess of the limits should revert to the state, but Decree No. 135 greatly reduced the effectiveness of this aim.

As in the question of maximum area, the incomplete registration records and lack of survey made policies of maximum land holding and retroactive legislation almost impossible to enforce, particularly when those involved were able to obstruct and corrupt the officials.

The lack of success of the above aims made the distribution of state lands more difficult. However, Article 22 of the 1950 Constitution said that "the state shall distribute among the landless peasants, at a small cost to be paid by instalments, sufficient land to secure their livelihood". Decree No. 768 of November 1952 allowed for the distribution of state lands in blocks of 10 ha. of irrigated and 50 ha.* non irrigated land giving priority to landless peasants. Areas in the Rouj, Jezeireh, and Ghab regions were to be the first to receive settlers. By March 1954, some 25,000 ha. of state land had been distributed and was being sold to smallholders at one quarter of the market value, but this probably the peak of the distribution at least until after 1958[32]. With Decree No. 168 of January 1953, however, landlords and merchants regained their position to some extent because instead of being distributed

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*200 ha. in Hassake and Deir es Zor

state lands might be rented out. Large areas in the Mohafazat of Aleppo and in the Jezeireh were let out on three year leases at very low rents, apparently due to a lack of applications from small cultivators.

Other reforms, particularly of tenure conditions and the redistribution of private land, which were demanded by the reformist parties, were largely resisted by the majority of landlords and merchants in the Chamber of Deputies.

In 1955 the alliance between the Baath and ASP* did start a campaign to reform and improve tenancy conditions. This included the limitation of the share of the crop taken by the landlord to one quarter in rainfed areas and one third in irrigated areas and protection against eviction of tenants from houses. In Law No. 363 of 1957, however, only the latter proposal was passed.

All the political crises of the 1954 to 1958 period failed to unseat the traditional ruling group, which continued to resist serious economic and political change and to ensure the survival of their political, economic and social position. The election of President Quwatly and the strong position of the People's and National Parties in 1954 prevented serious economic and political changes from being made, at least temporarily.

The ineffectiveness of the reformist groups, however, was also to a large extent due to their inability to work together. In the Chamber of Deputies after the 1954 election there were 19 Baath, 1 Communist and

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*In 1953 the two parties merged into the 'Arab Baath Socialist Party', hereafter referred to as the Baath.

38 supporters of Khalid al Azm who were in favour of many reforms[33]. However, the aims and the methods through which they hoped to achieve them were very different and they were only able to co-ordinate their actions on rare occasions. This conflict continued even when Al Azm became President in 1957, and his attempts to carry out orderly reforms were frustrated by the Baath as much as the conservative opposition.

It was clear that until the conservative majority in the Chamber of Deputies, which reflected its hold on the political and economic life of the country, was removed, neither the Baath nor the less revolutionary reformists would be able to carry out any significant changes. It was also becoming increasingly clear that until one group of reformists managed to gain power, divisions between the reformist groups themselves would prevent change.

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CHAPTER III The Agrarian Reform of 1958

The intention of this chapter and Chapter IV is to set out briefly the main reform laws, bringing out their principle clauses, and then to comment on their aims, their application to the aims of the regime and the problems of the agricultural sector, their effectiveness, and their effects, both intentional and unintentional.

(a) The provisions of the main laws

With the union with Egypt a series of laws and decrees from 1958 to 1960 fulfilled many of the demands of the reformists. In the agricultural sector these dealt primarily with land holdings, the conditions of tenancy and employment, the distribution of state lands and the setting up of co-operatives.

Land holdings

Land holdings were dealt with chiefly under Law 161 of 27 September 1958. Maximum holdings of private land were restricted to 80 ha. in irrigated areas, or 300 ha. in non-irrigated areas, with members of the family allowed to hold an additional 10 ha. of irrigated land, up to a total of 40 ha., or 40 ha. of non-irrigated land, up to 160 ha.

Land in excess of these limits was to be expropriated and compensation was to be paid to the ex-landowner based on a figure ten times the average annual rent for the land (based on three years' rent) in non-negotiable bonds over 40 years with interest of 1½% per annum. In addition, landowners had to declare their holdings annually, so the state could keep up-to-date records of land ownership.

The expropriated land was to be distributed by 1963 in parcels of up to 8 ha. irrigated or 30 ha. non-irrigated land. Land was to be given to the tenants of the land, labourers with agricultural experience, those with agricultural diplomas and beduins who were to be settled, unless it was to be withheld for "purposes of national production". After distribution, land was to be registered as freehold of the beneficiary, but it could be paid for over a period of 40 years, with interest of 1½% payable on the outstanding amount and a 10% charge for administrative and other costs.

Law 161 also tried to prevent the fragmentation of land, and its resale whether to landlords or others. Smallholdings would, it was hoped, go to one heir only, with inheritance of equivalent value going to the other heirs, or being paid by the heir who received the land. Tenants' heirs would, it was hoped, do the same thing, as landowners could not repossess the land on the death of a tenant. Land received under Law 161 could not be resold without the state's permission.

The conditions of tenancy and employment

Law 134 of 4 September 1958 dealing with the conditions of work and tenancy was at least as important as Law 161. It laid down maximum rents that landlords could charge, and minimum shares tenants could receive, giving the latter added protection against pump operators and other suppliers of inputs, including the landlord himself.

If the landlord contributed only the land, the maximum rent he could charge was 20% of the crop in non-irrigated and pump irrigated areas, and 33% in gravity irrigated areas. The minimum that a sharecropper could receive varied with the crop and the type of land, and the level

of inputs, but, for instance, he could not receive less than 25% of an irrigated cotton crop, 33% of an irrigated vegetable crop, 25% of a rainfed fruit crop, or 60% of a rainfed tobacco crop.

In other ways, Law 134 tried to protect the tenant and labourer. Leases were to be for one year (one agricultural cycle), were automatically renewable, and were to be in writing. For labourers, normal working hours were to be restricted to nine hours a day for three hundred days a year, children below 12 were not to be employed, a minimum wage was to be introduced, and agricultural unions were to be encouraged. A dismissal fee, as well as compensation for improvements made in the case of tenants, was to be paid if labour or tenant were dismissed. Other undesirable possibilities, such as the subletting of distributed land, were also prohibited.

These measures were to be supervised by various bodies: Tenancy disputes by a Committee of Three set up by the local department of the Ministry of Agriculture, and labour relations in general were to be supervised by a national body called the Special Inspection Organization which controlled the Committee of Three and had its own investigatory powers.

The distribution of state lands

The distribution of state lands, under Law 252 of 10 October 1959, as in Law 161, was to go ahead in units of up to 8 ha. irrigated and 30 ha. of non-irrigated land. These plots were to be distributed free, sold, or leased, with the purchase price to be fixed by committee or auction, and to be payable over ten years, interest free. It was hoped at the time that most of the 1.5 million ha. of state land would be distributed free. In fact, after 1959 most state land was leased or sold.

Under Decree 1507 of 1959, state land could still be leased to contractors, though only in units of up to 250 ha. for an individual contractor, or 500 ha. for a group, and only in areas not already allocated to farmers. Moreover, contractors had to declare machinery in their possession.

Co-operatives

The development of co-operatives was seen in the 1958 reforms as an integral part of rural progress, and the means by which agricultural methods employed by small holders and beneficiaries could be revolutionised. To that end, all beneficiaries of expropriated or state land had to belong to co-operatives, and it was hoped to extend compulsory membership to all smallholders owning less than 8 ha. irrigated or 30 ha. non-irrigated land.

To administer this programme of co-operative development, a Department of Co-operatives was set up, and Agricultural Co-operative Law No. 91 of July 1958 was promulgated, outlining the conditions and rules under which agricultural co-operatives were to be conducted. Law No. 130 of August 1958 dealt, in part, with the relationship between co-operatives and the Agricultural Bank, which was henceforth to be called the Agricultural Co-operative Bank*.

Law No. 191 gave the details of how the committees of co-operatives should be set up, and how this committee, under the supervision of the government co-operative representative, was to supervise the co-operatives agricultural production. It outlined a training programme that was to be

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*In the text it will continue to be called the Agricultural Bank

set up for co-operative officials, details of which were finalized in a Five Year Plan from 1960 to 1965. By 1965, 1250 officials were to have been trained in co-operative management, with most of them being allocated to agricultural co-operatives.[1]

Law No. 130 set out the role of the Agricultural Bank, particularly as it affected co-operatives. The Bank was to supervise co-operatives' finances, and supply them with credit at advantageous rates of interest. Rates of interest on loans were 1.5% lower to co-operative members than to others and deposits were given 1% higher rates of interest. Loans to co-operatives could be given against the guarantee of the crop, though others had to offer fixed assets as collateral. Furthermore, an essential inspection service was to be set up by the Bank.

Many of the other laws and decrees issued by the new regime from 1958 to 1961 also had an important bearing on the agricultural sector. Decree No. 220 of June 1961 modified Law No. 130, allowing co-operative members to borrow from the Agricultural Bank on personal security, and also to buy shares in the Bank. The capital of the Bank was also increased in an attempt to extend its operation in the agricultural sector. Law No. 91 of 1958 also exempted co-operatives from many duties and taxes.

A number of decrees also followed Law No. 134, consolidating the legislation or the protection of workers' and tenants' conditions. These included Decree No. 91 of April 1959 controlling the payment of workers of different categories and the penalties for breaking these laws.

(b) The aims of the government in the Agrarian Reform Laws, 1958 to 1961

The laws outlined above do give some idea of how the new regime in 1958 perceived the problems and aims, both political and economic, that it had to face.

It is worth looking in more detail at which laws were most closely pursued, which, if any, were neglected or obviously impossible to implement and therefore, probably, promulgated for propaganda rather than practical purposes. The way in which the different laws were interpreted and implemented will help to show what the regime was trying to do.

The new regime in 1958 was a dictatorial one, initially supported by the Baath, in which President Nasser rapidly assumed complete control. The agrarian reforms, particularly Law No. 161, were introduced to cement support for the new regime in the armed forces and among the landless rural population. Even more important, Law No. 161 was to be the principal means through which the political, economic and social dominance of the landlords was to be broken. Conservative politicians were no longer to be able to block all reforms through their control of the Chamber of Deputies into which they had been elected year after year from their rural constituencies.

The new regime was determined to remove "feudalism" which, it was sure, bore the same hallmarks in Syria as it had in Egypt. As a result, the implementation of Law No. 161 was carried out to ensure that the largest

and most powerful landed families were the first to suffer from the expropriations. The first two orders of expropriation listed 49 names of landlords who were to lose their land. The first included two former Prime Ministers, Husni al Barazi and Rushdi el Kikhia, the son of former President Hashim el Atassi, several former deputies to the Chamber of Deputies, and members of the families of all these men. The most important members of the other landowning families of central Syria, Keilani, Baroudi, Azm, from Hama, Soueidani from Homs, Mheid and Haraki, from Aleppo and Rustom from Lattakia were also included. The second concentrated on the large scale agricultural operators of the Jezeireh who had bought land, particularly the Najjar and Asfar families, and several of the tribal owners from the same area. The position of the tribal leaders, who had enjoyed political advantages since the French days, was also attacked by the abrogation of Tribal Law by Decree No. 166 of 28 September 1958. Later expropriation orders, which followed soon afterwards, extended the expropriation into the lands of the smaller landlords, though many of them belonged to the families of the leaders and politicians of the pre-1958 period[3].

These measures, combined with the distribution of expropriated and state land and other related reforms, were not only aimed at consolidating the new regime's power by attacking its principal opponents, but also by building up support among the landless tenants and labourers. Hourani and the Baath Party, who had sought the support of the landless mass of the rural population before 1958, now hoped to achieve this support from their position in government.

Important though the political aspect of the agrarian reforms was, the regime claimed that they hoped to improve production and achieve an economic and social transformation of the rural sector.

In the agricultural sector the redistribution of land was seen as the essential prerequisite to social and economic justice. It was also assumed that the land tenure arrangements before 1958 were in themselves a barrier to production increases and that with the redistribution of land, combined with the setting up of co-operatives and implementation of the other laws and decrees, both production and incomes would rise rapidly. The projected growth rate of agricultural production in the 1960 Five Year Plan suggests that such a development was anticipated, though the figures were unrealistically high, probably for political purposes.

A study of the regime's intended financial investment in the agrarian reforms and in the development of agricultural production as a whole suggests that it had little idea of what additional measures were required to increase production, or, indeed, what differences there were between the needs of the agricultural sector in Syria and in Egypt.

In the first place, the redistribution of land was to have been financially self-supporting. Compensation and costs were to be paid for by the payments of the beneficiaries, a policy that assumed (wrongly) the beneficiaries' ability and willingness to make their payments.

Secondly, the private sector was expected to continue to make the major contribution to investment and working capital in agriculture. As has

already been pointed out, the proportion of the agricultural population that did invest was very small, and these were almost all affected by the expropriations. That the regime expected this group to continue to invest in the sector is surprising, and suggests that the government was simply unwilling to provide the capital for this sort of essential but unspectacular investment.

Indeed, the state's only contribution towards taking over the private sector's role of providing the working capital and capital for small and medium scale investments was through the Agricultural Bank. The supply of capital to the Agricultural Bank will be discussed below, but it was woefully inadequate throughout the 1958 to 1961 period. It failed to provide anything like sufficient capital to supplant non-institutional credit which, in rural areas, was a fundamental cause for the influence and power of the traditional merchant and landowning groups.

Although the regime failed to supply sufficient credit through the Agricultural Bank, the setting up of the Ministry of Supply was intended to help raise the incomes of tenants and others in the rural sector. A strict control of profits was to be achieved through the control of prices of all goods and products. The political importance of the work of the Ministry of Supply, however, must not be underestimated. Advance buying of crops before harvesting at low prices was one of the principal means through which the tenant or labourer was kept in debt, and this was now to be prevented.

The inadequate role of the Agricultural Bank, and the uncertain and unrealistic approach of the regime to financing the land reforms and

providing for the short term needs of the agricultural sector suggests that the principle concern of the government after 1958 was to establish its political position. This obviously involved the destruction of the big estates and an attack on the influence and practices of the merchants. It also required the support of the rural population as a whole. This was partly achieved through the attacks on the landlords and merchants, the redistribution of land, and the benefits of Law No. 134. It was also obtained by the regime giving way to the beneficiaries of land and others on a shole series of matters, including debts to the Agricultural Bank, the payment for land received, and other measures in the laws. For instance, beneficiaries land could, under Law No. 161, be taken away if cultivation was not properly carried out. In practice this rarely, if ever, happened.

As a result, even the measures in the laws that were designed to improve economic conditions in the countryside were adversely effected by political considerations during this time of major political and economic upheaval.

(c) The implementation of the laws

The expropriation of land

For economic, as well as political, reasons it was obviously important that the expropriation and redistribution of estates should be carried out as rapidly as possible, but in step with the development of necessary services and other requirements for the adequate supervision and support of the redistributed areas. As has been shown, the regime struck first at the influential and large landowners, but the overall programme for expropriation was to be as shown in Table 20.

TABLE 20 The proposed implementation of the expropriation of land, 1960 to 1964, in hectares

Date	Area scheduled for expropriation
1960-61	476,000
1961-62	300,000
1962-63	300,000
1963-64	300,000
	1,376,000

Source: Le Bureau de Documentations Syriens et Arabes, Etude Mensuelle Sur L'Economie et le Marche Syriens, No. 29, Damascus, September 1959.

As Table 20 shows, the whole expropriation was to have been completed in five years, including 1959/60. Expropriation, as distribution, was to take place in "programmes" with periods of 3 to 4 months of expropriation followed by similar periods of distribution.

Figures which are available suggest that, up to 1961, expropriation fell slightly behind the programme outlined in Table 21. By 15 January 1961, one estimate suggests that 587,000 ha. had been expropriated[4], while M. Diab[5] quotes the figure of the Ministry of Planning of the UAR which stated that 596,755 ha. had been expropriated[6]. The second figure suggests that some 121,000 ha. was expropriated before 1960/61. If 121,000 ha. is added to the 1,376,000 ha. that was to be expropriated, the total is 1,495,000 ha., or approximately 47,000 ha. below the estimated total liable for expropriation of 1,544,000 ha.[7]. This shortfall must have been in the 1958 to 1960 period.

By 10 June 1961, towards the end of the Union with Egypt, it was estimated that 670,212 ha. had been expropriated[8], or about 43% of the total that was to be expropriated under Law No. 161.

It is interesting to note at this point that only 21,349 ha. of the June 1961 figure was irrigated, and this amounted to only about 22% of the irrigated land that was to be taken. Expropriation of irrigated land was clearly slower than non-irrigated and this was largely due to evasion by the landlords, which will be discussed in more detail below.

The distribution of land

The expropriation of land had therefore fallen slightly behind schedule, even by 1961.

However, the redistribution of land, and the distribution of state land fell hopelessly behind expropriation. Distribution, as already mentioned, was carried out in a series of "programmes", which involved maximum publicity to the extent that the Ministers of Agrarian Reform, Vice President Amer, and even Nasser himself went on tours and to public meetings where titles to land were given out.

Even official estimates and statements indicate that the distribution of land was far behind the expropriation. After 1½ years of the reform it was announced by the then incoming Minister for Agrarian Reform that only 1/10 of the distribution of expropriated land had been completed, and that distribution of state land had not even begun[9]. However, his intention to improve the rate of land distribution was not implemented. Little more distribution was carried out after February 1960, by which time 217,000 ha. were reported in a quasi-official source to have been distributed to about 7735 families[10].

Other sources suggest that in fact the total area distributed during the Union with Egypt was well below this figure. The United Nations reported that by 10 June 1961 175,530 ha. had been distributed to 16,154 families. 27,090 ha. of this was state land which was given to 2,090 families.[11]

Unofficial estimates, however, put the figures for distribution of land during Nasser's regime as no more than that of the United Nations. One estimate, made by El-Zaim, was that by September only 63,612 ha. of expropriated land was distributed, 36,734 ha. in 1959 and 23,348 ha. in 1960, to 5,081 families[12]. The total of 63,000 ha. was also quoted by Petran in her book[13]. Other figures suggest that the figure may have been slightly higher. Dabbagh puts the total distributed by September 1961 as 108,000 ha.[14], and Haddad puts it at 139,443 ha.[15].

Whichever figures are taken, it is clear that the government was incapable of carrying out the distribution of land. By 1965, some 3,085,000 ha. of state and expropriated land were to have been distributed to more than 110,000 families[16]. Even the highest figures for distribution shown above indicate the government was falling far behind its programmes by the end of 1961.

Apart from the political uncertainty caused by these delays, the affects on cultivation and production must also have been serious. Land that was expropriated but not distributed remained in the hands of the landowners, whose compensation was reduced accordingly. It is most unlikely that they continued to invest in the land or attempt to improve it, and what land was supplied with irrigation pumps and other investments was almost certainly neglected.

Co-operatives

The distribution of land was to be co-ordinated with the setting up of co-operatives and the training of co-operative organizers and personnel. By 10 May 1961 it has been estimated that 134 co-operatives had been set up under the control of the Ministry of Agrarian Reform covering an area of 188,161 ha., with a membership of 10,671 families[17].

These figures show that the setting up of co-operatives in redistributed land did not keep pace with the distribution itself. A comparison with the United Nations' figures for distribution, the same source as the figures on membership, suggests that slightly over half the families that had received land by May/June 1961 were in co-operatives. Probably just over half the land distributed was also in co-operatives, the balance in the figure of 188,161 ha. being made up of smallholdings and other village land included compulsorily in the co-operatives. However, very little had been done about the training of co-operative staff, so quality and effectiveness of many of these co-operatives must be considered suspect. The nature and quality of the co-operatives of the Ministry of Agrarian Reform, together with those of the Ministry of Agriculture, will be discussed below.

(d) Reasons for delays in the implementation of the laws

As can be seen clearly in the section above, despite the suspect nature of some of the 'official' statistics, the implementation of the various provisions of the Agrarian Reform laws was seriously delayed. Many factors, political, social and economic, combined to frustrate the reform programme. However, Syria may be considered one of the classic

examples of a land reform that fell down because its inspiration was largely political, and because those who carried out the legislation had insufficient knowledge and understanding of Syria's agrarian problems.

The 'Egyptian Factor' in Syrian Agrarian Reform Laws

To a very large extent, Syria's laws reflected those of Egypt*. In many cases, the articles were the same. Law No. 91 of July 1958 which dealt with the setting up and administration of co-operatives was very similar to the Egyptian co-operative law of 1956. Law No. 134 of September 1958 was similar in some respects to the articles of Egyptian Law No. 178 dealing with tenancy conditions and employment.

Turning to the limits on land ownership, Law No. 161 closely followed the Egyptian Law No. 178 of 1952. Maximum holdings of irrigated land in Egypt of 200 feddans (approx. 84 ha.) with 100 feddans for 2 children (approx. 40 ha.) compare closely with the Syrian figures.

However, the Syrian reform included limits on non-irrigated land, and was far more wide-reaching than the Egyptian reform, as about 25% (compared to 10% in Egypt) of the cultivated private land was affected**. Furthermore, as landlords sold off 63,000 ha. in Egypt, the government was only to be responsible for re-distributing 5% of the total cultivated area, whereas the additional commitment to distribute state lands in Syria meant that about 56% of the total cultivable land was to be distributed by the government.

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* Hence the oft-repeated story that Nasser dictated the provisions of the Syrian land reform laws by telegraph to Damascus.

** 1,544,000 ha. to 252,000 ha.

With the inclusion of non-irrigated land, some 3,200 landowners were affected in Syria, compared to 2,100 in Egypt - yet the total number of owners in Syria was probably less than 0.1% that of Egypt who numbered more than 2.8 million. To achieve the reduction of the political and economic power of the landed oligarchies in country where so much of the land was not irrigated would obviously involve expropriating relatively larger areas than, say, Egypt, but the particular laws applied to Syria involved the regime in a reform programme that was of a completely different dimension to that of Egypt.

Although the political aspect of the reform was paramount, at least in 1958, it could almost certainly have been achieved with a far less radical reform, and one which took greater account of the physical realities, production record and potential of the very varied agricultural regions of Syria.

The largely foreign element in the laws was the result of three factors. The first was the lack of preparation and speed with which the Union with Egypt was completed: The second was the desire to implement certain laws that were necessary from a political point of view as rapidly as possible, and the third was the strongly held belief that unity meant uniformity. In many respects, the second and third of these are closely related, for the Egyptian regime thought it recognised the same type of privileged landed class in Syria as there had been in Egypt, which required the same sort of remedies.

The speed with which the Union was negotiated and completed, and the execution of policies carried out meant almost inevitably that outside ideas and laws would be introduced, as virtually nothing was known about the agricultural sector covering physical and climatic factors, labour and

population conditions and numbers, land ownership, the financing of production, incomes, credit or, indeed, any aspect of the sector. Unfortunately, the 1958 reforms took little account even of the general knowledge there was about these matters.

There is no doubt that Law No. 161 was completely unsuited to the varied physical conditions of the different agricultural regions. Apart from soil conditions, about which almost nothing was known, the type and reliability of water supply in both irrigated and rainfed areas was too varied to limit either the size of holdings or the maximum size of distributed plots to only two categories.

Although maximum holdings in Egypt and Syria were to be the same, in few, if any, areas, did the production of irrigated lands compare with production in Egypt, with incomes being as low as one quarter of these from similar maximum holdings in Egypt[19]. In rainfed and marginal areas, of which the Egyptian regime had virtually no experience, the maximum holding was too small, too inflexible, and exceeded the political aim with no social or economic benefit.

The lack of knowledge of physical conditions may have left the regime with little alternative but to apply arbitrary laws avoiding the niceties of differentiation within general categories. However, the ignorance about physical conditions was matched by lack of knowledge about land ownership due to the inadequate survey and registration programme which by 1958 had only covered 5,053,721 ha.[20].

Expropriation in many areas was based on the reports of the landowners on their own land holdings. In many areas, especially where the 'musha'

system still operated, landowners were not actually clear about their holdings, or held them jointly, but in any case the procedure was an opportunity for misrepresentation which, no doubt, was taken advantage of in one way or another. It was not until the 1963 legislation, which will be discussed later, that landowners could be heavily penalised for this, and other, deceptions.

As far as the question of local labour supply and the demand for land was concerned, it is doubtful whether Law No. 161 considered the sort of information in Table 13, partly because no census had ever been undertaken. However, it may be interesting to note that the maximum distribution of 8 ha. irrigated and 30 ha. non-irrigated land was possibly the result of the suggestions made in the attempts to distribute state land in the early 1950's that irrigated land should be distributed in blocks of 5 to 10 ha. and non-irrigated up to 50 ha., or in holdings that were suitable for cultivation by a family. In some areas, such distributions may have been very suitable. Unfortunately, the regime, without the demographic constraints which allowed distributions in Egypt to be only of 2 to 5 feddans, did not allow for the flexibility of holdings that was necessary in Syria, whether on family farms or other types of holding.

It is also important to note that even irrigated holdings in Syria were far less productive than holdings of the same size in Egypt. While a holding in Egypt of, for instance, 3 feddans (about 7.2 ha.) represented a net average annual income of 75 to 90 Egyptian pounds (LE) before 1958[22], holdings of 8 ha. of irrigated and 30 ha. of non-irrigated land in Syria may only have provided a net annual average income of L.S. 400[23].

As will be seen later in detail, but can be mentioned in general terms now, the average size of holdings given out was well below the maximum of Law No. 161. For the period 1958 to 1961, from figures taken from United Nations sources, distribution of expropriated land (irrigated and non-irrigated) averaged 10.6 ha. per family, and for state land, 13 ha.[24]. Not only were holdings that were to be given out in Syria considerably less productive than those in Egypt, but the average holding distributed was less than half the maximum permitted. In most areas where holdings were distributed, therefore, incomes from the plots were extremely low.

The policy of distributing such small plots may have been a deliberate attempt to make the beneficiary economically dependent as well as legally bound to the co-operatives. More likely, however, is that the regime attempted to distribute as many plots as possible for political reasons, despite what must have been a growing awareness of the backwardness of the Syrian rural sector, low productivity and incomes, and the severe problems of the small farmers in the drought period of 1958 to 1960.

It is also possible that the regime, with its ambitions for Egyptian settlement in the Jezeireh, chose to ignore the problem that in some parts of Syria, particularly the west and south west, there was a critical and growing shortage of agricultural land. However, there is little evidence to support the idea that the regime intended any such migration in the short term, though it was an argument used by many of the opponents of Union with Egypt in 1961.

The administrative and technical inability of Syria to sustain the 1958 reforms

It has been shown that the regime was incapable of carrying out the expropriation and redistribution of land in Syria at the rate planned and some of the reasons for this have been outlined above. The other principal laws, No. 134 and those concerned with the setting up and administration of co-operatives, were also found to be difficult to implement, and in some cases, inadequate and ill-fitted to requirements.

In some respects, Law No. 134 was comparatively successful. This was due to the ease of access of the tenants and labourers to the local tribunal dealing with complaints, also because these tribunals tended to side with the tenant or labourer, in contrast, perhaps, to Egypt[25]. Undoubtedly, the tenant gained most from the enforcement of Law No. 134. Rather than copying the Egyptian regulations, sharecropping agreements were much more closely related to the relative inputs of landlords and tenants, the type of crop and the type of water supply. It was comparatively easy to enforce the conditions of tenancy which could be arbitrated by the local tribunals and the incomes of tenants undoubtedly increased. On the other hand, as in Egypt, the principal failing of the law concerned the length of tenurial contract, which in Syria was only one year. Despite automatic renewal, the long term position of tenants was legally in doubt.

Legislation in Law No. 134 dealing with labourers was, however, less successful. The regime over-reached itself in that although the idea of a minimum wage was decreed, the amount was neither specified or enforced. The regime began to realise that in many areas of Syria the large pool of

landless labour gave employers a buyers' market which they characteristically enjoyed by maintaining low wages. It was also very difficult to enforce other aspects of the law dealing with working hours, minimum age for employment and so on.

While many of these measures were desirable for social reasons as well as for propaganda purposes, they were impracticable because they could not be enforced. So, as in Egypt, the privileged minority who were tenants gained from Law No. 134 rather than the mass of landless labourers.

The development of co-operatives and the implementation of Law No. 91 were, however, ill-conceived and unsuccessful. Though it has been stated that by the middle of 1961 more than half the families benefitting from the distribution of land were probably in co-operatives, many of these co-operatives only existed on paper, or merely involved the village mukhtar being given money to distribute. Few, if any, of the aims of the Agricultural Co-operative law were achieved, and once again the problems of applying Egyptian laws and aims to Syrian conditions failed.

The reasons for this were soon apparent. Syria, unlike Egypt, was almost completely devoid of a co-operative administration, or trained co-operative officials. Before 1958, co-operatives had received virtually no support from the government, with landlords in general being suspicious of them as a threat to their economic and political control over tenants and others, and in 1955 there was only one full-time co-operative officer in the entire Ministry of Agriculture[26].

Given the manpower and financial resources of the state, it was clearly impossible to set up a comprehensive co-operative system in three years.

Apart from training an official for each co-operative, it was estimated in 1962 that the country needed some 600 agricultural engineers, as well as statisticians, economists, social workers, surveyors and administrators. It was also estimated that an extension service of nearly 700 officers was needed[27]. In fact, by 1960, there were actually only 20 temporary untrained field officers working with agricultural co-operatives[28].

Apart from the unrealistic nature of the plans for co-operatives from the point of view of personnel, the question of whether the Egyptian type production co-operatives, and the full range of services that was envisaged in Law No. 161 and Law No. 91 were either feasible or suitable must be raised. Important differences between agricultural conditions in the two countries made the application of the Egyptian-inspired law questionable in Syria. In Egypt, whole estates were expropriated and converted as a whole into co-operatives. Co-operatives were generally based on production units of about 1000 feddans, usually involving about 300 members. In Syria, although the aim was to develop similar production co-operatives, expropriations were far more fragmented, partly because large holdings in cultivated areas were smaller than in Egypt, and partly because a comparatively greater proportion of holdings were subject to expropriation. Co-operatives were rarely in a suitable form for a production unit, and although there were some instances of whole villages being expropriated, these were very much in a minority. As expropriated land was not consolidated by purchase or transfer, co-operatives tended to be based on a village community, rather than a production unit, making the idea of unified cultivation less valid. With no trained officials, the ignorance of the mass of

Syrian peasants of modern agricultural methods or advantages of co-operation and lack of preparation for this major change in the agricultural system resulted in the co-operative movement making little real progress.

The Egyptian co-operatives were to be financed from a levy from profits from joint marketing. Although this was also the idea in Syria, in fact the drought years of 1958 to 1960, combined with the lack of supervision of financial and marketing affairs, meant that few co-operatives made a profit and finance had to come from the state. Co-operatives very often simply became the means through which the mukhtar or some other official handed out money, a system which invited corruption and wastage and created an undesirable precedent which became increasingly difficult to shake off.

The failure of the great majority of co-operatives was the direct result of an over-ambitious and misguided programme and had the effect of making most cultivators unwilling to join or participate in co-operative activities if at all possible. Most of the co-operatives formed at this time gave no incentive to any cultivator to relinquish his independence and self-reliance.

Not only did co-operatives not improve services and supplies for cultivators, but the inputs and machinery hitherto supplied by merchants and landlords were less available than before. The co-operatives and government were notoriously inefficient at maintaining and running agricultural machinery and at supplying inputs for agriculture on time.

Under these circumstances, the advantages of smallholdings bound together in production co-operatives, a fundamental part of the government's political and economic programme, did not materialize. All that many peasants received was land, and the widespread stories of attempts by the new owners to give, sell, or rent back lands to their former owners[29] suggests that in some areas at least beneficiaries of the reform were finding it extremely difficult to cultivate their new lands successfully.

The Reform Laws and economic and political relations in the agricultural sector

Perhaps the most important consequence of the comparative failure of the co-operatives was that it not only failed to create systems of supply, production and marketing, but it failed to replace the system that already existed and was broken up by the agricultural reforms. It would, however, be wrong to understate the defects of the system that had previously existed. Many landlords were absentee rentiers, tenants and labourers were exploited by contractors as well as landlords, the production and marketing of crops was in the hands of merchants, and capital generated in the sector was unequally divided and distributed, and often not productively used. Many of these features, together with the control of the Chamber of Deputies by the landlords and merchants, were, of course, recognisable to the Egyptian regime.

However, to identify the Syrian merchants and landlords as being exactly the same as those in Egypt was mistaken. In the first place many of the Egyptian landowners and merchants were foreign and before 1956 they had not only exploited their tenants, but exported their profits. Although many Syrian merchants used their position to exploit their clients, and many landowners were simply rentiers, many were also far

more involved in investment and production than their Egyptian counterparts. Perhaps Warriner describes the position of many, though by no means all, landlords when she writes that rather than being "feudal" many large landlords were "seigneurial", taking some interest in and responsibility for their tenants and their land[30].

Because of the vital role in investment, credit, and the supply of inputs and services which was carried out by the landlords and merchants, production in the agricultural sector was seriously disrupted by the agrarian reforms. In the short term the incomes to tenants did rise. However, the state was unable to replace the role of the landlords and merchants which it underestimated and probably misunderstood. Its resources of capital and trained manpower, far below those of Egypt, were completely unable to deal with the needs of the agricultural sector which had been subjected to far more radical reforms than that of Egypt.

Apart from the large landowners and merchants, unlike Egypt, Syria had a relatively large and influential middle class. Many of these were merchants, many others small or medium landowners, often belonging to the large families from which the large landlords came. The comparative severity of the expropriation laws meant that many of this group were also affected, and it was from this group that the growing opposition to Egypt in the UAR came. It seems that the regime saw the Syrian middle class in the same terms as that in Egypt, in other words, politically, socially and economically sympathetic to the great landlords and merchants - a view that was not entirely accurate. The Syrian middle class was relatively much larger than its Egyptian counterpart, had its own identity, and was much more prepared to invest in local enterprises. In Egypt, the considerable foreign population in both the upper and middle

classes was often more interested in exporting their profits or spending them on luxuries.

As holdings were relatively so much larger in Syria, yet the ceilings of ownership were comparable to Egypt's, a far greater proportion of the medium and smaller owners, and therefore of the middle class was affected. It is indicative of the regime's misunderstanding of Syrian conditions that in Egypt Nasser looked to the middle range of owners, up to 200 feddans, to provide the continuity and stability in the agricultural sector, whereas in Syria, many of that same group were affected to some extent by the reforms.

The growing opposition to the regime from the middle class had an increasingly serious affect on the economy. The economic prosperity of the province depended more on the support of the middle class than the regime thought, for, as the I.B.R.D. put it, "the business community has been investment conscious and has engaged in little conspicuous spending except for housing"[31]. Deprived to a large extent of this investment, Syria's economy began to falter, and opposition to the regime to build up.

The eventual collapse of the Union with Egypt came about for a combination of political and economic factors all of which reflected to some extent the Syrian fear that the Egyptians intended to dominate their country.

The support that Nasser might have hoped to get from the rural areas as a result of the agrarian reforms was not, however, forthcoming. This was partly because the Baath and other political groups which opposed

Nasser in 1961 had retained the support of much of the rural population. It was also because the reforms had not been properly executed, in many areas cultivation had become disorganised, and production had fallen. The agrarian reform had been mismanaged and over-ambitious, and Nasser's regime took the blame for it.

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CHAPTER IV Agrarian Reforms in Syria After 1961

(a) The political struggle during the 1961 to 1963 interim period

The period between the demise of the UAR in September 1961 and the Baathist coup of March 1963 was one of political uncertainty and conflict. Bitter opposition to the Union with Egypt was widely felt by 1961. The loss of liberty was widely opposed. In the business community, nationalizations, currency controls and regulations concerning trade that blatantly revealed Egypt's exploitative attitude towards the northern region were unpopular. Landowners, not surprisingly, bitterly resented the expropriation of their lands, and a wider dissatisfaction existed in the rural areas, partly due to the inadequate execution of the laws, and partly because of the sequence of disastrous rainfall years that unfortunately coincided with 1958 to 1961.

The end of the Union was brought about by a coup engineered by Nationalists and Rightists. The Baath party, too, was opposed to the Union by this time. However, in the reaction to the type of regime that had existed, the Rightist, pro-parliamentary forces gained popularity, while the reformists, to some extent in disarray, lost support.

As a result, the Right again dominated the elections of December 1961. More than 125 out of 170 deputies were from the Peoples' and National Parties or Independants, and a further 16 formed an Islamic bloc[1]. Only the Hourani faction of the Baath did well among the leftist groups.

However, the Left, which included many supporters of President Nasser, was still well entrenched in the army. Attempts by the Right to repeal

the laws introduced from 1958 to 1961 through the Chamber of Deputies were bitterly opposed to the Left which was usually supported by the army. Throughout March and April 1962 the political conflict became more involved, with more and more interference by the military. Eventually, in May 1962, there was a coup d'etat, with the army from then on taking a dominant role in political decision making. Although parliamentary government was to be retained, from this time the Right was fighting a defensive battle over most of the political and economic issues of the day, not least over the question of land reform.

The unstable political situation that continued while the Chamber of Deputies remained in existence under these circumstances did not last long. Further political intrigue, and the tightening grip of the Left on the army lead to a coup by the Baathist-Nassserist officers in March 1963, triggered off, no doubt, by a similar coup in Iraq. Following this coup, the Chamber of Deputies was disbanded, and the Left installed itself in power.

(b) Changes in the Agrarian Reform laws from 1961 to 1963

Following the succession of Syria from the UAR, the National Charter of September 1961, which embodied the demands of the successionist groups, declared that the laws concerning the expropriation and distribution of land were to be suspended. The list of demands, which reflected the dominance of the Right included the denationalization of banks and the suspension of trade and currency restrictions. It was clearly the aim of the Right to restore their control over the agricultural as well as the political, commercial and industrial life

of the country. After the elections of December 1961 their intentions were made plain in the legislation introduced in the Chamber of Deputies.

Law No. 161 was replaced by Law No. 3 of February 1962. This abolished the bodies set up to initiate and execute the redistribution of land. Maximum land holdings were retained, but greatly enlarged; more account was also taken of the type of land and crop, and the size of the land-owners family. For every wife and child he was entitled to retain a further 1/8 of the maximum land holding. Compensation that had to be paid to those whose land had already been redistributed was to be speeded up, and paid over ten years in negotiable bonds with an interest of $2\frac{1}{2}\%$ per annum.

The beneficiaries themselves did also gain from Law No. 3 in that the repayment for land received was to be waived.

One of the conflicts in the Chamber of Deputies at this time was the extent to which land that had been expropriated and redistributed should be returned to its former owners. Law No. 3 did confirm the ownership of beneficiaries who had already received land. An attempt was made in Decree No. 2 of 30 April 1962 to allow former landlords to repossess their land, but in its final form the decree only allowed land that was expropriated and not allocated to be taken back by its former owners. Land that was allocated but not actually distributed was to remain in the hands of former owners for one year before being distributed.

The policy of returning expropriated lands to former landowners was hardly implemented. This partly reflected the realization by many

deputies that some at least of the changes made since 1958 could not be eradicated. However, as in the case of the distribution of land, the development of co-operatives and the implementation of Law No. 134 were also brought to a virtual standstill.

More positive attempts to revert to the pre 1958 agrarian situation were also halted by the growing influence of the Left, and the increased interference of the army, dominated by the Left, in politics. After the coup d'etat in May 1962 the Chamber of Deputies was forced to accept major changes in agrarian policy. Decree No. 2 of 2 May 1962 re-introduced Law No. 161 with the Right only able to include minor amendments to it. In drier and emptier non-irrigated areas holdings could be larger. For every wife and child the landowner was also entitled to 10 ha. of irrigated or 40 ha. of non-irrigated land. Compensation arrangements were again changed, but were more favourable than Law No. 161. Former landowners had non-negotiable bonds with 1½% interest to be re-paid over 15 years, unless their value was over L.S. 100,000, in which case the 40 year lapse remained.

Decree No. 2 also once again set up the full apparatus of expropriation committees and the expropriation and distribution of land was set in motion. Beneficiaries, in contrast to Law No. 161, were given title to their lands immediately rather than after 40 years, but payment for land was reintroduced, with interest of 1½% per annum. The administration charge was abolished. Land received was compulsorily mortgaged to the Ministry of Agrarian Reform.

(c) Execution of the laws, 1961 to 1963

From May 1962 the Right was on the defensive politically, particularly so far as agrarian policies were concerned. The increasing influence of the Left is reflected in the actual course of expropriation and distribution in the country.

After the National Charter of September 1961 the expropriation and distribution of land ceased. Expropriations and distributions of land for 1961 and 1962 almost all occurred before September 1961 or after May 1962.

While no expropriation occurred between September 1961 and May 1962 it is interesting that in the first half of 1962 the distribution of land and the setting up of co-operatives began once again. Although this was only carried out to a small extent it shows that the Right was beginning to accept that some adjustments of the September 1961 situation were necessary. The exact extent of the distributions made at this time is difficult to establish, but from the figures available for the province of Hama it was of only slight importance in terms of area.

Attempts to return land to their former owners under Decree No. 2 of February 1962[2] shows that only 28,962 ha. of land was given back to its former owners, (the details are shown in Table 21), and the hardline Rightists failed to restore their control over agriculture as they had hoped.

After May 1962 the expropriation and distribution of land continued. Altogether some 49,800 ha. of land was expropriated and 92,400 ha. of land distributed in 1962, almost all of which was dealt with after May.

TABLE 21 The return of expropriated land to its former owners, 1962, in hectares

Mohafazat	Area Returned to Former Owners
Damascus	1,030
Homs	1,152
Hama	1,421
Idlib	804
Aleppo	2,579
Rakka	1,520
Deir es Zor	20,094
Hassake	1,042
Sweida	320
Total	28,962

Source: Statistical Abstract, op. cit., 1962, p. 408.

It is interesting to note that only a very small proportion of the land expropriated and distributed was irrigated, possibly a reflection of the influence the landowners retained in local government affairs.

The expropriation of land took second place to the distribution of expropriated and state land which was the most important feature of the May 1962 to March 1963 period. Priority was given to distribution partly to clear the backlog of land which had been expropriated before September 1961 and not distributed, and partly because the Chamber of Deputies was still able to hold back the rate of expropriation to some extent. The sale and renting of state land, which is shown later in Table 26, again tackled one aspect of the agrarian reform which had been neglected from 1958 to 1961. This policy also avoided a major attack on the landowners who were so well represented in the Chamber of Deputies.

However, after the coup d'etat of March 1963, the Right was no longer able to mitigate the policies of the Left, and major changes in the approach to agrarian reform emerged.

(d) Political changes in 1963 and the provisions of the main agrarian reform laws

The coup d'etat of 8 March 1963 brought military officers to power who were almost all either Nasserists or Baathists, or supporters of these groups. Following an attempted coup by the Nasserist element in July, the Baathists took complete control of Syria.

Since this time the Baathists have remained in power in the country. However, the Baath has been prone to internal disputes and in 1963 there was a bitter internal conflict between civilian Baath leadership, and the younger Baath army officers who were more left wing and far more autocratic. This struggle was also partly responsible for the confessional discord that became serious after 1963 as the civilian Baath leadership, usually known as the National Command of the Baath, was more popular among Sunni Moslems than the military wing, usually referred to as the Regional Command of the Baath or 'neo-Baath', which was strongly supported by the Alawi. It was not until 1965 that this particular conflict was resolved in favour of the latter faction.

The fact that the Regional Command won this crucial struggle has had profound effects on the course of the agrarian reforms in Syria. Laws introduced in the 1963 to 1965 period and subsequently have been interpreted from a neo-Baath point of view, one which differs radically

from original Baathist ideology. The implications of this approach will be discussed after the outline of the provisions of the new laws below.

After March 1963 there was little dispute in the Baath Party about the need for further legislation in the agricultural sector, particularly further reduction in the size of holdings. Law No. 88 of 23 June 1963 was introduced to replace Decree No. 2 of 2 May 1962. Decree No. 1109 was then promulgated on 22 September 1963 to help clarify and consolidate the measures introduced by Law No. 88.

In Law No. 88 maximum land holdings were reduced below the levels of Law No. 161 to 15 to 55 ha. in irrigated areas and 80 to 200 ha. in non-irrigated areas, depending on the availability of water and the type of crop. Expropriation measures were back-dated to apply to all land holdings since 1 January 1950. Compensation arrangements remained much the same as under Law No. 161, but beneficiaries were once again exempted from payment, except that they had to pay a charge of one quarter of the value of the land to their co-operative, of which membership was compulsory.

Plots were to be distributed in holdings of up to 8 ha. irrigated and 30 to 45 ha. non-irrigated land, and all beneficiaries and others holding less than 8 ha. irrigated and 30 to 45 ha. non-irrigated had to join a co-operative. No beneficiary could sell or mortgage his land for 20 years, except to the Agricultural Bank, nor could he sub-let it or employ someone to cultivate it for him. Land received by beneficiaries could again be expropriated by the state for the state's needs. The state also reserved the right to set up state farms. The 'Judicial Committees' were reinstated, and backed by a 'Higher Commission' to implement the reform and hear appeals.

Law No. 88 also underlined the support that was to be given to farmers through the Agricultural Bank. The state, through the Ministry of Agriculture, would stand as security for loans to co-operative members from the Agricultural Bank.

While increasing the penalties for attempted evasion of the reform, Law No. 88 also permitted landowners who obtained permission of the state to keep an area above the maximum provided they irrigated it with wells. According to Law No. 88 the owner could also choose the land he retained as long as it did not run contrary to peasants' needs.

Law No. 88 was quickly followed by Decree No. 1109 of 22 September 1963 which dealt with three important aspects of the reforms. The first was the requirement to make an annual declaration of private holdings. The second elaborated on the susceptibility of land sold or given away between 1 January 1950 and 8 March 1963 to expropriation, allowing no exceptions to this backdated legislation. The third specified that up to 8% of the maximum land holding could be given to each wife and child up to a total of 4 married or born before 27 September 1958. Other measures included arrangements for common land and pasture land in a village to be taken over by the co-operative.

Other reforms introduced in the early Baath period of 1963/4 included Law No. 218 of 20 October 1963, which dealt with agricultural relations, and amended and extended Law No. 134 of 4 September 1958. Minimum shares of crops to sharecroppers were increased so that, for instance, he could not receive less than 40% of an irrigated cotton crop, 50% of an irrigated vegetable crop, or 30% of a rainfed fruit crop. The costs of

production, unless agreed by the two parties, would be adjudicated by a commission in each mohafazat. If a tenant's yield fell to below 40% of the average yield for the area, his obligation to the landlord would be waived.

A large number of other measures helped to secure the tenants' and labourers' rights. Fixed minimum wages, accident, holiday and compensation payments were introduced. Landlord obligations in inputs and in keeping verbal agreements were made binding, and an inspectorate was set up to oversee the law.

Another important law was Decree No. 127 of 14 December 1964 which created the General Union of Syrian Peasants, hereafter called the Peasants' Union, which was to concern itself with the protection of peasants' rights, the development of agricultural policies and to encourage the formation of co-operatives. Regional branches were also to engage in cultural, technical and political programmes, and have representation on local committees dealing with the expropriation and redistribution of land, and in implementing Laws No. 88 and No. 218.

Other laws fell into two main categories, those dealing with increasing the efficiency and speed of the administration of the agricultural sector, and those dealing with the direction of agricultural policy. In the former group can be included Decree No. 1589 of 23 February 1966 and Decree No. 145 of 3 December 1966, both attempts at simplifying the procedures for expropriation and distribution, putting forward priorities for recipients and setting up committees to expediate Law No. 88. Of great importance, too, was Legislative Decree No. 163 of 9 December 1967 in which the Ministry of Agrarian Reform and Ministry of Agriculture were combined.

Laws concerning agricultural policy showed perhaps a more radical nature after 1965, and reflected at the same time both the Leftist ideology and more pragmatic political considerations of the Regional Command. Decree No. 655 of 1965 dealt with the setting up and administration of state farms with which it was hoped to transform the systems of production in agriculture by developing collective methods of cultivation. Decree No. 166 of 15 December 1968 concerned the free distribution of 600,000 ha. of state lands to peasants, and was followed by Decree No. 66 of 27 January 1969 announcing the distribution of plots of irrigated state land of 2.5 to 4 ha. each to peasants in central Syria, in areas just east of the Alawite mountains. In these areas production schedules and the siting of houses was to be controlled by the state.

Other laws concerned the setting up of machinery stations, the increasing control by the state of prices, marketing and trade in agricultural products and inputs. They also included laws dealing with the repayment and waiving of debts in the agricultural sector, an issue of great political significance.

(e) <u>The political background to agrarian reform policies, 1963 to 1973</u>

In July 1963 the Baath Party took over full control of Syria. However, bitter factional disputes were the predominant characteristic of the 1963 to 1966 period, with the agricultural sector one of the most important fields of conflict. Apart from the element of personal ambitions and rivalries, which were significant, agricultural policies, including the nature of the role of the peasantry in politics, were of particular importance in the struggle between the main political groups.

In July 1963 the National Command of the Party probably had the upper hand over the Regional Command. However, the former, the more intellectual and ideological group[3], did not have the strong support in the army that the latter could command. The Regional Command was led by younger, more militant and extreme elements, mostly army officers, whose autocratic and pragmatic approach to politics clashed with that of their National Command brothers. Both National and Regional Commands did contain their own factions, each with their own ideological, confessional and personal commitments, but they tended to associate themselves with one or other of the two main groups.

As a result of this political struggle the agricultural sector, which had always been of central importance in the political and economic order, became dominated by the need for each group to gain support and attempt to impose its control over it. As will be shown, agricultural policies became subjected to pragmatic political considerations. It was impossible for political reasons to amend inconsistent and unsuitable policies, including those that conflicted with the unfavourable physical conditions for agriculture and the limitations of manpower and technical levels in the agricultural sector.

However, the agrarian reform laws of 1963 did receive wide support in the whole Baath party, and disputes became more bitter only with later differences in interpretation of the laws and additions to them. The destruction of the residual power of landlords with the distribution of their lands to peasants and beduins was a priority of the Baath in 1963. Many Baathists, especially those in the army, had strong

rural connections and insisted on the destruction of estates and large holdings, with the result that Law No. 88 was even more radical than Law No. 161.

Law No. 88 did take far more account of the local and regional differences in agricultural conditions in Syria. This undoubtedly reflected the concern of the Baath to underline that the reforms were Syrian in nature, a point emphasised by the National and Regional Commands who had both opposed the continuation of the union with Egypt. However, there was also widespread agreement within the Baath that even in the drier agricultural areas larger holdings would not be permitted, an ideological commitment that may have gained the Baath popular support but conflicted with the physical constraints on agriculture in most of the interior of Syria.

Law No. 218 of 20 October 1963, which superceded Law No. 134, was also more specific and detailed than its predecessor. The Baath as a whole was determined to control landlords' powers and rights, and Law No. 218, unlike Law No. 134, had detailed provisions on many matters in the expectation that they would be enforced.

The Baath was also united in its desire to raise production and modernize agricultural methods, although through the state or co-operatives rather than through private enterprise. The policies that were advocated for this purpose did not differ fundamentally between the two factions, at least in 1963, and were only later subject to different interpretation and distortion. They included the rapid implementation of the expropriation and distribution of land which was to be concluded within

two years. State lands were to be distributed rapidly to peasants and beduins. Distributed lands were to be integrated closely and rapidly into a system of production co-operatives. Co-operatives were to be financed to some extent by the beneficiaries themselves by the payment of one quarter of the value of their new lands to the co-operative, rather than full payment to the state. Apart from the obvious political implications of waiving three quarters of the beneficiaries' debt, it was also a practical move, as the debt situation had already indicated to the regime that smallholders were unwilling and even unable to make their repayments. The co-operatives were to become production co-operatives, providing a full range of services including marketing and exporting, as well as education and extension work.

The Baath also aimed to increase the state's financial commitment to the agricultural sector through the Agricultural Bank. The Bank was instructed to increase its loans to smallholders and members of co-operatives[4], and arrangements were made to reduce and reorganize debt repayments to the Bank, many of which had been incurred in the poor agricultural years of 1959, 1960 and 1961. Before the reorganization of debt repayments, those with outstanding debts were not entitled to receive loans, which was counter to the regime's policy of erradicating the influence of moneylenders and richer landowners.

The development of the influence and power of the peasantry was also a cornerstone of Baathist ideology, and one which, ostensibly, was pursued by all factions of the party. This was to be done through the co-operatives and the Co-operative Union, set up in legislature Decree No. 56 of 1 October 1964, and the Peasants' Union. The Co-operative Union was to be open to all smallholders, tenants and labourers for a small membership

fee, and was to combine political representation with extension and other agricultural support work.

The setting up of both organizations showed that the government realised it was not sufficient simply to expropriate and redistribute the land without adequate arrangements for the protection and education of the rural masses. The development of the Co-operative Union showed the government also realised that institutions were needed to co-ordinate and plan the requirements of individual co-operatives within a national and regional framework. The Peasants' Union reflected the government's appreciation that the peasantry, once controlled by the landlords, were increasingly aware of their political power, and needed an organization in which to express it.

While there was much agreement in the Baath party as a whole over the above reforms, differences in their interpretation, and of policies on the future development of the agricultural sector became more and more acute after 1963. As the political struggle between the two factors of Baath developed, differences in their agricultural policies became more pronounced, and the position of each more distorted by the other.

One of the principal differences that emerged was the attitude of the two groups to private ownership. The National Command, which stuck more closely to Baathist ideology, supported the private ownership of land, though of course in smallholdings and co-operatives, and the independence of the individual within the framework of the co-operative structure. This policy came under increasing attack by the Regional Command, which interpreted it, for their own reasons, as indicating a desire to retard

the socialist revolution for which they worked. The Regional Command, on the other hand, greatly influenced and supported by communist factions, aimed for an agricultural sector that had a large element of state control of marketing and trade.

For the most part, it was difficult for the National Command to resist the Regional Command demands without appearing to betray the cause of Baathist-Socialist progress, to which both groups claimed adherence. Indeed, the more gradualist policies of the National Command, combined with their more western oriented foreign policies, were easy propaganda targets for the more intransigent, pro-Soviet Regional Command.

Partly as a result of these disputes, the implementation of Law No. 88 fell behind schedule, and no constructive attempt was made to resolve the the profound and crucial question of the nature of the individuals control over the land he owned and the extent to which his working of it should be organized by the state. Instead, the argument degenerated into a clash for support from the various interests in the rural areas. The National Command hoped that private owners, who would still own 60 to 65% of the agricultural land after the implementation of Law No. 88[5], and, it has been suggested, even former large landlords[6], would rally behind the group's support of private ownership. On the other hand the Regional Command looked to the support of the landless tenants and smallest landowners who may have thought they had most to gain from greater state control in the agricultural sector.

However, it would be wrong to suggest the brood mass of landowners or the landless rural population had a direct say in policies that were carried

out, and in the end the control by the Regional Command of the army was the deciding factor in this dispute.

A second major difference between the two groups concerned the role and character of the Peasants' Union and Co-operative Union. One basic tenet of Baath ideology is that decisions and policies should be proposed at the lowest level of the party, in this case the local union branch or co-operative, and representatives at the regional and national conferences should decide policy accordingly. In this way the rural population would make its wishes known, and, through the services supplied by both Co-operative and Peasants' Union, be able to improve rural conditions and agricultural methods on the one hand and develop political awareness and responsibility on the other.

To some extent the National Command clung to this ideal, and the leadership pursued this democratic system until it became obvious that social and political conditions in the country were completely unsuitable for it. Both the Peasants' Union and the Co-operative Union became the means through which the factions hoped to gain the control and support of the rural sector. The nomination of supporters to positions of power in local and regional unions and co-operatives became more and more important. The Regional Command, however, rapidly got themselves into a dominant position in these structures as they had in the army.

It is interesting that other programmes in the rural areas, such as extension and rural education, which the government tried to set up at this time, almost all failed as the Peasants' Union and Co-operative Union insisted that such activities were their responsibility. Thus, by 1966, the Regional Command had cemented its control in rural areas.

Following the coup d'etat in 1966, the Regional Command took over control of the country, and it seemed the agricultural reforms might be completed rapidly and even radicalised. Although a certain amount had been done to complete reforms between 1963 and 1966, they had fallen far behind schedule. In fact, the Regional Command itself was split by factions with bitter disputes over foreign military and industrial as well as agricultural policies.

The left wing faction that took control, led by Salah al Jadid, pursued a policy of greater and greater state control in the agricultural sector. The Minister of Agriculture, Abdel Karem al Jundi, a Communist, pressed forward policies of state farms, state machinery centres and production co-operatives, and on the implementation of Law No. 88.

However, after the disastrous 1967 war against Israel, the radical policies in the agricultural sector began to lose momentum as political and economic crises beset the regime. In 1970 a further coup d'etat brought the right wing of the Regional Command to power, led by Hafiz Assad. This regime had to face the problems of lack of investment, lack of private co-operation and confidence and the flight of private capital and skills from the agricultural as well as the industrial and commercial sectors of the economy. The Assad regime therefore introduced policies in agriculture (as in industry) that were more conciliatory towards the private sector[7], which will be discussed below.

Of course, the changes represented changes in emphasis rather than in direction. The Assad regime may have come to the conclusion that the co-operation of the private sector in agriculture as well as industry and

commerce, was essential for the economic progress of the country. However, Assad has had to balance this need with the demands of his Baathist supporters in the countryside and the army. For this reason the Baath retains its control over the Peasants' Union and Co-operative Union, and despite certain relaxations, over industry and commerce. The distrust with which the private sector responded to the incentives offered shows its realisation that the Baath had the country tightly under its control.

(f) Execution and progress of the laws

This section will show the extent to which the laws outlined above were implemented, and how the political disputes and uncertainty affected the programmes set down. It will also help show the extent to which policies, many of which were made much of, were actually carried out during the Baathist period.

Expropriation of land

Following the Baathist coup of March 1963, and the determination expressed by the new regime to complete the expropriation and distribution of land subject to Law No. 88, it is perhaps somewhat surprising that the programme continued to lag far behind expectations. Although the reforms should have been completed by the end of 1963, at the beginning of 1965 the government announced that expropriation and distribution would be completed within eighteen months[8]. This deadline was completely unrealistic in terms of both the progress made in the past, and the efforts regimes had made to improve the manpower and resources available to carry out the programme.

Table 22 gives the figures produced by the Central Bureau of Statistics for the expropriation of land.

TABLE 22 Area expropriated by years, 1959 to 1969, in hectares

Year	Area
1959	516,830
1960	167,568
1961	133,198
1962	49,828
1963	50,445
1964	76,189
1965	220,735
1966	45,941
1967	52,199
1968	25,391
1969	243,212
Total	1,513,564

Source: Statistical Abstract, op. cit., 1969-70, p. 130.

Table 22 shows that by the end of 1969 the expropriation of land was officially completed. There is some doubt about this as figures from agricultural records in Hama suggest that expropriation continued through 1970 and even into 1971 and 1972, though in the last two years it was of very minor importance. This discrepancy will be discussed later, but even this discrepancy cannot account entirely for the considerable and serious differences that remain even between official figures over just how much land has been subjected to expropriation. Sources vary in their estimates of total land expropriated from 1,589,536 ha.[9] to 1,513,564 ha.[10] to 1,373,600 ha.[11]. Variations of this magnitude in official statistics give rise to suspicions that they may have been manipulated for some purpose. The first figure represents the total of expropriated land derived from adding annual figures from the Statistical Abstracts of

successive years. The conclusion that these annual figures were over-estimated for political reasons cannot be ruled out, but it is very difficult to decide which of the other two figures may be the most accurate. It is, however, interesting that local records of expropriations in the province of Hama throw some doubt on even these figures, as will be shown later.

Redistribution of land

Given the inadequacies of the information concerning expropriation, it is difficult to ascertain how much land was to be distributed, and therefore whether a programme of distribution was being carried out to schedule or not. Apart from the area of land expropriated, there is the problem of the amount of land that is considered suitable and available for distribution.

Unfortunately, it is difficult to compare the figures of semi-official reports and studies and the Statistical Abstracts of 1974 and other years because of the way information is categorised. As Table 23 shows, the Statistical Abstract of 1974 states that of 1,373,600 ha. expropriated, 326,200 is excluded or has been sold, though how much of each is not clear. Neither is it clear how much of the "allocated" lands were for "various ministries and co-operatives", and how much might still be for distribution to individuals. As can be seen from the table, the minimum of expropriated land not distributed in 1970 was 338,900 ha. or about 24.7%.

Other sources give figures that are more broken down, though perhaps no more accurate. Both the semi-official Syrie et Monde Arabe[12], and Economic Paper No. 42[13] state that by the end of 1969 some 780,764 ha. had

TABLE 23 Area of land expropriated according to agrarian reform. Allocation and distribution up to 1970, in '000 hectares

Expropriated Lands (total)	Non-Distributed Lands	Allocated Lands*	Excluded & Sold Land	Distributed Lands
1373.6	338.9	253.3	326.2	455.2

*Lands allocated to co-operatives or various ministries, etc.

Source: Statistical Abstract, op. cit., 1974, p. 221.

been dealt with. The initial impression that this is the amount of land that farmers have actually received is erroneous. Both state that by the end of 1969 an estimated 442,635 ha. had actually been distributed, a figure that is comparable to that of the Statistical Abstract of 1974, 455,200 ha. Of the rest of the 780,764 ha., 145,833 ha. were "not yet distributed", and 192,296 ha. were "not to be distributed". The remaining 732,800 ha. have been divided into the categories shown below in Table 24.

TABLE 24 Utilization of expropriated land, 1969

Area (ha.)	Description
442,635	Distributed
145,833	Not yet distributed
192,296	Not to be distributed
780,764	
337,072	In Hassake, not to be distributed
38,076	Seized and then sold
14,290	Unsuitable for distribution
139,935	Allocated to state lands
203,427	Other state lands, Ghab, areas below rainfall levels, empty areas, etc.
732,800	
1,513,564	Total

Source: Office Arabe de Presse et de Documentation, Syrie et Monde Arabe, Damascus, March/April 1970, pp. 27-30.

A further complication in the analysis of the areas distributed and to be distributed comes from the figures of the annual Statistical Abstracts. If the distributions of each year are added together, the Statistical Abstracts suggest that by the end of 1969 some 696,641 ha. of expropriated land had been distributed, a figure in excess of both the 442,635 ha. of Table 24 and 455,200 ha. of Table 23. It is clear that in the annual Statistical Abstracts lands "seized and sold","allocated to state lands", "other state lands", and possibly even "not yet distributed" must have been included in the annual figure of distributed land.

It is difficult to reconcile the figures of the annual Statistical Abstracts with Tables 23 and 24 except in these terms. Yet without a clear knowledge of the amount of land distributed it is very difficult to assess the effectiveness of government policies in land distribution, and to know whether the co-operative programme is giving adequate support to the beneficiaries of land. However, because the annual Statistical Abstracts give an indication of the amount of distribution that was carried out each year, even if the figures are exaggerated by the inclusion of certain other categories of land, they will be used below to examine the course of land distribution.

The annual distribution of expropriated lands, as detailed by the annual Statistical Abstracts, is shown in Table 25.

Table 25 shows that according to the Statistical Abstracts, before 1963 some 155,795 ha. of expropriated land was distributed, a figure which tends to support the unofficial rather than official estimates made in 1961.

TABLE 25 The distribution of expropriated lands 1963 to 1969, in hectares

Year	Area Distributed
1963	65,010
1964	11,053
1965	20,476
1966	70,358
1967	56,842
1968	188,455
1969	128,652
Total	540,846

Source: Statistical Abstracts, op. cit., various years.

While the variations between years of the distribution is far smaller than of the expropriations, it is still very marked. Furthermore, if distribution has been completed, as is suggested by the Statistical Abstracts, very large areas of expropriated land are not being re-distributed. Although many areas are unsuitable for distribution, as Table 24 suggests, other areas are going to be used by the state for its own purposes, in which case a completely new and hitherto undeclared agricultural policy is to be initiated. On the other hand, if most of the outstanding land is to be distributed, there has been virtually no distribution for three years, a long period even if the government wished to consolidate its other rural policies, particularly the development of co-operatives. Considering the unprecedented distributions of 1968 and 1969, this may well be a factor.

The possibility of some alternative use for much of the expropriated land cannot be ruled out. Table 24 indicates that much of the land not distributed was useable, and almost all the land "not yet distributed" and even "allocated to state lands" was probably being rented out on annual

leases. In 1969 some of the land in the drier areas may still have been the subject of debate as to whether or not it should be distributed. However, the delays in distributing much of the expropriated land reflected the desire, particularly of the 1966 to 1970 regime, to expand the direct control of the state in agriculture. The nature of the co-operative system and the possibility of further expropriations were important issues of debate at this time. For this reason, the regime may have wished to retain control of such a large proportion of land, so that the system of ownership and cultivation that was eventually decided on could be implemented.

The distribution of state lands

From Law No. 252 of 10 October 1959 it has been the intention of successive governments to distribute state lands, or to reserve or utilise them for state farms or state agricultural projects. Up to 1963, as was shown earlier, the distribution of state lands lagged behind the distribution of expropriated lands.

The state land may be of several legal categories, as was shown earlier; it was principally of the matruke and private state domain. The former has become of very considerable significance in the agricultural sector, especially as marsh areas and river valleys have been drained. The main reclaimed areas include the Rouj (5,000 ha.), Sinn (9,500 ha.), and the Ghab, which will be discussed in detail below. The Sinn, although partly in the wetter agricultural areas, is mostly marginal agricultural land on the fringe of the 'fertile crescent'.

It is difficult to define exactly how much of the state domain is agricultural land, as the area considered 'agricultural land' in the

country has varied, and indeed has depended on the rainfall each year. Furthermore, as the survey and registration programme continues, adjustments are made to the area of registered state domain. It is also difficult to tell whether or not the whole area of state land sold or rented each year was actually registered. What is certain, however, is that there has been no clear policy on the distribution or use of either the public (matruke) or the private (miri and unoccupied) state domain. As far as the former is concerned, though it was to have been distributed under the same terms as expropriated land, in two areas, the Ghab and the Rouj, Law No. 66 of 27 January 1969 decreed that these areas were to be distributed free. The reasons for this, which were largely political, will be discussed below.

Other state land that was sold after 1963 was sold mostly to small-holders who had to join a co-operative, and to pay one-quarter of the cost of the land over twenty years to the co-operative. Table 26 shows how state land (private domain) was sold or rented in the period.

Table 26 shows that the new regime in 1963 made a determined effort to sell off state land and from 1963 to 1967 the distribution of state land contrasts markedly with the slow progress in distributing expropriated lands. After 1968, however, the programme of selling state land tailed off and the possible reasons for this will be discussed later.

As far as the renting of state land is concerned, in some years, notably 1964, large areas were rented out, although after 1963 it was never done on such a scale as in 1961. The amount rented varied greatly from year

to year as is shown in Table 26. As renting was done on an annual basis, variations in the weather or changes in policy would be reflected immediately in the figures and the relative importance of each will be discussed below.

TABLE 26 Area of state land (private domain) sold or rented, 1960 to 1973, in hectares

Year	Area Sold	Nos. Benefitting	Area Rented	Nos. of Tenants
1960				
1961	1,559	418	677,938	33,587
1962*	245	NA	137,308	5,277
1963	39,423	2,177	29,632	2,150
1964	29,128	2,231	246,848	12,458
1965	36,312	2,675	39,042	4,048
1966	18,668	1,261	51,308	3,867
1967	24,932	1,988	42,065	4,479
1968	19,344	949	65,401	NA
1969	7,792	1,039	21,001	2,674
1970	5,032	646	61,993	4,756
1971	2,231	903	20,540	2,560

*In 1962, 131,854 ha. of private state domain, almost all non-irrigated, was sold according to Announcement No. 6 of 18 June 1962.

Source: Statistical Abstract of Syria, op. cit., various years.

Finally, under Law No. 166 of 15 December 1968, state lands were to be distributed to peasants in a revitalised programme involving 600,000 ha. and 35,000 beneficiaries, though only 295,465 ha. had been distributed since 1961. Table 26, however, omits the area of state land which was to be distributed free under Law No. 166.

State farms

The formation of state farms was adopted by the Baath as part of its ideology and policy in the Sixth Baath Party Congress of 1963[14]. It was an attempt by the leftists in the party to adopt a version of the collective farm. One of the first state farms was near Kamechlie in Hassake, with an area of some 140,000 ha., and it was hoped that units of this sort would prove viable in the drier, rainfed agricultural areas.

In fact, with the exception of the 'El Rashid' farm of 14,000 ha. in the mohafazat of Rakka, it was the only large scale state farm formed in these areas. After 1967, when the regime moved left politically, state farms were introduced in areas of better cultivation but these farms were supposed to be centres for research and demonstration, a very different concept from a collective farm. By 1970, there were seven in Damascus[15], all very small, totalling 458 ha., and others in Aleppo, Lattakia, Rakka and Deir es Zor[16]. After 1970, with another change of regime and policy, the research role of state farms was extended. A number of specialized, capital intensive state farms were set up such as chicken farms and cattle stations in fertile areas like the Ghab. Some of the stock reared on these farms has been sold to private farmers in an attempt to improve the quality of animals produced in the country as a whole. However, most of the stock or its products is either used by the armed forces or sold for consumption.

After 1970, if not before, the idea of large scale state farms in dry land areas was shelved, even to the extent, after 1973, of re-distributing land in Hassake from the state farm as compensation to those who lost land as a result of the flooding of the Euphrates valley. Some reasons for this change will be discussed below.

Other laws and programmes

In this section three aspects of the agricultural reform are of particular importance. These are the modifications made to the laws governing agricultural relations, the development of peasant unions, and the development of co-operatives.

It is difficult to tell how effectively the laws on agricultural relations, particularly Law No. 134, were carried out before 1961. It is unlikely that the laws were enforced in their entirety, partly because of the strong influence and powers landlords retained and partly because of the general political opposition to the regime after 1960. Many articles of the laws were in any case phrased in general terms, indicating the regime's intentions in the field but not laying down specific limits or regulations on many matters, including minimum agricultural wages and compensation following dismissal.

Law No. 218 of 20 October 1963 made important modifications to Law No. 134, and the main changes have already been mentioned. However, the setting up of Agricultural Commissions to administer and enforce the laws and to carry out inspections and hear complaints showed that the regime in 1963 was determined to execute the new law. The measures and penalties in Law No. 218 were very detailed and were supposed to protect the landlord

as well as the tenant and labourer. There is no doubt that the tenants and labourers, though perhaps not the landlords, were protected far more effectively than they had been before 1961, partly because the channels through which complaints could be made were better publicised and more efficient, and partly because the regime was more able and determined to enforce the new legislation.

Peasants' Unions

The reasons for the creation of the Peasants' Union in 1964 have already been outlined. Two points of interest arise from their inception, the rate and extent of their growth, and the role they played in policy making as well as policy execution.

As far as the latter was concerned, the involvement in policy making, as opposed to policy execution, was equivocal. On the one hand, the Peasants' Union had representation on the many government committees and bodies dealing with agricultural matters, with the important role as Baath Party representative often falling to the Peasants' Union member - though of course this member was appointed, not elected. On the other hand, local Peasants' Union leaders, who had some rapport with their members, were kept out of the planning and execution of the expropriation and distribution of land until 1969. On a national scale the wide ranging representation of Peasants' Union officials on virtually all the bodies dealing with agriculture was a political move designed both to reinforce Baathist control of the body concerned and to demonstrate the 'participation' of peasants in government.

The actual numbers of Peasants' Unions and their members are shown in Table 27.

TABLE 27 Number of Peasants' Unions and members, various years, 1964 to 1973

Year	No. of Unions	No. of Members
1964	NA	NA
1966(1)	371	NA
1967(2)	579	35,000 apx.
1968(2)	1,166	80,431
1972(3)	2,974	212,517
1973(3)	2,996	219,651

Sources: (1) Office Arabe de Presse et de Documentation, Syrie et Monde Arabe, op. cit., March/April 1969, p. 12.

(2) M. Abou Hassan, La Syndicalisme Paysan en Syrie, in Office Arabe de Presse et de Documentation, L'Agriculture Syrienne, Damascus, 1969, p. 87.

(3) Statistical Abstract, 1974, op. cit., p. 761.

Table 27 suggests that by 1973 a very large number of peasants had joined the Peasants' Union and that it had branches in rather more than half the villages in Syria. This would certainly seem logical as the Peasants' Union was officially one of the principal channels through which tenants and labourers could assert their rights. However, the figures in Table 27, particularly those for the number of members, should be treated with caution. It is interesting that as Table 28 shows for 1972, 25,184 members were deemed to belong to unions in Quneitra, though the official population of that mohafazat in 1970 was 16,490[17]. The number of members of the Peasants' Union not engaged in agriculture is unknown but is likely to be very small.

Table 28 shows that there is a comparatively small membership in the older agricultural belt of Homs, Hama and Aleppo, though with the rather strange exception of Idlib. This region does not lack agricultural labourers,

TABLE 28 Membership of the Peasants' Union by mohafazat, 1972

Mohafazat	Members(1)	Total Workers in Ag.(2) 1972 m + f	Female Workers in Ag.(3) (% of m.)	% Workers as Members
Damascus	16,540	71,959	4	23
Aleppo	18,720	158,189	14	12
Homs	9,099	59,573	18	15
Hama	7,211	81,327	24	9
Lattakia	29,554	54,047	20	55
Deir es Zor	11,871	51,059	11	23
Idlib	22,744	57,325	11	40
Hassake	20,449	85,074	9	24
Rakka	17,002	59,040	20	29
Sweida	17,195	18,909	6	90
Dera'a	13,486	27,762	7	49
Tartous	3,462	44,631	17	8
Quneitra	25,184			

Sources: (1) Statistical Abstract, 1974, op. cit., p. 761.

(2) Based on Statistical Abstract, 1974, op. cit., p. 142.

(3) Derived from Statistical Abstract, 1974, op. cit., p. 141.

smallholders, and beneficiaries of state and expropriated land and it may be that the reasons for this low level of membership are religious and political. The identification of the Baath Party and its political institutions, including the Peasants' Union, with the unorthodox muslims of Syria, particularly the Alawis but also the Druze, may also account for the high membership levels in Lattakia, Sweida and Dera'a.

From Table 28 there appears to be no relationship between the membership of the Peasants' Union and either the size of the agricultural workforce or the percentage of women in it.

A further point that comes out in Table 29 is the apparent instability of the membership of the Peasants' Union. This is of interest as Table 27 shows only a very slight increase in the numbers belonging to the Peasants' Union, and the number of Peasants' Unions in each mohafazat has also changed little. Even in Hama there was an increase of only four from 1972 to 1973.

TABLE 29 Percentage change of Peasants' Union membership, 1972 to 1973

Mohafazat	% Change 1972 to 1973
Damascus	+ 0.4
Aleppo	+ 64.2
Homs	+ 50.7
Hama	+360.3
Lattakia	- 58.0
Deir es Zor	+ 67.6
Idlib	+ 2.8
Hassake	+ 4.8
Rakka	+ 3.4
Sweida	- 56.2
Dera'a	- 31.6
Tartous	+505.1
Quneitra	- 85.5
Total	+ 3.4

Source: Derived from Statistical Abstract, 1974, op. cit., p. 761.

It is very difficult to account for changes in the membership of the Peasants' Union as great as those shown in Table 29. The increases in Hama, Homs and Aleppo can, perhaps, be explained by recruiting drives in these less receptive areas. Smallholders and others now also appreciate

that there are advantages in being in the Peasants' Union, particularly in dealing with landlords, but also with officers of the Agricultural Bank, merchants and others who are generally anxious to avoid disagreement with the Peasants' Union.

The decline of membership, in Lattakia, Dera'a and Sweida is difficult to explain. It may well be that the collection of membership dues, which are extremely low, has fallen down so many members were not recorded in 1973 as having rejoined.

Co-operatives

As under the Nasser regime, co-operatives were to be the principal means of organisation, development and modernisation in agriculture. Beneficiaries, whether of expropriated or state land, were obliged to belong to co-operatives, and other smallholders and tenants (those who had not been affected by expropriation) were to be encouraged to join.

From 1963 to 1973 the co-operative system has been the focus of government attention in agriculture. It has been seen as an integral part of the distribution of land. With the increasing responsibility of the state in the financing and supply of agriculture, particularly with the prohibition of non-institutional lending and the development of monopoly controls by the state in the import of inputs for agriculture, the co-operative organisation has become more and more important as a channel through which state intervention in the sector has taken place.

There have been several major steps in the increase of the importance of co-operatives. The first was the implementation of Decree No. 220 of

25 June 1961, shelved since the last days of the Nasser Regime, in which the Agricultural Bank became the 'Agricultural Co-operative Bank', and priority was to be given towards financing and helping the co-operative sector. As will be shown later, the role of the Agricultural Bank expanded rapidly in this field.

The second was the amalgamation of the Ministry of Agrarian Reform with the Ministry of Agriculture by Law No. 163 of 9 December 1967. From this point, co-operatives set up under the two former Ministries were administered together. This had a radicalising effect on the co-operatives of the Ministry of Agriculture, many of which had been formed voluntarily by farmers wishing to take advantage of the benefits offered by the Agricultural Bank, particularly with regard to rates of interest and costs of inputs.

The third was the development of a Co-operative Union in 1966, yet another organization in the agricultural sector. This organization was created to help co-ordinate the activities of the co-operative sector: The storage and marketing of products, the import and distribution of inputs and goods, the ownership and maintenance of machinery, and the development of extension work. However, its political role in mobilising support for the government and in acting as another means by which the regime could oversee the rural population through the appointment of Baath Party officers to posts of responsibility in the Union down to village level cannot be underestimated. From a political point of view, at least, the recently proposed amalgamation of the Peasants' Union and the Co-operative Union makes sense.

Table 30 shows how the numbers of co-operatives increased, particularly after 1964.

TABLE 30 Number of agricultural co-operatives, 1958 to 1973

Year	Ministry of Agrarian Reform		Ministry of Agriculture		
	Total	No. added each year	Total	No. added each year	
1958(1)	40				
1959(1)	97				
1960(1)	118		224		
1961	144	36	254	30	
1962	193	49	278	24	
1963	206	13	287	9	
1964	206	-	322	35	
1965	263	57	374	52	
1966	275	12	461	87	
1967	415	140	514	53	
1968	441	26	553	39	
1969*	480		623		109
1970	1631				528
1971	1612				- 19
1972	1648				36
1973	1725				77

*After 1968, the co-operatives of the two former Ministries were no longer differentiated.

Sources: Statistical Abstract, op. cit., various years.
(1) International Labour Office, Report to the Government of the Syrian Arab Republic on Co-operative Development, op. cit., p. 4.

It must be remembered that Table 30 shows the official record of the number of co-operatives that have been set up in Syria. It has been said that many of these co-operatives, particularly in the earlier years, only existed on paper, with very little or no co-operative activity of any sort taking place, but the members taking the advantages of cheap loans from the Agricultural Bank. On the other hand some of the co-operatives have worked well, particularly if they have been adequately staffed[18].

Table 30 does show that for the first two years of Baathist rule very little was done to increase the number of co-operatives. In the expropriated areas, even though relatively little land was distributed in 1963 and 1964, the creation of new co-operatives fell behind. The same is true, though to a lesser extent, of the Ministry of Agriculture co-operatives, many of which, at this time, were being created on distributed state land.

By 1970, when the bulk of redistribution that was to be undertaken was completed, the setting up of co-operatives had fallen even further behind. 1970 was therefore designated "Co-operative Year", and as Table 30 shows, a large number were set up. 1971 and 1972 were clearly years in which consolidation of the progress made in 1970 had to take place. By 1975 it was planned that there would be 4,500 agricultural co-operatives[19], an unrealistic figure given the progress from 1970 to 1973.

Such a rapid increase in the number of co-operatives was certainly desirable from the government point of view if all the areas of distributed land were to be included in co-operatives. In 1968, before the year of greatest distribution of expropriated land, only 77,000 ha. of expropriated and state land out of a total of some 581,000 ha. that had been distributed was in co-operatives[20]. So although great progress was made in 1970, there were still large areas of distributed land without co-operatives after that and the co-operative programme was still behind schedule.

(g) Analysis of the progress of the laws, 1963 to 1973

The expropriation and redistribution of land

After the problems of the 1961 to 1963 period, the Baathists set out on what appeared to be a determined and radical programme to complete the redistribution of land and the setting up of a state controlled system of co-operatives. This was to achieve the dual aims of socialism and modernisation in the agricultural sector. However, the delays in the implementation of the laws and programmes became increasingly serious politically and economically, and some of the possible reasons for the delays outlined in the section above will now be examined.

One of the most important aspects of Law No. 88 was that it introduced greater flexibility in the size of land holdings based on different physical factors, particularly rainfall, the type of irrigation and the type of crop. However, this new flexibility did not mean that holdings in some areas could be larger. On the contrary, in every category of land there were reductions in maximum land holdings, the 'flexibility' meaning simply that there was a greater number of categories of land type.

This was important from two points of view. First, the political content of the laws was retained, even strengthened. Reduced maximum holdings, combined with the backdating of expropriation to 1950, hit once again at the middle landowners in retaliation for the 1961/2 resurgence of the Centre and Right Wing political groups, and in an attempt to reduce further their economic power in the agricultural sector. Secondly, it further increased the already large areas of non-irrigated, marginal, expropriated and state land that the state held and was committed to

distributing in small holdings. The problem of utilising this land now that the large landowners and large businessmen no longer worked together in extensive, mechanised cultivation was extremely serious.

In these dry land areas, government policy was inspired by political and economic expediency. For political purposes, large landowners in these areas were deprived of their lands, but the state was completely unable to exploit these areas itself, as it lacked the expertise, machinery and capital and was unwilling for political reasons to engage in large-scale, extensive cultivation. What the state found was that many of these rainfed areas, extremely marginal agriculturally with a heavy risk factor, needed a very great deal of preparation in terms of soil improvement, the supply of water, and construction work to make them suitable as small-holdings for new owners. In many areas, however, rather than distribute the land in blocks of up to 30 ha. or 45 ha., figures arrived at with little or no research, expropriated land and state land was rented, often on an annual basis, either to former owners or to other large contractors.

As Table 26 shows, the amount of state land that was rented out varied greatly from year to year. What Table 26 conceals, however, is that the rented state land varied between the better agricultural areas, and areas like the Ghab, where it was rented out in blocks of 1 ha. to 3 ha., to the dry land areas where many hundreds of hectares went to each renter, or consortium of renters. This will be shown in the detailed analysis of the province of Hama.

The regime, therefore, got round the extremely difficult and sensitive problem of the continued utilization of many of these dry land areas by

renting them out to contractors. The political need to expropriate the land was therefore fulfilled; by designating many of these areas as 'areas below rainfall levels', and so on, as shown in Table 24, the political obligation to distribute these areas in smallholdings was avoided. But much of the land was still being utilised in the old way by the same contractors and merchants.

In the better rainfed and irrigated areas, however, the greater 'flexibility' of Law No. 88 served a number of purposes. The regime seemed more aware than the government of 1958 of the very considerable variations of physical and economic conditions in the main agricultural areas. Politically, the Baathists were able to hit again at the land-owning class. Politically, too, in many areas where there was a demand for land more expropriation meant a greater area to be distributed among the landless who were the main supporters of the Baathist regime.

It is difficult to assess during this period to what extent there was a demand for land, either locally or nationally. However, as Table 13 shows, for historical as well as topographical reasons, the demand for land was probably greatest in the Jebel Druze and the Jebel Alawi. As peaceful conditions prevailed after the Second World War, this demand for land spread to the areas adjacent to those mentioned above, particularly Aleppo, Idlib, Homs, Hama and the Hauran. In these good agricultural areas, the Baathist regime was faced by an increasing land shortage, not only from the natural growth of population, but also from migration from the upland and desert fringe areas.

Opponents of the reform have tried to prove that there was no shortage of land[21]. However, Table 13 suggests that in most areas this was not so.

When commentators refer to land being abundant and relatively cheap, they are, after 1963, wrong unless they are making comparisons with Egypt, or referring specifically to the dry land zones[22]. Furthermore, the idea that "most Syrian villagers owned their own land ..." and "only a small percentage of Syrian farmers existed entirely as share-croppers ..." is refuted by the analysis of the composition of the agricultural population above. Another argument, that the slow distribution of irrigated land proves that most Syrian farmers already owned land up to or beyond the limit, does not hold water when the number of landless are considered, and the reasons for the slow distribution of irrigated land may have another cause which will be suggested below. Even though Table 13 suggests that levels of under-employment were higher in the poorer agricultural areas, both before and after 1960 the relatively peaceful political conditions undoubtedly led to an increased demand for employment and land in the better agricultural areas in the lowlands.

The policies followed in the distribution of expropriated and state land suggest that this demand for land was an important consideration for the government. The average size of plots distributed in irrigated and non-irrigated lands of different quality in the country as a whole is impossible to obtain. However, figures for the Acharne, Tar-allah and Ghab region of Central Syria, an important project area, are available.

The distribution of land could, according to Law No. 88, include plots up to 8 ha. of irrigated and 30 ha. of non-irrigated land, though in the Ghab and Rouj there was a maximum of 5 ha. for irrigated land. These figures were not based on any comprehensive income studies or studies

of family size or units for family production. In fact in the Ghab, Archarne, Tar-allah region the distribution was made in plots below even the 5 ha. level. Although some recipients in this area were already holders of land, either as tenants or owners, in the plain or in the Jebel Alawi, plots distributed were very much smaller than the prescribed minimum, suggesting, in this area at least, a strong demand for land.

Table 31 shows that the designated plot size for distribution was further reduced in the Ghab and Acharne. It was estimated that plots of this size would provide work for a family of six, and give them an income of some L.S. 1,600 per annum. Under present conditions it has been considered unlikely that an income of this level could be obtained from such a plot[23]; in any case, as Table 31 shows, the average size of plots distributed was even lower than planned.

TABLE 31 Planned and actual distribution of irrigated plots per family in Ghab and Acharne, in hectares

Zone	Planned	Actual	
		State Land	Expropriated
Ghab	4	3.4	2.4
Acharne	3.5	2.4	2.2

Source: R.T. Ratnatunga, Report on Land Tenure, Land Settlement and Institutional Considerations, U.N. Special Fund, F.A.O., Ghab Development Project, Syria, Damascus, 1968 (mimeo) p. 63.

This region shows that the regime has distributed areas in plots of less than economic size, and this has been partly a result of population pressure. However, the government since 1963 has also been subjected to other pressures to distribute as many plots as possible. The extremely

difficult problem of distributing land in viable economic units has not been faced, at least in the Ghab and Acharne region, where distribution of plots to squatters and others was governed to a large extent by political considerations. Most of the recipients, particularly in the state lands of the Ghab were Alawites, and the attempts of the Ministry of Agriculture to organise the distribution on an economic basis were over-ridden by the need of the regime to satisfy members of this sect, and others, who expected and demanded land as recognition of their support.

Co-operatives

As Table 30 shows the development of co-operatives lagged behind the distribution of land. This was a serious failure in the government's agricultural policies as the co-operative system was to replace the landlords as the suppliers, marketers and financiers of the agricultural sector. The co-operatives were also to be one of the principal means through which the modernisation of the agricultural sector was to take place. It was essential that the distribution of land and the setting up of co-operatives should be simultaneous, otherwise the recipients would have been left without any help at all. Simply giving out money and other resources which probably happened in many co-operatives in their early stages[24], usually led to wastage, inefficiency, and disillusionment with the co-operative system among co-operative members.

While the delays in setting up co-operatives was serious, an equally serious problem in the co-operative sector was the uncertainty as to the type of co-operatives that were to be introduced. This was a very sensitive political issue as it raised the fundamental problem of the

status of the land which was to be distributed to beneficiaries and the extent to which the state retained powers over the land it had given out. The question was whether co-operatives should simply be organizational or be developed, as rapidly as possible, into operational units. In the first case they would act as a means for channelling credit into agriculture, provide a more efficient means of obtaining supplies, carrying out marketing, doing the accounts, and possibly, provide a basis for the joint ownership of machinery or other essentials. The cultivation, organization of plots and individual activities would remain a matter for the individual farmer. In the second case the co-operative would operate as an agricultural unit, possibly retaining the individual's rights to ownership of a defined plot in the unit, as in Egypt, or, more likely, allocating a share in the profits to each individual depending on his former land ownership, skills, amount of work and size of family. Agricultural decisions would be taken centrally for the whole unit and individual ownership and decision-making would, in fact, be eliminated.

After 1963, and particularly after 1966, the Baath Party advocated the setting up of operational co-operatives. This conflicts with their original doctrine extolling the virtues of individual farms based on the family as a unit of ownership and production, but has been justified by attaching great importance to the need for more efficient and productive farming[25]. There was certainly considerable disagreement within the party between those who favoured greater state control, and, they thought, more efficiency in agriculture, and those who retained close ties with their agricultural backgrounds, as many did, who supported individual ownership.

In the event little progress has been made with the development of operational co-operatives, and few, if any, have been successful. In the Ghab a co-operative centre on the Egyptian model was developed at Shatha, but apart from the problems in cultivation there, insufficient capital was put into the community centre aspects of the scheme, an essential part of the co-operative centres in Egypt[26]. From an agricultural point of view in most areas the only operations that are done co-operatively on a large scale are ploughing and combine harvesting.

The failure of operational co-operatives has been due to two main factors. First, because a relatively high proportion of land was subjected to the expropriation, the countryside has been left fragmented between private and co-operative land and it would be far more difficult to operate a co-operative as an agricultural unit for this reason. Apart from the demands on manpower and resources that a consolidation of co-operative land would require, no regime has been prepared to face up to the possible political consequences of such an action, even though it has been recommended by non-political bodies[27].

Secondly, landowners and tenants would be opposed to altering their holdings to accommodate a new co-operative system. More important, the vast majority of the peasants, whether beneficiaries, tenants or smallholders, would be completely opposed to giving up any control over their land, however small and uneconomic a unit. This opposition, apart from reflecting ignorance of the possible benefits of an efficient co-operative system, shows that for the most part the rural population still clings tightly to the ideal of personal ownership and control of the land as advocated by Hourani and the early Baathist leadership. This feeling has undoubtedly been strengthened by the record of most of the

existing co-operatives which show no operational advantages to outweigh the loss of individual control. The events of the last 20 years can only have increased their feelings of insecurity in their ownership. There is widespread anxiety, both among existing owners and beneficiaries, with justification, that the continuing political instability and changes of policy since before 1958 have put their control over their land holdings in jeopardy. As the Baathists look to the rural population as their main source of support both outside and in the army, radical change in this sphere is, for the time being at least, very unlikely.

Given that the logical development from the regime's policies of distributing very small units of land, namely the development of operational co-operatives, has been ruled out on political and technical grounds, the improvement of the organizational element of co-operatives is very important. However, with some exceptions, since 1963 the co-operatives have been unable to fulfil their role in the supply of inputs, marketing arrangements and credit. Indeed, one unsympathetic source suggests that in 1964 there were some 400 co-operatives altogether, of which only 200 actually supplied services, and only 25 actually gave credit[28]. While this situation has improved, the range and quality of the services supplied, as will be shown with reference to Hama, remains inadequate.

Manpower

One of the most serious problems in the execution of the reforms and the setting up of co-operatives has been the inadequate supply of trained manpower. To this day the Ministry of Agriculture is inadequately supplied with agricultural engineers and experts in co-operatives and

extension work. This shortage has contributed to a number of the problems in the agricultural sector, including the delays in the progress of both the distribution of land and the setting up of co-operatives. The formation of many co-operatives in 1970 fully extended the manpower resources available, and the increase of 1970 had to be followed in 1971 and 1972 by a period of consolidation.

It has also been estimated that only about 30 agricultural engineers were working in the co-operative sector in 1969[29], or about one for every 54 co-operatives, a ratio that has not improved since 1958. An Institute for Co-operatives was set up in 1970 to train co-operative officers over a two year period, but a change of regime brought a change of policy and the Institute was closed[30]. An alternative policy, that of training large numbers of officers (usually applicants put forward by the Peasants' Union) in courses of a few days, was adopted. A previous programme, started in 1960, in which more than 1,150 co-operative officers were to be trained over the period of the first five year plan was also the victim of political uncertainty and change[31].

The political changes, ever since 1963, have therefore had a serious effect on the development of the agricultural sector. Uncertainty of the future, both among the rural population and in the government, has contributed to the difficulties and failures in agricultural policies, and has seriously affected the fields in which progress has been made. The period from 1963 to 1973 has been one of many great and irreversible changes in the agricultural sector, but also one of mixed, even disappointing, results as far as the major reforms are concerned.

NOTES

1 S. Jargy, La Syrie d'hier et d'aujourd'hui, Orient, No. 20, Paris, 1961, pp. 68-69.

2 Statistical Abstract, op. cit., 1962, p. 408.

3 Its ideology is dealt with in K.S. Abu Jaber, The Arab Baath Socialist Party; History, Ideology, Organization, Syracuse, N.Y., 1966.

4 H. Khoury, La Credit Agricole. Evolution de Problemes, op. cit., p. 23.

5 A. Mourad, La Propriété Agricole En Syrie, op. cit., p. 39.

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7 I.B.R.D., Current Economic Position and Prospects of Syria, Baltimore, 1972, p. 19.

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10 Office Arabe de Presse et de Documentation, Syrie et Monde Arabe, Damascus, March/April 1970, p. 27.

11 Statistical Abstract of Syria, op. cit., 1974, p. 221.

12 Office Arabe de Presse et de Documentation, Syrie et Monde Arabe, op. cit., p. 27.

13 Syrian Documentation Papers, Outline of the Economic and Social Changes in the S.A.R. during 1950-70, (Economic Study No. 42), Damascus, 1972, p. 23.

14 K.S. Abu Jaber, The Arab Baath Socialist Party; History, Ideology, Organization, op. cit., p. 122.

15 Office Arabe de Presse et de Documentation, Syrie et Monde Arabe, op. cit., March 1968, p. 40.

16 Office Arabe de Presse et de Documentation, Syrie et Monde Arabe, op. cit., January 1971, pp. 22-27.

17 Statistical Abstract, 1974, op. cit., p. 81.

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23 R.T. Ratnatunga, Report on Land Tenure, Land Settlement and Institutional Considerations. U.N. Special Fund, F.A.O., (Ghab Development Project), Damascus, 1968, (mimeo), p. 65.

24 T. Petran, Syria, op. cit., p. 137.

25 K.S. Abu Jaber, The Arab Baath Socialist Party; History, Ideology, Organization, op. cit., p. 171.

26 A-M. Goichan, L'Aménagement de la Vallée Syrienne de l'Oronte, Orient, No. 37, Paris, 1966, p. 170.

27 R.T. Ratnatunga, Report on Land Tenure, Land Settlement and Institutional Considerations, U.N. Special Fund, F.A.O., Ghab Development Project, Syria, Damascus, 1968, (mimeo), pp. 90-95.

28 H. El Kholy, Report of Study Tour Undertaken to Examine Extension Services and their Effectiveness in Syria, in K. Hammouda, Impact of Agrarian Reform Measures on the Living Standards of the Syrian Peasants, U.N.D.P. Special Fund, SYR 30, Semi-Annual Progress Report No. 5, Damascus, 1971, (mimeo), p. 22.

29 T. Petran, Syria, op. cit., p. 206.

30 H. El Kholy, Report of Study Tour Undertaken to Examine Extension Services and their Effectiveness in Syria, op. cit., p. 16.

31 International Labour Office, Report to the Government of the Syrian Arab Republic on Co-operative Development, op. cit., p. 14.

CHAPTER V Planning in the Agricultural Sector and the Integration of Planning and the Agrarian Reforms

In this chapter the development of agricultural planning in Syria over the period of the land reforms will be traced. The first section will include a study of the development plans from 1960 in which proposals were put forward concerning investments, projects and sources of capital within the agricultural sector. An assessment will also be made of the relative importance that was attached to the agricultural sector vis a vis the rest of the economy.

The second section will include an analysis of the actual implementation of the plans, particularly in the agricultural sector, and the implications of the performance of the plans for the economy as a whole. Most important, the extent to which the agricultural plans and the agrarian reforms made a coherent policy for the whole agricultural sector will be examined, as will the appropriateness of successive agricultural plans given the problems in the execution of the agrarian reforms.

This chapter will be followed in Chapter VI by an analysis of the development of agricultural production over the period of the agrarian reforms and agricultural planning.

(a) The development plans, 1961 to 1975

In studying the Syrian five year plans, it must be accepted that until the third five year plan, 1971 to 1975, the plans were little more than lists of objectives and projects. Even so, from 1961 the plans contained one overall trend. This was the increased control and planning by the

state, nationalisation and state control of the main sectors of the economy. It was also claimed that they were all trying to pursue the aims of the maximisation of growth, full employment and political and social stability.

The increased control by the state will be discussed below. In the three five year plans, however, projected growth was expressed in terms of the growth of National Income, and is shown in Table 32.

TABLE 32 Planned growth of National Income, 1960 to 1975

Plan	Total Planned Growth	Planned Growth p.a.
1961- 5 (1)	40 %	7.9%
1966-70 (2)	41.5%	7.2%
1971- 5 (3)		8.2%

Sources:
(1) Z. Keilany, Economic Planning in Syria, 1960-5, An Evaluation. The Journal of Developing Areas, 4th April 1970, Macomb, Illinois, 1970, p. 362.

(2) Ministry of Planning, S.A.R. Second Five Year Plan, 1966-70, Office Arabe de Presse et de Documentation, Damascus, 1966, p. 5.

(3) Ministry of Planning, S.A.R. Third Five Year Plan For Economic and Social Development in the S.A.R., (1971-5), Office Arabe de Presse et de Documentation, Damascus, 1971, annex 1.

These targets were to be achieved by a programme of state controlled investment, as detailed in the five year plans. The relative distribution between sectors shows how the priority of government objectives altered. The growth of total investment, at least from the second and third five year plans, shows the growing role and commitment of the state in the economic growth of the country. Table 33 outlines the total planned investment, and the percentage allocated to agriculture and irrigation sectors.

TABLE 33 Total planned investment for the first three five year plans in millions of Syrian pounds, with percentage allocated to agriculture and irrigation.

Plan	Total Investment	% to Agriculture	% to Irrigation, Land Reclamation
1961-65 (1)	2,720	9.9	30.5
1966-70 (2)	4,955	4.1	32.5
1971-75 (3)	8,000	7.2	24.3

Sources: (1) Z. Keilany, Economic Planning in Syria, 1966-65, An Evaluation, op. cit., pp. 362-363.

(2) Ministry of Planning, S.A.R., Second Five Year Plan, op. cit., p. 9.

(3) Ministry of Planning, S.A.R., Third Five Year Plan, op. cit., Annex II, p. 1.

In each of the three five year plans, irrigation and land reclamation, together with agriculture, took up the largest percentage of planned development capital. The enormous capital expenditure on irrigation and land reclamation shows the priority given to this aspect of agricultural development at the expense of other parts of the agricultural programme. Table 33, however, does not include the investments set aside for the development of a number of industries based on agricultural products, an important part of the development of the agricultural sector, which will be discussed below. Nor does it include the proposed investments in the agricultural sector of the Agricultural Bank and other banks. Both the Agricultural Bank and other banks were to contribute to the working and development capital of the sector, though after the re-nationalisation of the banks in 1963 the Agricultural Bank was to be the principal channel for the distribution of credit. By 1970, the amount of short and longer term credit given out had officially reached L.S. 175 million per annum as compared to L.S. 40 million per annum in 1958[1], and it was intended to raise it to L.S. 500 million per annum over the period 1970 to 1975[2].

Unfortunately, no studies of the needs of the agricultural sector for either working or development capital requirements have been published. In the next section an attempt will be made to estimate these, with an assessment of how adequate the investment in the co-operative, state and private sectors was from the point of view of both the annual and longer term development needs.

In the first two five year plans, while irrigation developments were to be financed largely by the public sector, the private sector was primarily responsible for the "Agriculture" developments. Table 34 shows the responsibility of the public and private sectors in agricultural investment.

TABLE 34 Responsibility for investment in the first three five year plans, 1961 to 1975, in millions of Syrian pounds

	1961 - 65 (1)		1966 - 70 (2)		1971 - 75 (3)	
	Public	Private	Public	Private	Public	Co-op. & Private
Euphrates:			651		1,593	
Irrigation:	640	50	155	150	211	140
Land Reclamation:	140					
Agriculture:	95	175	136	300	436	140

Sources:
(1) Ministry of Planning, S.A.R., The Syrian Five Year Plan for Economic and Social Development, 1960/1-1964/5, Damascus, 1961, p. 10.
(2) Ministry of Planning, S.A.R. Second Five Year Plan, op. cit., p. 9.
(3) Office Arabe de Presse et de Documentation, Syrie et Monde Arabe, op. cit., June 1971, pp. 20-21.

In the third five year plan, however, the state sector takes over the dominant role in investment in 'Agriculture', both directly through the

public sector, and indirectly through the co-operatives. Thus investments in machinery, storage facilities, seed development, horticulture and forestry, plant protection, animal breeding and so on, in the first two plans the responsibility of the 'private' sector, were to be taken over by the state. It must be noted, however, that the exact nature of this transfer is not represented in Table 34, as in each plan the items included under 'Agriculture' were not entirely the same.

These investments, which will be discussed in more detail below, nonetheless represented a major change in the state's role in the economy, and sources of capital to finance the plans had to be developed rapidly. This involved the rapid development of domestic savings, by various means, and a great increase in both foreign borrowing, and in deficit financing, both of which had been comparatively little used before 1958[3]. In the first five year plan domestic savings was to contribute some L.S. 1,950 million, or some 68%, the rest coming from Public Debt, (L.S. 98 million) and foreign loans (L.S. 660 million)[4]. This required raising the level of domestic savings from an estimated 11.5% to 14% over the period of the plan, which was to be achieved through increased taxation, the profits from nationalised banks and industries, the development of social insurance institutions, and so on[5].

In the second plan further increases in the level of domestic savings, from 13.6% to 17%, were essential if planned expenditure was to be met. Foreign loans were to contribute about 28% of the necessary capital for development (about L.S. 967 million), and the profits from public enterprises were to provide 54.1% of the proposed development expenditure.

In the third plan, the massive L.S. 8,000 million investment was to be financed by domestic savings to the tune of 65%, an ambitious target.

As most of the private sector's proposed investments were to be financed from internal sources, some L.S. 1,880 million would have to be found from foreign or deficit financing sources, mostly for the public sector. As in the second plan, the regime looked towards the Eastern bloc but also towards Western Europe for the necessary capital. However, the internal requirements of the plan demanded that the rate of internal savings should go up from 14.8% to 19.3% per annum[7]. To this end important policies to affect a reconciliation between the regime and the private sector have been pursued, along with policies to control consumption with so-called 'austerity' budgets, which will be discussed below.

(b) The agricultural sector in the plans

Planned investments

As has already been shown, the plans put an overwhelming emphasis on the development of irrigation in the agricultural sector. However, this emphasis represented what was seen as a coherent agricultural policy, the cornerstone of which was the growth and stabilisation of agricultural production. In each plan, the development of irrigation was recognised as the essential prerequisite to a stable and expanding agricultural sector. On this basis it was hoped to level out the fluctuations in annual production which have such a serious effect on the rest of the economy, and to increase production by intensifying agriculture and raising productivity.

The intensification of agriculture was to be achieved not only through large scale schemes, but, according to the first plan explicitly, and the second and third implicitly, through the development of small scale

irrigation projects giving a rapid return on investment, for which there was great potential in the Orontes and Barada valleys and along the coastal zone.

The development of large and small scale irrigation projects was, in every plan, to be complemented by policies of intensification and diversification in the rest of the agricultural sector. These were to include land reclamation and improvement, crop improvement and protection, research, agricultural training and the development of animal husbandry. In the industrial sector, a tractor factory, fertiliser plants and processing plants based on agricultural produce were to be set up, and storage silos were to be built.

As Table 35 shows, industrial projects connected with agriculture became more and more wide ranging as the public role in the sector increased. Table 35 shows the public commitments of this sort, though for the third plan only 'priority' projects are included.

Table 35 does not, of course, include the public investment into the research and improvement projects that were to be set up in all three plans. In the first five year plan this amounted to some L.S. 44 million, of which L.S. 18 million was allocated to animal breeding, L.S. 13 million to agricultural training and research stations, and L.S. 10 million to horticultural and forest developments[8]. In the second plan such investment amounted to some L.S. 35 million, with L.S. 11.4 million to be spent on animal breeding and production and L.S. 10.2 million on cattle and poultry stations[9]. By the third plan investment of this sort was increased by 3-4 times. Investment in livestock was, however, to be

concentrated in the wetter areas in the setting up of cattle and poultry stations owned by the state, rather than in the drier areas where only extensive livestock production was possible[10].

TABLE 35 Public investment in agriculture-related industrial projects in the three five year plans, 1960 to 1975

Projects	1961-65(1)	1966-70(2)	1971-75(3) (Priority)
Nitrate Fertiliser Plant	90	71.9	26
Phosphate Fertiliser Plant/Mining		78.0	96.2
Food Processing		50.2	75
Cotton/Wool Industry		16.7	255
Machinery/Tractors			97.3
Tobacco Industry	10	.6	36.5
Silos	45.7*	92.4	150.0

*Seed classification centres included in this category

Sources: (1) Ministry of Planning, S.A.R., Five Year Plan, 1960/1-64/5, op. cit., p. 17.

(2) Ministry of Planning, S.A.R., Second Five Year Plan, op. cit., pp. 25-31.

(3) Ministry of Planning, S.A.R., Third Five Year Plan, op. cit., Annex II, p. 30 and pp. 43-57.

Table 35 does show that in all three plans great importance was attached to the development of crop storage. This was partly to reduce the fluctuations of supply from one year to the next, and partly to allow the government to act as a purchaser, thus trying to break the influence of the merchants in the rural areas.

Table 35 also shows that the state had, by the third plan, taken over the dominant role of the private sector in the processing of agricultural

products. The investments in fertilizer plants and machinery manufacture were, on the other hand, initiated by the state and involved very heavy capital investments.

Planned private investment in these fields declined relatively but not absolutely in the three plans. In the first plan the private sector was responsible for investments of L.S. 28 million in the food processing industries, and even L.S. 4 million in the phosphate fertilizer industry. Altogether, the private sector was responsible for 53% of the total investment in the industrial sector[11]. In the second plan private investment in the industrial sector was to total L.S. 50 million, just under one third of industrial investment (excluding the fertilizer industry)[12]. Figures for the third plan are not available, but the role of private enterprise was relatively much smaller still.

Planned increases in production and incomes

Investments directly into the agricultural sector and also into the machinery and fertilizer industries were intended to bring about rapid and substantial increases in production of the main crops and in rural incomes.

Specific targets for the increases of production and incomes were set down for the first and second plans, but a certain amount of caution seems to have been used in adopting detailed figures for the third plan targets.

In the industrial sector, figures are available for the proposed increases in fertilizer production. In the first plan production was to increase from nil to 170,000 tons per annum, an ambitious target[13]. By the third,

production was to increase from 93,000 tons to 150,000 tons per annum[14]. These figures suggest that, in fertilizer production at least, there was great difficulty in meeting production targets.

In the agricultural sector, targets were laid down for increases in irrigation, production, employment and incomes. While the cultivated area in the first and third plans was to be stabilised (the latter at 6.1 million hectares), the second plan envisaged a 15% increase in the cultivated area[15]. The irrigated area was to be increased in the first plan from 500,000 ha. to 750,000 ha.[16], in the second from 671,500 ha. to 735,000 ha.[17], and in the third from 495,000 ha. to 550,000 ha.[18]. Employment in agriculture itself, available only for the third plan, was to increase by 170,000 to 1.34 million by 1975[19].

Production figures for individual crops are available for the first two five year plans, and the planned increases were as shown in Table 36.

TABLE 36 Planned increase of various crops in the first and second five year plans, 1960 to 1970

Crop	Planned Increase in 1st Plan ('000 tons and %) (1)		in 2nd Plan (%) (2)
Wheat	875 to 1,480	69	63
Barley	435 to 536	23	
Cotton	270 to 444	64	(irrigated cotton) 33
Milk			24
Poultry			28
Eggs			36
Sugar Beet	91 to 563	619	428
Tobacco	7.4 to 17	230	67

Sources: (1) Ministry of Planning, S.A.R., The Syrian Five Year Plan, 1960/1-64/5, op. cit., p. 34.

(2) Ministry of Planning, S.A.R., the Second Five Year Plan, op. cit., p. 28.

The third plan envisaged a growth of productivity per hectare in value terms of 12% from 1971 to 1975[20], and the agricultural sector was to contribute 5.1% per annum to the growth of the Nett Domestic Product[21].

As for incomes and consumption, both were to depend on production outstripping population growth, which in all plans was estimated at between 2.5% and 2.7% per annum. The growth of National Income shown in Table 32 was to be higher than private consumption, which was to grow at 6.1%, 6.5% and 6.8% per annum in the three plans[22]. Average per capita incomes (though much higher than average rural incomes) were to rise from L.S. 525 to L.S. 656 in the first plan, and from L.S. 739 to L.S. 931 in the second plan. Figures for the third plan are not available[23].

(c) Implementation of the five year plans

This section will discuss the implementation of the five year plans and comment on the adequacy of the plans in helping to create the new agricultural structure. It will help show how the planned investments and policies were to achieve the various aims of the plans, and will examine whether these policies were relevant to the problems of the agricultural sector as seen in the preamble to the plans, and in the agricultural reform laws. It will also show to what extent the plans were carried out, which aspects were successful, which failed, and, if possible, why they failed. The implementations and effectiveness of the plans will be examined in relation to trends in production, incomes and so on over the period, and what other measures the government had to take to achieve its aims.

Record of plan implementation

The most striking impression of the record of the plans is of shortfalls and delays. Some of the successes of the plans, too, have been affected by conflicting or subsequent policies which have tended to reduce their worth. In global terms, the failures of the investment, savings, production and export plans to reach their targets, and the over-development of consumption, and imports, summarise the implementation record of the plans. Shortfalls in the above targets inevitably meant delayed or curtailed policy execution, and declining confidence in the plans and government aims by officials and the population as a whole.

In investment, the public sector failed in the first two plans to reach its targets. In the first plan, only 56% of planned public investment was executed, while in the second plan the figure was 77% (the increase due particularly to the heavy investments made in the final year of the plan)[24]. The situation in the third plan is not known, save for the indication given by the decision to cut back on planned investments from 1972[25].

The shortfalls in planned investment have both economic and political causes. While investment ratios grew in the period of the U.A.R. to perhaps 16% or 18%, they fell again in 1966/7 to approximately 13%. This may have been due to the political instability, the opposition of the business sector to the Baathist regime, and further widespread nationalizations. They rose slowly again to about 15% in 1970, but public savings have not improved at all over the period, largely due to the increase in current expenditures, especially for defence. On the other hand, to try to keep up with planned development targets,

successive governments have had to resort to increased borrowing and the use of deficit financing, both to repay loans and meet investment costs[26].

Other targets which closely affect the ability of the state to carry out its investment plans, particularly in exports and imports and levels of consumption have also generally not been achieved. Imports have consistently exceeded planned levels, even during the second plan, when particular efforts were made to cut imports. Between 1965 and 1970 imports were planned to rise by a total of 26.6%, though in fact they rose by 12.4% per annum (at current costs). Exports, on the other hand, have consistently fallen behind planned targets. Between 1965 and 1970 the planned rise in exports was to be a total of 20.9%[27] though in fact it was 6.4% per annum (at current costs)[28].

Inevitably, these failures to achieve targets have led to increasingly serious trade deficits for the country, with the consequence that governments have been hard put to finance the development part of their expenditure without recourse to deficit financing and foreign borrowing.

The targets for the restriction of private consumption have also been exceeded in all three plans. In the first, private consumption was to increase by 34.5% over the five years[29], or 6.1% per annum. In fact, it increased by 8.2% per annum[30]. In the second plan, it was to increase by 36.9%, or 6.5%[31], though in fact it exceeded this limit by more than 30%[32]. In the third plan it was to increase by 6.8%[33] per annum and in fact increased by 7.9% from 1971 to 1973[34]. In the public sector consumption has also exceeded the planned levels; in the second plan it was to have increased by 5% per annum and in the third by 8% per annum[35], but since 1963 it has increased by an average of 10.9% per annum[36]. This has affected the levels of domestic savings and the balance of payments of the country.

Factors affecting the implementation of the plans

The failure of successive governments to implement the plans has been a consistent factor in Syria since 1960. The reasons for the failure have been both political and economic. The first that can be isolated has been the persistent and counter-productive over optimism of the plans in which targets have been selected for political reasons and are beyond the reach of the country's economy. This is a legacy of Nasser's Egyptian economic planning and has had the same effects in Syria; uneven and unbalanced sectoral growth, and widespread cynicism about the economic planning process.

Although the third plan suffers from this fault as much as the previous two, a greater flexibility in approach to targets is evident. This can be seen in both the designation of 'priority' and 'reserve' projects in the plan, and in the reappraisal of targets undertaken in 1972 resulted in some projects being shelved. However, the excessively high targets in the third plan remain and underline the political aspect of planning in Syria. The development of the Central Planning Organisation, statistical services and more sophisticated methods of plan formulation has not resulted in more realistic planning targets.

Just as political considerations have affected the actual targets of the plans, so has the political activity in the country affected their implementation. In the period of the first plan the country suffered three coups d'etat and two attempted coups[37]. During the second there were two coups, four attempted coups and the 1967 war against Israel. During the third, up to the end of 1973, there was at least one attempted coup and the 1973 war against Israel[38].

In each five year plan the private sector, which has been given an important if declining role in investment, has been subjected to a great deal of restriction and control. It has been shown that in the first plan the private sector fulfilled and even exceeded its investment targets, at least up to 1964[39]. In the second plan, however, private investment, although above public investment levels, was still below that planned. By the third plan the regime was obliged to make concessions to the private sector to encourage private investment, and to give guarantees that private assets brought back into the country would not be sequestered.

Although private investment did start to increase again after 1970[40], there is little doubt that private inspectors were still wary of investing large sums of capital in Syria, particularly in the industrial or agricultural sectors. In the past a change of government has usually come suddenly and lead to disastrous consequences for the private sector. In 1963 the banks were re-nationalized after the advent of the Baath to power, and in 1965 and 1966 a further change of government lead to the major nationalizations of that period. As a result, much of the capital and skilled manpower that left Syria remains outside the country, or in comparatively safe sectors of property, building and commercial enterprises.

While the private sector, at least since 1964, has not fulfilled its planned levels of investment, this has also occurred in the public sector. In the first plan only about 56% of planned public investment was realized and in the second plan this figure was 77%[41]. The investment record of the public sector has therefore also introduced uncertainty into the development programme.

One factor that has contributed to successive governments' inability to reach the planned level of public investment has been the commitment to military spending that has burdened Syria, particularly during the period under the Baath. Conservative estimates suggest that at least 60% of current expenditure was on military purchases in 1970. This has had serious consequences for public savings which fell by the end of the second plan to 2.1% of Gross Domestic Product. As a result investments in the development plans have had to be made from deficit financing and foreign loans[42].

In addition to this increasing dependence on unstable sources of income to finance the plans, it was also intended to help finance the plans with the profits from nationalized and other government enterprises. However, the importance placed on the surplus of government enterprises, which was to provide 77% of public investment capital, was misguided and over-optimistic. Profits were cut by distribution of 25% of profits to workers and by declining efficiency, the result of owners and managers moving to the Lebanon and various pricing and other policies which maintained inefficient enterprises alongside successful ones. In 1971 and 1972 the actual surpluses of public enterprises has fallen short of estimates by 30%[43].

The use of deficit financing and foreign loans, which had been more or less under control in the first plan, got out of hand in the second. After 1965 attempts were made to reduce foreign loans and imports but outstanding debts had to be serviced and repaid by deficit financing, and imports for both current needs (especially foodstuffs) and development projects were well above planned levels. By the third plan

there was pressure on resources and increased demand in the economy which has persisted despite various measures taken by the government, including an "austerity" programme. Other policies including the encouragement of private investment and relaxation of import restrictions have made the balance of payments and foreign exchange situation worse, a serious problem when loan repayments and further foreign loans are such important factors in the ability of the government to finance development plans[44].

As has been mentioned above, the private sector has, since 1970, been given some encouragement to participate in the economy. This it has done with some enthusiasm, partly as a response to promises made by the new government to pay some compensation from the nationalization period and to allow joint participation with the state in certain enterprises.

Since 1970 private capital has flowed into Syria rapidly, reaching in 1971 L.S. 307 million[45]. However, the inability or unwillingness of the government to define clearly the role of the private sector, or fix the boundaries of its operations in any long term way, have continued to keep vast sums of Syrian and other private capital and many businessmen and skilled workers out of the country. As many of these men are opposed to the Baath regime and left in the 1963 to 1966 period, the government may not be wise to encourage all of them to return to Syria.

Implementation of the plans in the agricultural sector

In the agricultural sector, both investment and production have failed to reach the targets outlined in Tables 34 and 36. In addition, investment in the agricultural sector has fallen behind that in other

areas of the public sector. In the first plan, public investment was 56% of that planned but "Irrigation and Agricultural Works" and "Agriculture" received only 48% and 36% respectively of their planned investment, the least of all categories[46]. In the second plan it has been estimated that only 40% of the investment allocated to "Agriculture" was made, and even the Euphrates project received only 57% of planned investment although figures for "Industry" and other sectors were much higher[47]. In the third plan, the cut back in the investment programme mentioned above have included many projects on the "reserve" list.

These shortfalls have meant that many of the projects and the production targets for various crops have not been implemented. As the figures for fertilizer production show, the completion of this crucial project, started in the first plan, had still not been carried out by the end of the second plan. Silo and cattle station projects designated in the first plan had still not been completed in 1972. In the second plan the public sector was responsible for setting up more projects. Of the 49 projects in agriculture and 20 in irrigation that were to be completed by the public sector, fewer than 15 were finished and 18 were not even begun[48].

A detailed analysis of the production of various crops will be carried out below. However, the general point can be made that output fell below planned levels in all three plans, though some crops did better than others. In the three plans, the growth targets for agricultural output have been set at 4.0%, 4.3%[49], 5.1%, per annum[50]. It has been suggested that agricultural output, which has varied greatly from one year to the next, actually increased by only 0.5% to 1% per annum before 1970, after which it may have been higher at 2%[51].

The shortfalls in planned output in agriculture and in investment are clearly inter-related. Shortfalls in output have increased the country's need to import foodstuffs, and reduced the potential for exports, internal savings and, therefore, investments by both public and private sectors. Shortfalls in planned investment, on the other hand, have probably had a serious effect on output, though the exact extent of this is impossible to gauge.

As in the overall plan, the failure to reach planned output in agriculture almost certainly reflected over-ambitious targets. From 1960 onwards it was particularly difficult to achieve the sort of growth rates in agriculture of 5 to 6% per annum that had occurred in the 1950's, as increases had to depend on improvements in productivity rather than increasing the area of production in more and more marginal zones. The government hoped to achieve these increases through the development of irrigation, fertiliser plants, market storage improvements and the development of a co-operative structure in agriculture linked to the agricultural reforms, but the failure to undertake investment made the ambitious targets unattainable.

It must be said, however, that output in the agricultural sector was also seriously affected, particularly during the first plan, by unfavourable weather conditions, which continued into the second plan. So far, the third plan has been comparatively fortunate from this point of view, and the increased output of the third plan referred to earlier has probably been largely due to this.

(d) Analysis of the balance of agricultural investment - the large scale investments

As the section above shows, investments by the public and private sectors have not reached the levels planned to meet the needs of its various projects, particularly in the agricultural sector.

The bulk of the investment in the public sector that has been implemented has been directed towards irrigation, the construction of fertiliser plants, grain silos and, in the third plan, machinery and development of agriculture based industries. As Table 34 shows, irrigation dominates investment. Since 1966 the irrigation programme has itself been dominated by the Euphrates project and by other large scale projects that since the second plan have come under the "Great Projects Administration", for instance, the Ghab and Rouj schemes.

With the exception of the Euphrates, which has a political, as well as economic, stature that can be closely compared to the Aswan Dam in Egypt, shortfalls in investment and over-optimistic schedules have resulted in long delays in completion of these projects. Furthermore, expected rates of return have also proved to be exaggerated, partly because of the delays, but also because of the poor production levels that have been achieved as other aspects of the schemes have been neglected. This will be discussed in detail with reference to the Ghab scheme below.

As so much of the planned investment in the agriculture has been allocated to irrigation, it is all the more serious that most of the projects have fallen behind schedule and the planned increases in

irrigation have not taken place. Table 37 shows the development of irrigated areas since 1958, as reported by official sources. It must be noted, however, that there is some disagreement about the area of land that is actually irrigated in the country. Figures from the Production Yearbook of the F.A.O. for 1972 have been included in Table 37 which suggest that the official figures for that year may over estimate the total irrigated area.

TABLE 37 Development of irrigated areas, 1957 to 1974, in thousands of hectares

Year	Area	Year	Area
1957	583	1965	522
1958	590	1966	508
1959	476	1967	539
1960	527	1968	477
1961	558	1969	547
1962	657	1970	451
1963	670	1971	476
1964	489	1972	625 (485)(1)

Sources: Statistical Abstract, op. cit., various years.
(1) F.A.O., Production Yearbook, Rome, 1972, p. 5.

To date few areas of the Euphrates river project have reached the stage of actual utilization. The total area that may eventually be added to the irrigated farmland of the country though the project has been the subject of considerable disagreement, with estimates varying from 640,000 hectares by government sources[52] to about 390,000 hectares by the F.A.O.[53]. These estimates depend on the varying analyses of the capability of the Euphrates dam and its networks to supply various areas and of the amount of irrigation that already takes place within the project area.

In other schemes the continued allocation of large sums for structural developments shows that the basic construction of irrigation and drainage networks has not been completed in many of the schemes. This will be referred to later in a more detailed study of the Chab scheme.

There is also considerable disagreement about the potential area that may be irrigated in the country as a whole. Estimates vary from about .9 million hectares to about 2.5 million hectares by the Ministry of Planning in 1965[54]. Progress so far suggests that there is a long way to go before even the first of these figures is reached.

As Table 35 shows, the development of fertiliser plants has also been one of the principal programmes in the agricultural policy. From 1960 onwards the use of fertiliser was to increase from both imported and home produced sources. In the first plan production of nitrate fertiliser was to develop from zero to 120,000 tons by 1965 and for superphosphates from zero to 50,000 tons, the latter the result of private individual investment. The actual use of fertiliser was to increase from 35,000 to 45,000 tons total in 1960 to 125,000 tons of superphosphate, and 165,000 tons of nitrate fertiliser in 1965. In the second plan 75,000 tons of superphosphates and 148,500 tons of nitrate fertiliser were to be produced each year by 1970 and imports of the former were no longer to be necessary[55].

However, as in the case of large scale irrigation, the fertiliser plants were also long term projects involving large capital expenditure with virtually no short term benefits. Although, theoretically, the nitrate and superphosphate plants were to be completed in the first and second

plans respectively, even if they had been completed on schedule a delay of four to ten years before they were both in operation was expected. Both were undoubtedly important, as the development of the use of fertiliser was one of the policies necessary for increasing productivity in agriculture, particularly as fertiliser had been so little used in Syria.

The development of the large scale plants, while inevitably meaning long delays before their products could be utilised, was so behind schedule that large amounts of capital have been tied up in the projects. The agricultural sector has had to rely on fertiliser imports, which has meant continuing shortages and high costs. In 1972, home produced fertilisers reached the market for the first time as the nitrate factory began production eight years late[56]. In the first two years of operation the plant has managed to produce only about 38% and 22% respectively of its total capacity[57]. In 1973 the superphosphate plant had still to go into operation, though phosphates were being mined in central Syria.

As a result, the country has been forced to import increasing amounts of fertiliser at considerable cost and only a small part of the enormous national demand has been satisfied. An official source has suggested that by 1966, the beginning of the second plan, the country was still only using one-thirteenth of the required amount of fertilisers[58].

After 1966 a growing proportion of the estimated fertiliser needs was used, as fertiliser imports more than made up the very slight increase in the cultivated and cropped area in this period. In 1972 and 1973, when home production began, fertiliser imports were cut back in anticipation of home produced substitutes, but fertiliser production in

Syria failed to reach expected levels and there was a drop in fertiliser used in these two years. Table 38 shows the increase in imports and the development of home production of chemical fertiliser in the country from 1956.

TABLE 38 Imports and use of chemical fertiliser, 1956 to 1973, in tons and thousands of Syrian pounds

Year	Imported Tons	Imported Value	Home Produced Tons	Home Produced Value
1956	23853	5548		
1957	25018	5723		
1958	39330	9084		
1959	NA	NA		
1960	47157	8213		
1961	77412	11690		
1962	64209	13225		
1963	66156	14626		
1964	41654	8442		
1965	75136	19335		
1966	84145	18847		
1967	59224	11745		
1968	121249	20140		
1969	110379	19184		
1970	155432	26541		
1971	169915	36460		
1972	117440	30620	56000	NA
1973	43718	12224	33496	NA

Source: Statistical Abstract, op. cit., various years.

The third major investment programme for the agricultural sector in all plans has been the development of storage facilities for crops. As Table 35 shows, large capital investments were to be made in this field. However, as with the fertiliser plants, the silo projects were also subject to interminable delays which were only partly due to opposition to their construction from merchants. Shortages of public capital meant that although the state storage programme was very important indeed from economic and political points of view, the private sector was allowed to

continue to dominate the purchasing and storage of crops. By the end of 1971, most of the 109 large and medium sized crop stores were still privately owned[59]. The government grain silo projects for which funds were allocated in both the first and second plans were not completed and it is only during the third plan that government owned silos and stores have been coming into use.

Investment in the other categories shown in Table 35, with the exception of machinery/tractors, reflects the growing role of the public sector in industry. Following the nationalizations of 1963-6 the government found it necessary to reorganise and expand many of the industries that processed agricultural products, particularly cotton and wool. Many of the private plants were small, under-utilised and inefficient, and had been run down after 1958.

A number of new industries, including onion processing, tomato processing, vegetable oil manufacture, sugar refining and jam making were also created as the government tried to extend its role in the processing of agricultural products.

As with the fertiliser projects, the setting up of a tractor factory in Aleppo and other machinery industries was not only part of the government's policy to intensify agricultural production, but also to cut down on the inputs to agriculture. The delays in the implementation of these projects have had a serious effect on the Syrian economy from this point of view as well.

(e) Analysis of the balance of agricultural investment - the small and medium scale investments

As has been shown above, public investment in the five year plans was concentrated on large scale, long term projects which were often hit by delays, shortages of capital and cost overruns. Major developments in irrigation, and in developing the industrial side of the agricultural sector through fertilisers and processing plants were essential in the long term to raise the levels of productivity, and utilise agricultural products more effectively.

However, it must be questioned whether concentration of investment on such projects was appropriate to the needs of the agricultural structure that was being developed with the tenurial reforms. The priority given to the above mentioned schemes meant that short and medium term projects were under-capitalised and neglected, receiving a disproportionately small share of the development budget allocated to agriculture. It also meant that various essential institutional developments which were part and parcel of the agricultural reforms, the Agricultural Bank, extension services, co-operatives, marketing and supply organisations and the training of manpower were under-capitalised. Investments of this sort would have resulted in more rapid and profitable returns and contributed to government income at a time when it was also making longer term investments. It would also have lead to increases in the incomes of farmers and beneficiaries under the agrarian reform laws. Indeed, from the point of view of the reform laws, and the development of a sector of small scale, peasant farming within a co-operative framework, shortages of working capital and short and medium term loans from the Agricultural Bank and

neglect of supervisory, extension and other services could only lead to a retention of those ills the reforms were designed to remove.

This section will attempt to assess the extent to which the government recognised the need for such investments and the efforts that were made in trying to implement what plans were made in this area.

The development and funding of short and medium term agricultural projects and programmes was also essential because declining per capita productivity in the agricultural sector had to be reversed rapidly, as the country's exports depended on agricultural production and home grown produce was becoming less and less able to supply the country with food. Furthermore, without determined well-funded policies to develop institutions in the agricultural sector the agrarian reforms would not make any contribution to increasing production or raising the standard of living in the rural areas, or reducing the influence of the merchants and landowners. The success of the reforms depended to a large extent on the institutional and production policies which had to accompany them.

Small and medium scale irrigation developments

Government policies in this field largely neglected two major considerations. First, as in Syria such a large part of the irrigation is done from small scale wells and pumps, the consolidation and improvement of water supply and control was necessary in almost all areas. In the pump irrigated areas in particular, which still make up perhaps 75% of the total irrigated area[60], there has been an unhealthy relationship between annual rainfall and the area irrigated. It was essential that the government should control the number of wells and pumps brought into

operation and develop small scale storage reservoirs to ensure more reliable water supplies.

Small scale irrigation developments have also been of great importance even in large scale project areas. In the large scale irrigation schemes quarternary level irrigation channels and drains have been neglected, or insufficient capital has been allocated for their completion, which has inevitably been delayed. Yet the efficiency of the scheme, from the point of view of water utilization and production, may be reduced by 30% to 40% if this part of the project is not completed properly[61]. This will be shown later with particular reference to the Ghab.

As has already been mentioned, public sector investment in irrigation in all three plans fell below that planned. As priority was given to large scale irrigation projects, in particular to the Euphrates scheme, smaller scale projects suffered. This is particularly noticeable in the third plan where many small scale projects on the "reserve" list were shelved.

The training of manpower

As has been shown, the government has made some arrangements for the training of skilled agricultural engineers and co-operative organizers. However, in this field too the schemes were inadequate and under-capitalised. As the 1970 project in particular showed, training co-operative officers to a satisfactory level is expensive and takes time. The fifteen month course was cut back in the subsequent project to courses for large numbers lasting a week or two. Apart from the urgent need for larger numbers of trained co-operative workers - which could only have been achieved in the 1970 project by much heavier investments - the political

significance of the part of co-operative organizer had not been overlooked by the regime. For this reason many of the co-operative officials were picked for their political allegiance and given a short training course before being sent to the villages. Most of the small number of officials trained under the 1970 project now have other jobs in the Ministry of Agriculture.

The development of co-operatives

The development of co-operatives in the areas affected by the agrarian reforms, together with those in other areas of smallholdings, was to be the system through which new methods of cultivation, new crops, and new inputs were to be introduced into agriculture in order to diversify and intensify production and increase productivity. The proposed development of co-operatives was laid down in each five year plan: In the first plan, they were to have numbered 1,280, 1,250 staff were to be trained, and L.S. 1.84 million was to be spent on setting up the co-operatives and certain marketing requirements[62]. By the third plan, the number of co-operatives was planned to increase from 1,600 to 4,500 by 1975, and some L.S. 43.5 million was allocated to setting them up and administering them[63].

As has been shown above, the co-operative programme has fallen far behind schedule. To a great extent this has been the result of the failure to train personnel. Although the setting up of co-operatives has been delayed, each co-operative officer may still be in charge of six to eight co-operatives, and yet may himself only have had a few weeks training although he may have gone to agricultural secondary school. This

severe shortage of trained manpower has also been an important factor in the slow development of the extension service, demonstration farms, research work, and state farms.

The co-operative sector has also been neglected in that insufficient capital has been allocated for administrative purposes, for setting up marketing and supply arrangements, and for essential capital investment in co-operatively owned machinery and equipment. Insufficient capital and lack of skilled manpower has also resulted in little more than token progress in extension services that were to be run in conjunction with the co-operatives. Demonstration farms were badly organised and unable to sustain programmes related to their work, and the whole extension programme has lacked impact in the rural areas[64].

(f) Rural credit

The co-operative system has been hampered since its inception not only by lack of capital for small and medium scale investments in land or equipment but also for the basic annual working capital needs.

After 1963, when full repayment for land by beneficiaries was finally waived, one quarter of the value of the land was to be paid over twenty years by beneficiaries to the co-operative of which they had to be members in an attempt to build up assets in the co-operative which could be used for working capital and small scale developments.

It seems unlikely, however, that full payment of this fee has been made. In the first place, if payment levels to the co-operative have been similar to repayment records of loans from the Agricultural Bank, there

has been a serious shortfall in the co-operatives' receipts. Secondly, although the payment of 25% of the value of the land to the co-operative is compulsory, there is a widespread lack of confidence in the co-operative system, shown by the reluctance to save through its own bank[65]. The state has therefore introduced incentives to increase investment and encourage improvements such as the use of fertilisers in the co-operative sector. These have included the increase of personal loans to co-operative members, interest rates which are 1½% below the usual rate of the Agricultural Bank to co-operative borrowers, reduced the cost of inputs (average reductions were 5%) and relaxation of the regulations governing the distribution of credit[66].

The fact that there has been a serious shortage of capital for small scale developments by individuals and co-operatives can be seen in a study of the activities of the Agricultural Bank. With the development of the bank non-institutional sources of working capital were to be eliminated, with capital being supplied from within agriculture, from the bank, and from a number of specialised government controlled institutions, among them food processing plants. Capital for longer term investment could still come from outside private sources; many merchants owned and invested in agricultural machinery, storehouses and so on, though these functions were to be taken over by the state in due course.

Planned development of institutional capital

After 1959, the state, through the Agricultural Bank, was to play the major part in providing capital for the annual needs and for small scale investments. The private banking sector was allowed to participate in

loans to the agricultural sector, but from 1966 the Agricultural Bank was to take all such activities under its control. Though non-institutional forms of credit were made illegal, especially after 1963 when the constitution introduced by the Ba'ath specifically banned such loans,[67] rural savings and investment by cultivators and landowners were expected to rise to help replace non-institutional sources.

From 1962, the Agricultural Bank was expected to provide at least L.S. 200 million for short term and other loans[68], and in the second five year plan this was to rise to L.S. 300 million[69]. By the third five year plan, Agricultural Bank credit was to rise from L.S. 330 million to L.S. 500 million, some 7 times the amount given out in 1958[70].

Actual distribution of institutional credit

After 1958 institutional credit to agriculture came from three main sources, the Agricultural Bank, the private banks and the public industrial corporations. Of these only the first gave out medium (up to five years) or long term (up to ten years) credit.

Agricultural Bank

Although the Bank gave out medium and long term loans, as Table 39 below shows, it was concerned mainly with the distribution of short term working capital. Table 39 includes loans given to the private and co-operative sectors of agriculture.

The figures of Table 39 are subject to some reservation on two counts. First, and most serious, is the possibility that a large proportion of the funds earmarked as loans to agriculture did not in fact reach the

TABLE 39 Official figures of new loans given out by the Agricultural Co-operative Bank, 1958 to 1973, in thousands of Syrian pounds

Year	Medium/Long	Short		Total Value
		Kind	Cash	
1958				
9	2,436	25,750		28,186
1960	4,546	39,778		44,324
1	5,861	17,792		23,653
2	8,512	6,459	10,713	25,684
3	4,059	5,355	7,453	16,867
4	5,091	7,214	10,804	23,109
5	4,827	19,878	16,503	41,208
6	11,937	21,584	47,778	81,299
7	10,615	34,415	71,318	116,348
8	8,278	35,841	97,101	141,220
9	8,504	48,503	99,123	156,130
1970	9,832	52,152	97,596	159,580
1	17,781	67,308	99,218	184,307
2	16,185	52,104	88,518	156,807
3	17,555	84,347	83,422	185,324

Source: Statistical Abstract, op. cit., various years.

sector at all. It has been suggested that in 1964 as little as 22% of the Agricultural Bank's funds actually reached agricultural co-operatives and individual farmers[71]. In fieldwork on the provincial level, the writer found no evidence to substantiate this claim, and if funds were diverted from the agricultural sector on a large scale it was almost certainly done before allocation to provincial bank centres. There is little doubt that funds allocated to individuals and co-operatives are channelled into other uses, whether commercial or for personal consumption. The shortages and inadequacies of trained manpower in the co-operatives and branches of the Agricultural Bank have hindered the proper supervision of loans to farmers.

The second reservation relates to the discrepancies that exist between different official sources. Excerpts from the official newspaper of the Peasants' Union, Nidal al Fellahine, state that the total amount of loans given out by the Agricultural Bank in 1968 was L.S. 150 million, about

L.S. 9 million more than the figure of Table 39[72]. Another quasi-official source, Syrie et Monde Arabe, states that the figure for the same year was L.S. 170.7 million[73]. All three sources are presented without explanation, but they are all referring to the total loans extended by the Agricultural Bank. Such differences in statistics make analysis of the role of the Agricultural Bank difficult.

The other banks

Before the re-nationalization of the private banks in 1963 the banks, particularly La Banque de Syrie et du Liban and L'Omayad Banque, gave out loans to private owners. This was almost all short term credit and was given against the security of land[74]. In 1962 this amounted to L.S. 59.7 million[75]. After the nationalization of the banks the commercial banks did continue to direct some loans to the agricultural sector. Most of these were connected to industrial or commercial enterprises - the sugar refineries, for instance, extended short term credit for seeds and fertilizer to cultivators.

Requirements of the agricultural sector for annual working capital

The most striking feature of the distribution of institutional credit is the dominance of short term credit over long and medium term. The figures of Table 39 show this for the Agricultural Bank. Despite this concentration on short term credit the Agricultural Bank has failed to fill the gap that was theoretically left after the legal abolition of non-institutional credit. It has been estimated that in the immediate pre-reform period merchants and moneylenders were responsible for some L.S. 200 million, or 47%, of the annual requirements of the agricultural sector[76]. However, as Table 39 shows, the total short term credit given

out by the Agricultural Bank even in 1973 has not reached this 1958 figure. There is no evidence that the private (later the commercial) banks increased their contribution to the agricultural sector. It may be argued that private investment by cultivators and landowners has increased. This is possible, but for various reasons which will be discussed later, it seems unlikely that it has increased very greatly. As a result non-institutional credit is still used, though much less openly than before.

Table 39 also suggests that not only has the Agricultural Bank failed to take over the role of the non-institutional credit sources but the increase of institutional credit has been so slight that it may have failed to keep pace with the increases in the annual costs of agricultural production. In 1957 some L.S. 425 million was used to cover the costs in agriculture[77], and since that time the main costs of production, wages, fertilizer, and even irrigation[78] have risen even though other high cost inputs such as machinery, which have had to be imported, have been held down.

The failure of the Agricultural Bank to supply sufficient working capital has been a major factor in the failure to intensify agricultural production. As will be shown later the cropped area has not been increased as a percentage of cultivated land. Just as serious, however, is the fact that productivity on existing cropped land has been kept down by the inability of cultivators to finance the necessary inputs. A recent study by the Ministry of Agriculture averaged the costs of production of various crops, given not only adequate supplies of fertilizers and seeds, but also proper inputs of labour, cultivation of

the land and so on. It estimated that for winter and summer field crops alone, given present areas of the crops, total inputs of labour, seeds, fertilizers and other inputs, and cultivation costs but excluding the cost of land and rents the total requirement for proper cultivation of these crops was L.S. 1062 million. This figure excluded maize, millet, rice and oats, and of course, the fruit and livestock sectors of agriculture[79].

Although some of the above costs may be reduced as labour for many cultivators is done cheaply by the family it still represents a figure far in excess of the probable actual annual inputs into agriculture, and indicates that the agricultural sector was short of working capital to cultivate adequately the cropped area that was in fact used.

Requirements of the agricultural sector for medium and long term credit

Almost all the medium and long term loans to individuals and co-operatives in agriculture come from the Agricultural Bank. Such loans have been given for machinery, pumps, wells, buildings and land reclamation work.

As Table 39 suggests, there have been two major attempts to increase the amount of medium and long term credit given out. These have coincided with the programmes to increase the number of co-operatives in 1966, and again after 1970, when extra capital was needed apart from the theoretical payment of the beneficiaries of 25% of the value of their land in order to increase their ownership of machinery and to carry out small and medium scale projects.

However, import restrictions combined with cutbacks on the amount of medium and long term credit extended have greatly inhibited the development of the machinery stock of the country and prevented constructional and other investments. Although the amount of machinery, pumps and so on did increase from 1962, the increase was relatively slow, and Syria has remained behind most other states in the area, except Iraq, in terms of machinery per area cultivated.

Unfortunately, figures for the actual increase in the numbers of tractors, pumps and so on are not, from official sources, entirely clear. This is partly because the figures for "registered" tractors, combine harvesters and threshers are not the same as those for "use". For instance, it seems that between 1967 and 1973 more tractors came into "use" than were newly "registered"[80]. On the other hand, the Statistical Abstract appears to disagree with the records of the Ministry of Agriculture - in 1965, the former estimated that more than 12,000 tractors were "registered" in Syria, while the figure of the latter shows that only 7,675 were being "used"[81]. This suggests that many tractors that were "registered" were either no longer being used, or had broken down.

Table 40 shows the development of the sales of machinery in Syria since 1955. Considering the shortages of machinery in Syria and the policies of expansion and intensification of the five year plans, the amount of machinery in the country has increased slowly. This has been due to the import controls imposed by successive governments since 1963 and particularly after 1965 but the lack of medium term credit has also contributed to the problem.

TABLE 40 The sales of certain types of agricultural machinery in Syria, 1955 to 1971

	Tractors	Harvesters	Combine Harvesters/ Threshers	Seed drills	Disc Harrows	Irrigation pumps	Motors (mobile & immobile)	Sprayers/ Dusters
1955	531	35	91	12	NA	2468	5160	58
1956	560	12	192	88	NA	2204	4188	42
1957	576	24	273	64	NA	1051	1732	95
1958	589	3	54	17	NA	1655	2305	130
1959	594	11	4	21	NA	1224	2038	271
1960	862	9	13	45	NA	1121	1923	194
1961	958	8	134	44	NA	1119	1948	160
1962	1592	1	139	65	NA	822	2538	35
1963	1786	57	337	57	NA	570	1943	11
1964	1538	3	99	49	NA	700	2022	658
1965	630	1	27	16	272	668	1534	421
1966	105	0	0	7	51	434	1124	706
1967	45	4	8	5	227	481	533	279
1968	61	6	9	1	147	481	740	133
1969	197	1	11	1	173	353	964	494
1970	1217	150	23	6	51	413	788	658
1971	819	3	3	1	103	306	826	305

Source: Statistical Abstract, op. cit., various years.

As a result of the slow development of the machinery stock of the country from 1963 to 1970, it has been necessary since 1970 not only to increase the amount of new machinery, but also to replace old machinery. This has put an added burden on the country's balance of payments.

Since 1970 the shortage of institutional credit in the agricultural sector has conflicted with the relaxation of conditions and a reduction in the administrative procedures for obtaining a loan. This has brought increasing demands for credit, particularly from members of co-operatives, without adequate credit being available. However, the extension of credit to less secure borrowers has led to serious debt problems. The lack of supervision and proper organisation of credit in the co-operatives and

also by the Agricultural Bank with private borrowers has meant that a large percentage of the capital of the Agricultural Bank is tied up in debts. A detailed study of the debt problem in the province of Hama will be made below, but it must be stressed that the agricultural sector, which was undercapitalised before 1958, continues to lack working capital and adequate supervision and assistance to go with it.

The distribution of credit by the Agricultural Bank to co-operative and private sectors

Since 1958 the Agricultural Bank has attempted to extend credit to smallholders and others who had previously been denied credit because they were unable to offer sufficient security. This was to be done by introducing new, less stringent forms of security for credit. A second aim was the support of the new co-operative structure and encouragement of beneficiaries to accept and contribute towards their co-operatives by giving them special advantages in obtaining loans from the Agricultural Bank.

Before 1967 these advantages were extended to co-operatives of both the Ministry of Agrarian Reform and the Ministry of Agriculture and there seems little doubt that many 'private' co-operatives of the latter were formed simply to take advantage of the credit terms available within the co-operative sector. For individuals outside co-operatives, as well as those within them, the relaxation of security requirements for loans theoretically opened up the possibility of institutional credit. This not only applied to smallholders but also to renters of state and private land and beneficiaries of the agrarian reform who were co-operative members.

The advantages given to co-operative members in Law No. 130 of 23 August 1958 and Decree No. 220 of 25 June 1961 have already been mentioned. Further relaxations in security requirements for loans, including permission to use warehouse receipts, and even unharvested crops, as security, were granted in other legislation, including Law No. 129 of 28 August 1959. In Law No. 110 of 4 May 1970 the Ministry of Agriculture was to stand as theoretical security for beneficiaries and renters of state land. To encourage participation and a sense of responsibility among the members, co-operative societies were allowed to buy shares in the Agricultural Bank, and a savings scheme was set up. So in spite of the rather long and detailed administrative procedure to obtain a loan, the spirit of the agrarian reform was given a practical framework in legal and administrative terms through which credit could be extended on a large scale to the mass of smallholders and other cultivators. This policy was supported by ensuring that the increase of the amount of credit extended was not generally used to increase the size, but the number, of loans. This reflects the very large increase of short term loans, with each borrower being allowed only up to L.S. 1000 per annum.

The distribution of loans between the co-operative and private sectors, however, is difficult to assess. This is partly because the figures of the Agricultural Bank are not published in this way. Even if these figures were readily available, they would be complicated by two factors. First, members of co-operatives may also receive loans as private farmers, in which case the loans they receive as co-operative members could well be used on their private plots. Secondly, co-operatives that were formed under the Ministry of Agriculture, which were usually formed

specifically to take advantage of favourable credit arrangements for co-operatives, were usually better organised and probably received more credit than those formed under the direction of the Ministry of Agrarian Reform. It has been suggested above that only 1/8 of the co-operatives of the Ministry of Agrarian Reform were distributing credit in 1965. A more detailed study of the actual distribution of credit by co-operatives will be undertaken with regard to the province of Hama.

In analysing the distribution of credit between the co-operative and private sectors, it must be remembered that a large part of the other institutional credit from agricultural industries, and the Commercial and Real Estate Banks, to the agricultural sector went to the private sector. Although only the figures for 1966, 1972 and 1973 are available, Table 41 shows that as far as the Agricultural Bank loans are concerned, the co-operative sector kept pace in percentage terms with its growth of the share of the cultivated area. Because of the uncertainty that remains about the number of private owners and cultivators, at least until the Agricultural Census of 1970 is published, the number of co-operative members as a percentage of all owners and cultivators is not clear.

TABLE 41 Loans by the Agricultural Bank to co-operatives, 1966 to 1973

Year	Co-operatives as a % cultivated area	Loans to co-operatives as a % total loans
1966	11.5 (1)	12.3 (3)
1972	15.8 (2)	
1973	15.0 (2)	

Sources:
(1) Office Arabe de Presse et de Documentation, Syrie et Monde Arabe, op. cit., May 1969, p. 38.
(2) Statistical Abstract, op. cit., 1972, 1973.
(3) W. Ule, The Rural Co-operative System in Syria - Development, Present Situation & Organisational Structure, Research Institute of the Friedrich-Ebert-Stiftung, Report No. 42, Bad Godesburg, 1970, p. 59.

Two factors should be considered in relation to Table 41. First, although the smallholders within the co-operative sector, whether beneficiaries of the distribution of state and expropriated land or not, received proportionally as great a share as the rest of the agricultural sector from the Agricultural Bank, neither the number of co-operatives nor the money made available by the Agricultural Bank has been sufficient to enable all recipients of expropriated and state land to be members of co-operatives, or receive the credit on favourable terms.

Secondly, although the proportion of loans to the co-operative sector was in line with its proportion of the agricultural land, the co-operative sector, particularly that part of it that fell under the Ministry of Agrarian Reform, lacked capital and equipment to a greater extent than the agricultural sector as a whole. The expropriation of machinery and pumps by Decree No. 123 of 29 November 1964 from landlords affected by the reforms helped to supply these co-operatives with some equipment. However, even by 1966 the co-operative sector was still behind the rest of the agricultural sector. It has been estimated that co-operatives owned only 10.6% of the tractors in that year[82].

The distribution of credit in the co-operative sector

As has been shown above, the distribution of credit by the Agricultural Bank to the co-operatives just about matched that to the agricultural sector as a whole. Within the co-operative sector the government's attitude towards credit has been somewhat contradictory. On the one hand, in order to try to encourage the development of co-operatives and extend credit to a large number of smallholders and beneficiaries, loans have been extended with less and less personal security. Apart from the

economic reasons it was also important politically to the regime to provide cheap credit for the mass of smallholders in order to reduce the influence of the merchants and others who had hitherto been the main source of working capital in agriculture. It was particularly important for the government that non-institutional lending activities should be stamped out in the co-operatives.

Although the government has, in theory, taken the burden of extending credit to high risk sectors of the agricultural community, and has tried to extend credit to the whole agricultural area (even the drier areas), it has refused to accept the high losses that were inevitable. The problem of debt has become an obsession with the Agricultural Bank, with serious consequences for both the increase of credit to the agricultural sector as a whole and to the smallholders and other less secure borrowers in particular. The lack of supervision of the use of credit, particularly in the co-operatives, but also by the Agricultural Bank, has been a major factor in the poor use of credit and the development of debt. Even giving loans in kind offers no guarantee of their proper use in cultivation. Again, despite the increase of credit to the smaller operators, the shortage of working capital has itself prevented increases in productivity and income, and the ability to repay debts. The lack of any sort of insurance arrangements or other allowance against poor weather conditions has increased the problems of debt.

With the increase of debts, the Agricultural Bank has become more wary about the distribution of loans and medium and long term loans to the private sector have to be backed by tangible security. A number of strongly worded laws and decrees have been issued about debt including

Law No. 28 of 8 April 1967 which permitted the Agricultural Bank to sequestrate the land of defaulters on loans. However, it is in the co-operative sector in particular that debt is serious.

Within the co-operative sector the distribution of loans in the co-operatives has depended to a large extent, in the absence of proper supervision and control by the Bank, on 'Area Lending Committees' and the co-operative supervisor. This has meant that two interests have been dominant. The first is those of the 'Area Lending Committees', very often made up of the more influential and therefore probably the larger operators in the co-operatives. The second is political, for many of the co-operative supervisors have either been mukhtars appointed by the regime, or after 1963, Baath party members. Many of these appointees have come from among the richer smallholders. With the development of the Peasants' Union the distribution of loans in co-operatives has benefitted those who have joined the Union. As a result the distribution of credit has not always depended on the individual needs of the co-operative members. Considerations other than need or any other policy based on objective agricultural economic or social grounds have often had undue influence in the distribution of credit.

Other sources of capital in agriculture

Apart from the commercial and industrial investment in agriculture, with the abolition of non-institutional money lending investment in the agricultural sector was to come from the Agricultural Bank and from reinvestment in the land by cultivators and landowners. For this reason it was hoped in 1968, for instance, that I.S. 150 million of institutional credit would be enough to finance the year's agricultural activities if the inputs of peasants and landowners were sufficient.

This division of investment responsibilities, however, put a heavy burden on the private sector. In 1967 it has been estimated that the agricultural sector needed an annual investment of some L.S. 455 million. Even taking into account other institutional sources of working capital, the landowners and cultivators would, therefore, have had to find some L.S. 250 million, about double their contribution in 1958[83].

It is very doubtful whether such an increase in investment by landowners and cultivators did, in fact, occur. The increased income to the large number of tenants and beneficiaries as a result of the agrarian reforms, due particularly in the case of the former to the reform of the labour laws, did not generally find its way into productive investment in the agricultural sector. Much of the increased income was used in increased consumption.

In any case increased income to the mass of smallholders and tenants was largely offset by the effect of the reforms on the ability of the larger landowners to invest, and in the lack of confidence of large, medium and even small landowners and operators in the government's policies on agriculture. An interesting example of this is the unwillingness of individual landowners and cultivators to save through the Agricultural Bank. As Table 42 shows, private saving through the bank have been limited, and long term savings have almost disappeared compared to pre-1958 times.

Furthermore, savings through the Agricultural Bank, which **were to provide** an institution through which both private and co-operative savings could be made, and take the place of other banks for this purpose, has not proved an attraction to individual landowners and cultivators as Table 42 shows.

TABLE 42 Deposits at the Agricultural Bank by individuals and co-operatives, 1957 to 1973, in thousands of Syrian pounds

Year	Individual		Co-operative	
	Current	Deposit	Current	Deposit
1957	1,858	540		
1958	2,576	51		
1959	2,729	51		
1960	2,810	98		
1961	985	10	129	18
1962	1,023	6	146	9
1963	1,054	9	194	9
1964	463	53	623	47
1965	887	16	3,915	
1966	1,310	28	4,595	
1967	1,984	13	7,417	
1968	1,807	11	11,379	
1969	1,814	38	16,511	
1970	1,184	19	13,068	
1971	1,947	27	21,173	
1972	2,109	59	26,222	
1973	2,993	54	39,082	

Source: Statistical Abstract, op. cit., various years.

In the private sector, the influence of weather conditions on the level of deposits may be discernible, particularly from 1967 to 1973, though the high figure of 1960 is surprising in this context. The growth of 'individual' use of the bank since 1970 probably indicates greater confidence in the regime rather than favourable weather conditions, which did not occur in 1972 or 1973.

The co-operative sector, on the other hand, shows a rapid rise in the use of the bank's facilities, which is not surprising as co-operatives are obliged to use the Agricultural Bank for most of their transactions. The lack of longer term deposits by the co-operatives, while it may be due in part to accounting practice, also reflects the lack of long term capital and savings in the co-operative sector.

The lack of confidence in successive regimes by the private sector has not been the only factor in poor private investment. As has been mentioned, those that lost land and machinery in the expropriations, and who contributed a considerable amount of the private investment in agriculture, were not only unwilling to invest but because of the unfavourable, long term compensation arrangements lost a considerable amount of what they thought was their due. By the middle of the first five year plan, many of those landowners and others who had, as the preamble to the first plan stated[84], used their savings productively, either put their savings into less productive but safer sectors of the economy, or moved them abroad.

Among the landowners who retained land, the agrarian reform greatly reduced their incomes and therefore not only their willingness, but ability, to invest in their land and provide increases in working capital for their tenants. Furthermore, their profits, and indeed profits throughout the agricultural sector, were also reduced by government policies and increasing government control over marketing and prices for agricultural products.

For the reasons above it is clear that non-institutional sources still play an important part in financing agricultural production. Apart from the agricultural requirements, the farmers have other social and economic needs that because of their low incomes and savings have to be financed through loans. The extent to which such needs are obtained from money-lenders, merchants and other private sources is not clear. Merchants and moneylenders almost certainly lend against the security of crops or the advance sale of crops, and institutional credit, because of poor supervision, whether cash or kind, is used to finance non-agricultural activities.

Examining the extent to which non-institutional lending occurs is difficult, because it is illegal. It may well be that its role is declining, particularly as the state is gradually expanding its role in the purchase and marketing of more and more crops. However, the marketing of most fruits and vegetables, livestock and many grain products is still private. Even in villages where most of the inhabitants belong to a co-operative, non-institutional credit is still important. In one northern Syrian village in 1964 it was estimated that 46% of credit was from the co-operative, 8% from friends and relatives, and the rest from merchants and moneylenders[85]. Such non-institutional credit was used for both agricultural and other purposes, and while productivity and incomes remain low, savings and surpluses will remain insufficient to meet either agricultural or other demands.

The problem of debt

The result of under capitalisation of the sector by institutional sources and inadequate private savings has been two-fold. The first, mentioned above, has been the continued role of non-institutional credit. The second has been a very serious problem of debt. For political reasons, it is rather difficult to obtain the real figures on debt to the Agricultural Bank, but some figures have come to light, and on a provincial level for Hama more detailed figures have been obtained.

The figures that are available are somewhat misleading, as debts have been reduced in various ways, which will be explained. However, it has been estimated that at the end of 1957 outstanding debt to the Agricultural Bank was L.S. 63 million[86]. By 1967 it was L.S. 115 million[87], and in 1971 it was L.S. 93 million[88]. Comparison of these figures with those

of Table 39 shows how serious the problem of debt is. This very poor record has been a major factor in restricting the growth of credit by the Agricultural Bank. The poor performance of the co-operative sector itself in debt underlines the fact that most co-operatives have not been developed sufficiently to deal with the efficient administration and control of credit.

In Syria, however, the debt situation has been made worse by the confusion that occurred after the 1957 to 1961 drought period when large sums of money, possibly as much as L.S. 70 million, were given out as credit, but were thought by many of the recipients to be relief. This resulted in a protracted wrangle about repayment between the government and debtors which continued until 1970.

Although some of the debts from before 1958, particularly those outstanding to the private banks[89], had already been written off, debts incurred from 1959 to 1961 were not put aside until Law No. 46 of 1972. Even in 1974 these debts had not been finally waived by the government. This has had a serious effect on the willingness of many debtors who have managed to refuse to repay these debts for more than a decade, to repay other later debts to the Agricultural Bank.

Partly as a result of this disagreement, and partly as a result of the disorganized and inadequate condition of the Agricultural Bank in the period immediately after 1958, many borrowers have retained a mistaken and even cynical attitude towards credit facilities offered by the Bank. The attitude that the Agricultural Bank exists to provide free capital to

smallholders and others persisted well into the 1960's. This resulted not only from the distribution of relief loans, but also having the system in most co-operatives that the co-operative organizer would simply give out cash at the beginning of the year, and no supervision or control over its use existed. With such a confused and inadequate beginning to the expansion of the Agricultural Bank it was more difficult to enforce the rules of the Bank later. It also became more and more obvious that, for political reasons, the government was unwilling and unable to apply severe sanctions on those failing to repay debts.

From the point of view of the aims of the Agricultural Bank, it was to be given two conflicting roles. In the first place, it was to be run as a business, rather than as a "compensation or insurance agency", without making a loss[90]. On the other hand, credit was to be extended to both individuals and co-operatives with much less security than before at low rates of interest. For the reasons outlined above these policies have been incompatible and the result has been the serious and continuing problem of debt.

In order to avoid the political repercussions of widespread removal of farmers from their land for non-payment of debts, which the Agricultural Bank **is** legally entitled to do, the Agricultural Bank has resorted to a compromise between this course, and the writing off of all outstanding debts, which would probably have equally disastrous political and economic consequences. The Bank has tried to waive some of the debts and reorganise the repayment of others, so that debtors can continue to receive loans while repaying past loans on which they have defaulted.

The way in which this has been done and the implications of such a policy will be discussed in detail in the section on the mohafazat of Hama. However, it is of interest to note that the government has had to reorganize the repayment of debts on several occasions. Not only have additional debts been incurred, but many debtors have been unable or unwilling to keep up the repayment of the reorganized debts.

(g) The introduction of new methods and services to improve agriculture

The particular policies followed in the allocation of funds throughout the agricultural sector, together with the inadequacies of the co-operative system and the lamentable shortage of trained manpower have meant that improvements in production and methods in the agricultural sector have been slow.

The shortage of manpower has already been examined in the case of co-operatives. Other extension services were hardly formed at all until the Peasants' Union began organising extension activities. For the last six or seven years, the Peasants' Union and the Ministry of Agriculture have both tried to run an extension organisation to combat illiteracy and carry out various programmes disseminating agricultural information of all sorts. With standards of cultivation so low, and levels of illiteracy so high (in 1969 it was estimated that 81% of co-operative members and 71% of the rest of the adult rural population was illiterate)[91], extension work has been essential. However, in the Peasants' Union, which now dominates extension services, political education and discussion has tended to dominate the Union's activities, to the benefit of neither the literacy nor the agricultural expertise of the rural population.

The introduction of new crops and new, more intensive methods has also been slow. As will be shown later, the intensification of cultivation by the reduction of fallow has not in fact occurred. The use of new crops and new varieties of established crops to increase production, reduce the annual fluctuations in yield, and to provide raw materials for new industries has been declared **the aim of the government, but until** the last two or three years little has been done in this field. Although demonstration farms run by the Ministry of Agriculture have been set up they have been largely ineffectual because of lack of adequate co-operative over-extension services to back up demonstrations with seeds, supervision and other follow-up requirements. For this reason it has remained extremely difficult to introduce new or improved crops, even those with immediate and obvious advantages such as new hybrid grains.

Apart from the diversification of crop production, attempts to develop the livestock sector in the cultivated zone have met with little success. So far, attempts at improving the livestock sector have concentrated on developing its potential in the arid or "rangeland" areas of the country. In these areas, co-operatives have only recently been developed, and the livestock sector in general, considering it may contribute between 20% and 40% of the total value of production in the agricultural sector, has been seriously neglected[92]. In terms of credit it has continued to receive less than 1% of the total of the agricultural sector. In 1967 this amounted to only L.S. 1.3 million[93].

Almost nothing has been done to stabilize and improve livestock production by integrating fodder production with other crop production in the cultivated areas, except by a few private operators. Livestock ownership in these areas is, in the private sector, almost entirely confined to one

or two cows, goats or chickens per family, with no particular provision made for them in crop production. The large flocks of sheep and goats seen in the fertile crescent and even on the coastal plains in summer usually belong to families from the "rangeland" areas, who move westwards for the summer and pay for their animals to eat the straw and cotton stalks off the ground.

The recent developments of chicken farming, particularly round Damascus, and of cattle stations, have been the result of investments by the state and individual private investments. Because their markets are the urban centres and they are capital intensive, highly technical plants, there is little spin-off to mixed farming developments into the countryside. Apart from these specialised and isolated units there remains a lack of facilities for training cultivators in livestock management, for providing veterinary care, adequate foodstuffs and animal housing and there has therefore been little improvement in the quality and farming of livestock.

Turning to the development of supply and marketing facilities for farmers, the state is making slow progress in its policy of providing a comprehensive system for the supply of inputs and the marketing of agricultural products. Even the co-operatives, as has been mentioned above, have not taken over these functions for their members.

However, the state is gradually extending its control over the supply and marketing of an increasing number of inputs and products. These monopoly controls have not been universally welcomed by cultivators, as the prices charged by the state for inputs tend to be high, and the prices given for

products tend to be low, a similar situation to that in which merchants controlled local trade and commerce. The pricing policies of the state will be discussed below but there is little doubt that there is a considerable amount of black market activity in the buying and selling of inputs and products that, by law, are state monopolies. There is almost certainly also a great deal of illicit selling among co-operative members of products that should be sold through the co-operatives.

(h) The development of agricultural industries

The development of industries based on agricultural production is an important part of government policy. It is hoped this will both stimulate agricultural production and productivity and link the agricultural sector more closely with the national economy. Since 1958, some progress has been made in this direction but, as has already been shown, there have been serious delays in the completion of many projects.

In some of these industries the state has instituted a monopoly of production and therefore of purchase of the crops concerned. Cotton, tobacco and sugar beet can only be sold to state-owned factories for processing. Other industries, for instance tomato processing in Damascus and onion drying in Salemiya (Hama province) have local importance for their respective agricultural products. Not only do they act as a secure market, but the factories may extend credit and other forms of assistance and advice to the cultivators of their crops.

The state has tried to control the marketing of a number of other crops, particularly grains. However, increased state control of the mills and stores has not cut out the private role in marketing, or indeed, in the

supply of seeds and other inputs. These merchants may still buy the crop in advance, or extend credit on the security of the crop in the ground, which they expect to buy at an advantageous price. The state does not yet have the experience, the facilities or the manpower to control all marketing and supply of agricultural products and requirements. In many respects, it would be better for the state and the cultivator to define the private sector in this field clearly and give it support. This, however, has been ruled out for political reasons, even since 1970, and the state is likely to increase its role in supply and marketing in the agricultural sector.

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CHAPTER VI The Development of Agricultural Production over the Period of the Agrarian Reforms

In Chapter VI a detailed assessment of the changes in the utilization of the land and agricultural production will be made, together with an assessment of the implications of this on incomes, the national economy and on government policies.

Forecast changes in both the utilization of the land and agricultural production, which were laid down in detail in each of the five year plans, were dependent on the implementation of the agrarian reforms and agricultural plans. Difficulties and delays in the execution of both, which have been dealt with above, indicate that there were problems in implementing planned changes in the utilization of land and agricultural production.

At the same time the inability to achieve the targets does not necessarily infer that the agrarian reforms or the agricultural plans have failed entirely. Many of the targets set for various crops, as for most other aspects of the plans, have been unrealistic, but it is important to examine what developments have occurred and what trends towards increased production and other planned changes in land use there may have been.

There are particular problems in Syria in determining such developments for two reasons. The first is the dominant importance of weather conditions which vary greatly from year to year and tends to obscure what trends there may be. The second is that the statistics themselves may not be entirely reliable or consistent. This is inevitable as the country starts to develop its statistical services. Different ways of collecting information have been used, usually resulting in an increase of estimates. This has been true of both crop area and production. For crop area, the increased number of crops

estimated can be seen from the Statistical Abstracts, but for both area and production, increases in estimates have occurred as assessment has been done more and more directly by the Ministry of Agriculture, with less dependence on the reports of cultivators and landlords.

It has been suggested that the alteration of the methods of collecting and assessing production of wheat and barley in 1960 may have lead to the figures being higher than they would have been by 20% and 30%, respectively[1]. New methods of data collection were also used in 1967[2] and 1970[3].

(a) The consolidation and intensification of the cultivated area

The consolidation and intensification of the cultivated area has involved a number of policies. These have included a reduction of the cultivated area, particularly in the arid areas, the elimination of fallow, the rapid development of irrigation and the introduction of new methods and inputs to increase production.

The consolidation and reduction of the cultivated area

It has already been suggested that during the 1950's the limits of the agricultural area had been reached and expansion of the cultivated area was slowing down. Table 43, however, shows that the cultivated area increased by about 26% from 1959 to 1963 and the cropped area about 11% over the same period before consolidation and reduction of either took place.

It is interesting that the cultivated area should increase so rapidly over a period in which drought and uncertainty caused by agrarian reform might

TABLE 43 Cultivated and cropped areas, 1957 to 1973 (thousands of ha.)

Year	Cultivated Area (A)	Cropped Area (B)	B as % of A	Irrigated Area (C)	C as % of A	Fallow Area (D)	D as % of A
1957	4,650			582	12.5		
1958	5,452			590	10.8		
1959	5,491	3,377	61.5	476	8.7	2,114	38.5
1960	6,014	3,480	57.9	527	8.8	2,534	42.1
1961	6,381	3,814	59.8	558	8.7	2,567	40.2
1962	6,263	3,201	51.1	657	10.5	3,062	48.9
1963	6,942	3,753	54.1	670	9.7	3,189	45.9
1964	6,654	3,250	48.8	489	7.3	3,404	51.2
1965	6,341	3,348	52.8	552	8.7	2,993	47.2
1966	6,130	3,127	51.0	507	8.3	3,003	49.0
1967	6,097	3,338	54.7	538	8.8	2,759	45.3
1968	5,871	2,655	45.2	477	8.1	3,216	54.8
1969	5,885	3,488	59.3	547	9.3	2,397	40.7
1970	5,909	3,299	55.8	451	7.6	2,610	44.2
1971	5,908	2,816	47.7	476	8.1	3,092	52.3
1972	6,001	3,104	51.7	625	10.4	2,897	48.2
1973	5,878	3,397	57.8	619*	10.5	2,481	42.2

*The figures in Table 43 are official statistics. It has already been noted in Table 27 that another source put the total irrigated area for 1973 at 485,000 ha.

Source: Statistical Abstract, op. cit., various years.

have been expected to lead to a decline in the area. Several factors may account for the increase. In the first place the difference between the increase in the cultivated and cropped area suggests that large areas - possibly the distributed state lands - were designated as cultivated areas without actually being brought under cultivation. This is likely in the arid areas where there was such a shortage of water. It is worth noting the very substantial sales and renting out of state land after 1960, shown in Table 26.

A second factor may be the improvements in the collection of statistical information on land holdings, particularly after 1960. A third factor, which may help to account for the very high figure of 1963, is the

combination of a year in which the utilization of state land was particularly encouraged and which also experienced favourable weather conditions.

Table 43 shows that after 1963 some reduction of the cultivated area was achieved. This was considered important in the drive to reduce the fluctuation of crop production as the areas to be taken out of cultivation were the marginal agricultural lands on the desert fringe.

Table 43 shows that the percentage of cultivated land that has been cropped has not risen significantly, even though the cultivated area has contracted since 1963. This contraction has been to some extent the result of government policy for in order to reduce soil erosion and the degrading of arid pasture areas cultivation has been prohibited in many arid areas. It has also been due to the desertion of some marginal agricultural areas by private operators and also by villagers. Unfortunately, estimates of the extent of this movement are only guesswork, as the 1970 population census has still not been released, so no comparison with the 1960 situation is possible.

Despite the proposed development of irrigation in the five year plans, Table 43 also shows that the irrigated area has not significantly increased from the period when the reforms started, and there has certainly been no even increase of irrigated area such as might have been expected had irrigation schemes, large and small, been brought into operation as the five year plans defined. Indeed, the quality of the irrigated land remains somewhat suspect. It has been estimated that in 1959 to 1961 6% of fallow land was in irrigated areas[4]. This suggests

that in those three years, 27%, 29% and 28% of irrigated land was fallow. This may have been partly due to the political events, but it is also due to the fact that the drought affected irrigated areas very seriously as streams, rivers and wells dried up. In this context it is interesting that the years in which Table 43 shows the irrigated area to have exceeded 600,000 ha. were years of particularly good rainfall, a point which casts further doubt on the figure for irrigated land for 1973.

Even on irrigated land, the low inputs of natural as well as artificial fertilizers have meant that farmers have continued to resort to fallow as a means of rejuvenating the fertility of the soil. With the increase of fertilizer, as well as the numerous irrigation projects, it would have been expected that in the irrigated areas at least the amount of fallow would have been reduced. However, as Table 43 shows, this has not taken place in either the irrigated or non-irrigated areas. This suggests that the use of fertilizer is still very restricted and that the methods and organization of cultivation have not changed greatly over the period of the agrarian reforms.

The diversification of crops

The diversification of agricultural production was one of the most important aspects of the agricultural policies of the five year plans. This aspect of agricultural policy was no less important than the increase of yields, for as with increased yields, the diversification of production was to contribute to cutting down imports and increasing exports. It was also to tie in closely with the agrarian reforms as both crop diversification and increases in yields were to be achieved with the help of the new co-operative organisations and so contribute to the expected increase of incomes to the cultivators.

The broad policies of diversification were outlined in the targetted production in the first two five year plans. The actual extent to which diversification targets were met from a production point of view will be discussed in the general context of production target achievement. However, it is also interesting to see if the structure of agricultural production has altered in line with the policies of diversification, and to what extent high value, intensive crops has increased proportionately as the cultivated area and cropped area has contracted.

Table 44 shows the development of the area of the different categories of crops. The table is slightly misleading unless the additions to the various categories in 1964 are noted. The additional crops included in the statistical tables in that year were five types of fruit, nineteen types of vegetables, one dry legume and six industrial crops.

It must also be noted that, as column B of Table 44 shows, the total of the various crop categories have not in the past added up to the total cropped area as shown in Table 43. Although the figures have been close since 1970 differences between them have been marked in the past. It is not clear why the figures should be different, and the fact that the figures of Table 44, as well as Table 43, probably contain inaccuracies should be borne in mind in the analysis of trends of crop production.

Table 44, together with Table 45, which shows the relative importance of the groups of crops for each year in percentage terms, show increases in the area of fruit and vegetable production since the 1960 to 1963 period. Taking those crops measured before 1964, Table 44 shows that it was not until 1967 in the case of fruit and 1971 in the case of vegetables that the previous maximum areas planted to these two groups in 1962 and 1963, respectively, were surpassed.

TABLE 44 The development of crop area in Syria, 1953 to 1973, in thousands of hectares

Year	A Total cropped area, columns C-H		B A as a % of column B of Table 43		C Pastoral Crops	D Cereals	E Dry Legumes	F Industrial Crops	G Vegetables	H Fruits
1953	2,452					1,880	187	164	18	203
1954	2,672					2,022	199	225	17	209
1955	2,884					2,168	200	283	16	217
1956	3,026					2,278	194	309	18	227
1957	3,143					2,395	222	279	19	228
1958	3,106					2,301	269	283	17	236
1959	2,913		86.3			2,221	192	255	20	231
1960	2,985		85.8			2,354	147	235	14	235
1961	2,795		73.3			2,115	138	271	17	254
1962	3,019		94.3			2,220	194	325	23	257
1963	3,187		84.9			2,432	178	305	34	238
1964	3,100	3,226[1]	95.4	99.3[2]		2,299	211(0)*	335(16)*	137(107)*	244(3)*
1965	2,794	2,913	83.5	87.0		1,952	245(0)	341(20)	123(96)	252(3)
1966	1,938	2,035	62.0	65.1	5	1,226	151(0)	306(20)	99(74)	253(3)
1967	2,659	2,822	79.7	84.5	4	1,895	194(1)	295(27)	155(127)	278(3)
1968	2,407	2,574	90.7	96.9	3	1,575	210(1)	342(23)	164(135)	279(4)
1969	2,756	2,907	79.0	83.3		1,881	246(1)	345(18)	152(124)	281(5)
1970	3,291	3,401	99.8	103.1	4	2,502	229(1)	291(15)	115(85)	260(5)
1971	2,532	2,651	89.9	94.1	4	1,744	216(1)	298(16)	129(94)	260(4)
1972	2,850	3,003	91.8	96.7	5	1,995	236(1)	317(20)	159(121)	291(6)
1973	3,266	3,392	96.1	99.8	10	2,426	240(0)	260(20)	128(90)	328(6)

*From 1964 new crops were included in the total crop area. The sub-total of these crops is shown in the brackets in columns E-H.

1 The figure on the right hand side of column A includes the new crops added to the total crop area in 1964.

2 The figure on the right hand side of column B shows the figure on the right hand side of column A as a percentage of column B, Table 43.

Source: Statistical Abstract, op. cit., various years

TABLE 44 The development of crop area in Syria, 1953 to 1973, in thousands of hectares

TABLE 45 Crop areas in Syria as a percentage of total cropped area, 1953 to 1973*

Year	Cereals	Dry Legumes	Industrial crops	Vegetables	Fruits
1953	77	8	7	1	8
1954	76	7	8	1	8
1955	75	7	10	1	8
1956	75	6	10	1	8
1957	76	7	9	1	7
1958	74	9	9	1	8
1959	76	7	9	1	8
1960	79	5	8	0	8
1961	76	5	10	1	9
1962	74	6	11	1	9
1963	76	6	10	1	7
1964	71	7	10	4	8
1965	67	8	12	4	9
1966	60	7	15	5	12
1967	67	7	10	5	10
1968	61	8	13	6	10
1969	65	8	12	5	10
1970	74	7	9	3	8
1971	66	8	11	5	10
1972	66	8	11	5	10
1973	72	7	8	4	10

*To the nearest 1%

Source: Table 44

The increase of the area of vegetables has been small and there appears to have been a lack of desire to introduce new, more profitable crops, of which vegetables of all sorts would have been particularly important, since 1962/3.

If the vegetable crops measured by the Statistical Abstract after 1964 are included, the slight increase in area planted becomes obscured by fluctuations of the group total which correspond to some extent to the annual rainfall figures. With vegetables, the area planted has depended largely on the water supply, and the lack of development partly reflects the delays in irrigation schemes and the failure to consolidate the

irrigated area. In many areas the water supply is still too uncertain for most cultivators to invest heavily in vegetable production.

The slow development of vegetable cultivation also reflects adversely on the agrarian reforms. Vegetables, because of the marketing and price restrictions on cotton and other industrial crops, cereals and even dry legumes, are usually very profitable crops for the cultivator as they can be sold on the open market. In 1967, for instance, it was estimated that more than 90% of fruit and vegetables were still sold privately by producers[5]. Apart from water, their production needs hard work, initiative and an awareness of market opportunities and demands. Market opportunities certainly exist, as prices of vegetables have been rising rapidly since 1961[6], and profit margins in vegetable production can be very high. However, in co-operatives, and even on tenanted private property, there has been a lack of innovation or application in the introduction of vegetables and other new, profitable crops. As will be indicated in the study of Hama, this has largely been the domain of private enterprise. This has been partly due to the low economic horizons of smallholders which the co-operatives and extension services have failed to lift.

Profit making activities are inhibited in the co-operatives by the members' fears, largely justified, that the state is ready to step in and take profits. Although co-operative members have been unwilling to plant new crops or those requiring more work, whatever the profits, some of these same members may plant vegetables or other such crops on their own private plots which were not subject to the marketing controls of the co-operatives. This will be further discussed in the detailed study of the province of Hama below.

It is also worth noting that, in some instances in the co-operative sector, government pressure has not been towards encouraging the introduction of new crops, but keeping up the area planted of certain crops, particularly cotton. The government has pressurised farmers in co-operatives to grow cotton, partly through insisting on certain minimum acreages if licenses to plant cotton are to be given at all, and also through the partial control of marketing in the co-operatives. This has contributed to some extent to the slow development of vegetable cultivation in the country.

Table 44 shows that the area of fruit cultivation also increased after the 1961 to 1963 period. Table 45 shows an increase in the area cultivated with fruit as a percentage of the total cultivated area. In Table 44 the unevenness of the growth of the fruit area stands out. In production, the fluctuation of fruit yields can be expected but downward fluctuations of the area under fruit trees of the order that occurred in 1962 to 1963 and 1969 to 1970 must be due either to larger scale desertion or destruction of orchards, or statistical factors. In 1962 to 1963, and to a much smaller extent in 1958 to 1959, the decline in the area of fruit trees may have been the result of the neglect and subsequent destruction of privately owned orchards. The 1970 to 1971 figures are not explicable in these terms, though they do coincide with a particularly poor rainfall year. The poor rainfall may have prevented some annual fruits from being planted, and even lead to the destruction of some orchards, but the figures for 1959 to 1961 do not suggest that such a large decline in area need have occurred for that reason.

As Table 45 shows, as a proportion of total crop area fruit has shown an uneven but slight increase. Before 1972 and 1973 fluctuations in the

proportion of cultivated land planted with fruit trees varied inversely with the area under cereals and dry legumes. The high percentages of 1965 to 1969 correspond with the low cereal area of the same period, and in 1970, a peak year for cereal cultivation, the area of fruit trees fell to pre-1965 levels. It is not until 1972 and 1973 that the area of fruit remained at 10% despite increases in the areas of cereals and dry legumes.

Despite the inaccuracies of the figures going to make up Table 44, it does reflect the increase in area of fruit trees from 1971 onwards which may have been due to two causes. The first was the price of fruit, which since 1969 had risen nearly as fast as the prices of meat, cereals and dry legumes despite cheap imports from the Lebanon[7]. The second may have been the increased confidence of the private sector, which has been largely responsible for planting fruit trees in the political and economic prospects following the change of government in 1970.

Of the three other groups of crops, cereals, dry legumes and industrial crops, only the area of dry legumes has increased slightly since 1961 to 1963, although the area of certain crops in the other two groups has also increased. As Table 44 shows, the area of dry legumes grown fluctuated greatly, showing the dependence of these crops on rainfall. After 1967 some levelling out of the annual fluctuations of area planted can be seen as greater areas have been planted on irrigated land. This was encouraged because wholesale prices of dry legumes rose faster than those for any other foodstuffs except cereals and flour after 1969. Table 45 shows that dry legumes, which are used to make a number of traditional Syrian foods, have remained some 6 to 9% of the total area cultivated since the mid 1950's and only in 1960 and 1961, when weather conditions were particularly bad, did it fall below these figures.

The area of cereals, however, shows variations from the area of dry legumes which are interesting. Although as Table 45 shows there has been a decrease of the total area under cereals the peak years of area planted, 1970 and 1973, are as high as the peak years of 1964 and before. However, poor rainfall years after 1964, particularly 1966/7 and 1970/1, resulted in far smaller areas of cereals being planted. This was due to there being less wastage of seed in planting in bad years, partly because the government has had an increasing control of seed distribution, and partly because restrictions on planting in the semi-arid eastern areas have been more strictly enforced in dry years. These restricted areas, however, may be planted in promising rainfall years on the basis that profits will be possible even after paying the fines that will be incurred for cultivating in these areas.

In proportional terms, Table 45 shows a gradual decrease in the importance of cereals despite the continuing and, since 1964, growing annual fluctuations of the cropped area. The fluctuations show that attempts to consolidate the cultivated area and intensify crop production by reducing fallow in the more reliable, wetter areas have made little progress.

As far as industrial crops are concerned, cotton still dominates production in terms of area. The continued production of cotton, together with the introduction of new industrial crops, has been an important part of agricultural policy. However, Tables 44 and 45 show that there has been a decrease in the total area of industrial crops. This has been due to a decline in the area of cotton, which has fallen substantially since 1962[9]. Falling world prices of cotton have undoubtedly contributed to this. The prices that have been paid by the

government to cotton producers have also encouraged some cultivators, particularly in the private sector, to turn to other crops. This has occurred despite the pressure exerted by the government to maintain the area of cotton production by issuing licenses permitting its cultivation. In most cases a licence to grow cotton is not given at all to a cultivator unless he is prepared to cultivate a defined minimum area of the crop.

Other industrial crops have not been expanded sufficiently to offset the decline of cotton despite the very high production targets that have been set, particularly for sugar beet. Since 1964, tobacco and sugar beet have only very slightly increased in area. For sesame the increase in area has been more marked and for groundnuts it has been considerable, but the area of cumin has declined and the crop is now of very minor importance[10].

With the exception of the groundnuts, the small increase in area put down to industrial crops has been disappointing. It reflects the delays in setting up processing plants for agricultural products and the continuing problems in linking agricultural production with industrial processing. However, an important factor has been that the government controls the marketing and processing of the cotton, sugar beet and tobacco crops. The pricing policies which have been followed for these crops have contributed to their declining total area, and this will be discussed below.

The development of yields

The consolidation of the cultivated area, and the intensification and diversification of agriculture was to have led to increases in

productivity and improvements in the yields of crops. In fact, as Table 46 shows, there is little evidence that major improvements in the yields of the main crops have taken place. At least part of the slight increases in yields shown are the result of the alterations in the methods of collecting information about crop production mentioned above.

TABLE 46 The development of yields of the main crops, 1958 to 1972, in tons per hectare

Year	Wheat	Barley		Maize		Millet		Rice	Lentils	Chick Peas	Dry Broad Beans	Rambling Vetch	Bitter Vetch	Tomato	Potato	Onion	Sugar Beet	Tobacco
	NI*	NI	I	NI	I	NI	I	I	NI	NI	NI	NI	NI	I	I	I	I	I
1958	.4	.3	1.1	.9	1.6	.3	.2	.5	.3	.3	6.9	9.6	9.3	14.2	.9
1959	.4	.3	1.5	.7	2.1	.4	.2	.7	.5	.4	8.6	8.9	7.7	18.2	.9
1960	.4	.2	1.1	.6	1.6	.2	.3	.6	.2	.2	8.8	10.7	11.7	23.6	.6
1961	.6	.5	1.0	.6	1.6	.6	.6	.9	.6	.5	8.8	11.8	11.3	19.6	.7
1962	1.0	1.1	.9	.8	2.6	.9	.6	1.2	.9	.7	8.5	10.9	10.9	20.3	.7
1963	.8	1.0	1.1	.9	2.4	.8	.5	1.1	.7	.5	7.1	9.0	7.4	21.5	.5
1964	.7	.8	1.2	.9	2.0	1.0	.7	1.2	.9	.9	8.2	9.9	8.1	24.5	.7
1965	.9	1.0	1.1	.9	2.0	.7	.7	1.0	.9	.8	8.2	11.1	7.7	20.0	.7
1966	.4	.3	1.5	.5	2.4	.4	.6	1.0	.4	.4	8.6	9.1	8.1	22.2	.6
1967	.9	.9	1.6	1.0	2.3	1.1	1.2	1.2	1.0	1.0	8.8	11.2	9.5	23.5	.5
1968	.6	.8	1.5	1.0	1.9	.5	.8	.8	.6	.7	10.4	11.4	8.9	22.0	.8
1969	.8	1.0	1.6	.8	2.3	.9	.8	1.2	.9	1.3	11.6	10.6	9.2	26.6	.8
1970	.5	.2	1.4	.5	1.8	.4	.6	1.1	.4	.5	11.7	11.1	10.7	25.2	.6
1971	.5	.3	1.3	.8	1.5	.6	.8	1.4	.9	.7	12.3	12.3	12.4	26.9	.6
1972	1.3	1.2	1.3	.8	2.6	.8	.8	1.6	1.0	.9	14.5	15.3	11.8	26.0	.8
1973	.4	.1	1.3	.6	.7	.3	.4	1.1	.2	.2	13.0	13.3	14.6	19.8	.7

*NI = Non- irrigated
I = Irrigated

Source: Statistical Abstract, op. cit., various years

Table 46 underlines the fact that yields are still largely dependent on the weather conditions, with the fluctuations of rainfall corresponding with the fluctuations in yields. It is indicative that yields in the 1958 to 1960 period, during which rainfall was very low, are closely comparable with those of 1973, another very poor rainfall year. On the

other hand, even crops that are grown almost exclusively on irrigated land, such as tobacco, show very little improvement in yields over the period.

(b) The implementation of the planned levels of production of the five year plans

In examining the performance of production in relation to the production targets of the five year plans, it is also clear, given the above conclusions on yields and areal developments of most crops, that virtually every crop has consistently fallen short of planned production. Although many targets have been unrealistically high, in most cases the shortfalls are so large that it is clear that only limited progress in production has been made.

In this section a survey of the main crops will show the extent to which they fell behind planned production, though here again it must be borne in mind that the methods of collecting official statistics on crop production have tended to increase estimates of production over the period concerned.

Dealing first with cereal production, the actual production increases in the first five year plan exceeded those planned for barley, but not for wheat. For barley, this was because actual production in 1960 to 1961 was so far below the planned base figure, and 1965 was an average year for production. Wheat production was planned to increase from 875,000 tons to 1,480,000 tons per annum. In fact the Statistical Abstracts show that it increased from 757,000 tons to 1,014,000 tons. The 1961 figure of 757,000 tons was only the twelfth highest recorded between 1953 and 1973, but the 1965 figure, which ranked eighth between 1953 and 1973 still fell short of the planned 1965 figure by about 31%.

For barley, production was planned to increase 23%, from 435,000 tons to 536,000 tons in 1965. In fact, according to the Statistical Abstracts, the production figures were 335,000 tons in 1961 and 690,000 tons in 1965. The 1961 figure was higher only than seven other years between 1953 and 1973, while the 1965 figure was the fifth highest in the same period, and was not surpassed until 1972. Given the sort of fluctuations in production these figures reflect, it is extremely difficult to visualise useful planning targets.

In the second five year plan, no figures were given for planned increases in barley production. For wheat, the planned increase was 63%. In the event production in 1966 was 559,000 tons and in 1970 625,000 tons, an increase of approximately 11%. After 1970, the introduction of Mexican and other hybrid wheat varieties into several parts of Syria helped to increase production, as will be shown in the study of Hama.

Maize, an important crop for fodder as well as food, was included in the planned targets for the second plan. Production was to increase by 170% but in fact it increased from 7,500 to 7,900 tons, or 5.3%. This discrepancy brings out particularly clearly the poor performance of most of the newly established crops which were to be developed in Syria for import substitution, for fodder, or for more productive, efficient food production. Apart from maize, the development of rice production has also been particularly disappointing since 1959. In 1964 a special three year project was introduced which planned to eliminate the need for imports of rice, which in 1964 were worth L.S. 18 million[11]. This project required the planting of 15,000 ha., and the production of 40,000 tons of rice. In fact, by 1967 only 1,000 ha. was planted, and only 2,200 tons of rice was produced.[12]

Among the industrial crops, planned increases were specified in both the first and second five year plans for cotton, sugar beet and peanuts. For cotton, the planned increase of the first plan was from 270,000 tons to 444,000 tons in 1965. Official figures show production in 1961 to have been 325,000 tons, and in 1965, 476,000 tons. However, 1965 was a quite exceptional year in which cotton production surpassed any other year before or since, except 1964, by more than 55,000 tons.

In the second plan, cotton production was to rise by 33% but the actual increase was from 375,000 tons in 1966 to 383,000 tons in 1970, or about 2%. Cotton production in the second plan period was far below that of the first plan, for although yields increased slightly, this was more than offset by the reduction in the area of cotton planted. According to the Statistical Abstracts, production and yields increased after 1970, though targets were not specified in the third five year plan.

For sugar beet planned targets were so far beyond actual production in both the first and second plans that it is difficult to believe that the plans for this crop had any serious foundation in properly researched estimates. In the first plan production was to have increased from 91,000 tons to 563,000 tons in 1965, whereas in fact, production moved from 86,000 to 171,000 tons. In the second plan, production was to increase by 428%, the actual increase was from 189,000 tons in 1966 to 228,000 tons in 1970, or about 21%.

As in the case of maize and rice, sugar beet was one of the crops that was to be introduced to diversify agricultural production, to reduce imports and to raise rural incomes. The failure to encourage sugar beet

production has been due to some extent to the delays in completing the processing factories. It has also been due to the inability of the government to motivate the farmers to grow the new crop, partly because of the pricing policies adopted and partly because of the inability of the co-operatives and extension services to teach farmers how to grow the crop profitably.

The other new industrial crop that may be mentioned is groundnuts, the area of which has been increased over the period of the first two plans. In the second plan, the planned increase of production was 170%. In fact, production increased from 13,400 tons to 16,300 tons from 1966 to 1970. This increase of about 22%, even though 1970 was a poor year for the crop, was again far below the target.

For other crops, targets were not usually specified in the plans. In the second plan, however, planned production increases were laid down for citrus fruit and grapes. The former were to increase by 177%. In fact, from 1966 to 1970 the Statistical Abstracts show citrus fruit production to have increased from 7,700 tons to 7,800 tons, or about 1.3%. For grapes, production was to rise by 56%. It actually increased from 202,000 to 206,000 tons, a movement of little importance compared to the fluctuations of production from year to year, but about 2%.

The production of fodder crops was also to increase enormously in the second plan. Green fodder production was to increase twenty times from 1966 to 1970. Although starting from a very low base figure, production increases up to 1970 were small and erratic, with increases in one fodder crop being largely cancelled out by decreases in another. In

the third plan, actual production of green fodder began to increase markedly, but as Table 44 shows, fodder production is still an insignificant part of agricultural production in the country.

The actual increases of fruit and fodder production in the first two plans underline that planned increases were unrealistic. As with maize, rice, sugar beet and groundnuts, they represent depressing evidence to the government that these crops, which were an important part of the plans to diversify and intensify agricultural production, developed far more slowly than planned.

Apart from the new crops which the government was trying to establish in the country, older established crops, particularly cereals, have also consistently fallen behind planned production levels. The government has, therefore, had to contend with the problem that while progress in the introduction of new crops has been very slow there has also been significant improvement in the production of old established crops in the country.

(c) Some implications of production levels on incomes, the national economy and government policies

In the next section, some of the implications of the poor production levels on the national economy, on incomes and on government policies associated with agriculture will be examined.

The government has not responded to poor production performance in agriculture by adjustments to the agrarian reform laws or investment

policies. For political reasons the reform laws and large scale investment policies have been retained. The government has tried to recoup its expenditure on the agricultural sector by controlling trade and creating state monopolies in processing and sale of an increasing number of agricultural products. As a result the government has been able to ensure a certain income from the agricultural sector. However, these policies have had other, less desirable, effects, which will be outlined below.

Incomes

The Statistical Abstract shows that per capita Gross Domestic Product has risen since 1957 as is shown in Table 47.

TABLE 47 Per capita G.D.P. at factory cost in constant prices of 1963, 1957 to 1973, in Syrian pounds

Year	Per Capita G.D.P.	Year	Per Capita G.D.P.
1957	707	1966	713
1958	668	1967	741
1959	624	1968	758
1960	599	1969	830
1961	636	1970	824
1962	765	1971	876
1963	737	1972	902
1964	779	1973	856
1965	763		

Source: Statistical Abstract, 1974, op. cit., pp. 868-9.

In terms of Syria as a whole, per capita income, which may have been rising at perhaps 3% per annum before 1956[13], seems to have risen at just over 1% per annum since 1957. However, there is no doubt that incomes in the agricultural sector have lagged behind those in the industrial and commercial sectors, and real incomes, particularly in rural areas, have been stagnant or even declined since the early 1960's.

Immediately after the agrarian reform measures dealing with tenancy arrangements and wages in 1958 and 1963 the incomes of tenants and labourers increased. However since 1963 the rural population has been growing in relative and absolute terms. There is no evidence that employment in rural areas has diversified since that date so the proportion of the population engaged in agriculture has probably been increasing. Given the low productivity in agriculture and the stagnating yields of many of the most important crops, it is extremely likely that per capita incomes in the agricultural sector have not increased. Unfortunately, trends in per capita productivity in agriculture are difficult to obtain as figures for employment in the sector are inadequate. The role of female and child labour in particular is grossly underestimated.

In the industrial and public sectors wage increases have been very severely restricted since 1963. Controls on incomes in the agricultural sector, on the other hand, have been less comprehensive, and enterprising and hardworking farmers could have raised their incomes greatly, as some did. Although the prospect of rising incomes was one of the promises held out by successive regimes to gain support for agrarian reform, these have not materialised. This has been the result of the poor progress that has been made in setting up co-operatives, extension and other services for cultivators. It has also resulted from the policies of successive governments of extending the state monopoly in the purchasing of agricultural products, but at low prices.

Finally, incomes in the agricultural sector are closely related to the weather conditions. This has continued to be so despite the government's

attempts to stabilise agricultural production. Not only have incomes in the agricultural sector stagnated, therefore, but they remain fluctuating and uncertain, a state of affairs that reflects badly on both the agrarian reforms and the government's related agricultural policies.

The national economy

The low productivity in the agricultural sector, together with stagnant incomes have combined to put governments since 1963 in an extremely difficult situation. As it has not been possible to carry out major alterations to either the agrarian reform laws or investment policies for political reasons, successive governments had to continue to try to keep up investment programmes although expected income from agricultural schemes and agricultural industries is below that anticipated. Apart from this governments have been faced with growing pressure on imports of food, falling surpluses of foodcrops for export, and a growing proportion of the agricultural land being taken up for the growing of foodstuffs.

The first problem, that of financing investments, will be looked at in the context of government policies on prices and taxes. The second, however, has become a worsening problem, not least because of certain relaxations in foreign trade since 1970. In a study of the 1954 to 1962 period, Kaylani reached the conclusion that the percentage of the income generated in the agricultural sector from foodstuffs increased from 58% in 1954 to 71.6% in 1962*. Agricultural resources were therefore being used increasingly to satisfy the demand for food. He also found that real per capita consumption showed no apparent increases, but rather fluctuations based on weather conditions.[14]

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*These figures are based on the value of production of the main foodstuffs nett of imports, exports, and the consumption of seeds, weighted with a wholesale price index based on 1958.

It seems likely that the relative importance of foodstuffs indicated by Kaylani has continued, and may have even increased since 1962. As Table 44 shows, the number of crops included in the Statistical Abstracts has been increased since 1962, so figures obtained from the method used in Kaylani's study are not directly comparable. However, an indication is obtained of the continuing dominance of food crops from looking at the value of agricultural production from 1967, in 1963 prices, shown in Table 48.

TABLE 48 Percentage of value of agricultural production formed by food crops, 1967 to 1973, in 1963 prices

Year	Percentage
1967	84.2
1968	78.4
1969	80.7
1970	75.9
1971	78.4
1972	81.1
1973	71.9

Source: Derived from the Statistical Abstract of Syria, op. cit., 1974, p. 213.

The percentage figures in Table 48 do exclude such good crops as sugar beet, which is growing in importance, groundnuts and sunflowers, which are all classified as industrial crops. The figures for 1970 and 1973 reflect the poor weather conditions in those years, with the particularly serious effect the lack of rainfall has on the wheat and barley production of the country.

If the export of food products were increasing, the continued dominance of food production need not necessarily be a problem for the national

economy. However, as Table 49 shows, food products have not become a stable or expanding factor in the total exports of the country.

TABLE 49 Import and export of food and live animals, 1960 to 1973, in millions of Syrian pounds

Year	Total		Food and Live Animals		Live Animals		Dairy Products and Eggs		Cereals and Cereal Preparations		Fruit and Vegetables		Sugar, Honey, etc.	
	Imp	Exp	Imp	Exp	Imp	Exp	Imp	Exp	Imp	Exp	Imp	Exp	Imp	Exp
1960	806	344			8	21	11	.8	24	.6	25	9	20	.7
1961	644	352			7	10	7	.2	32	5	21	10	20	.6
1962	862	617			14	17	7	4	40	152	32	30	20	.6
1963	874	721			11	23	9	6	11	118	48	28	36	.9
1964	898	672			10	36	11	5	21	90	58	28	65	.9
1965	810	640	166	215	12	48	11	2	35	60	47	49	29	1
1966	1101	661	242	174	13	84	15	6	103	7	50	31	18	1
1967	1009	591	197	189	9	72	16	6	47	12	51	46	23	1
1968	1193	673	243	248	12	102	15	6	95	23	53	43	17	.6
1969	1411	790	228	272	49	106	23	4	29	40	50	46	32	.7
1970	1375	775	372	205	13	71	25	3	173	22	60	24	41	.7
1971	1677	743	58	603	13	25	54	.9	232	.1	81	39	104	1
1972	2360	1098	468	259	22	60	56	2	130	26	86	60	116	2
1973	2312	1941	559	192	21	50	77	1	121	48	107	47	143	2

Source: Statistical Abstracts

The dominance of food crops in the value of agricultural production is underestimated in Table 49 as crops which are growing in importance, such as sugar beet, are classed as industrial crops. In Table 49 the category of sugar, honey, etc. refers in the case of sugar to processed sugar.

As the Syrian economy is still largely based on agriculture, it is extremely serious that an increasing percentage of agricultural production is of food, and at the same time, an increasing percentage of that food production is being consumed. Table 49 shows clearly that food imports

have increased far more rapidly than food exports in value terms, yet in successive five year plans it has been intended that agricultural exports should increase and imports of food decrease.

The situation outlined above has been the result of low productivity, and the increased internal demand for food, which has been due to the population increase and increased per capita food consumption. At the same time the government has had to look to the agricultural sector as a major source of income not only to help finance agricultural schemes, but also to contribute towards other running and development costs in the economy. The government has therefore intervened in the marketing and trading of agricultural products, and this will be discussed below.

Government pricing policies in the agricultural sector

Government intervention in the marketing, pricing and trade of agricultural products has increased greatly since 1963. This has been for three main reasons. First, the increasingly heavy commitments of the state to both current and development expenditure has increased the need for the government to extract what it can from the agricultural sector to help relieve the state's pressing financial problems.

The second reason, connected to the first, is the result of the continuing low productivity of the agricultural sector. Income to the state from the sector has been well below that anticipated, so in an attempt to step up revenue from agriculture the government has increased trading and pricing controls.

The third reason relates to the political philosophies of successive regimes, which, since 1963, have all desired greater control in every aspect of the economy. This has been particularly true of the agricultural sector, for one of the aims of the agrarian reform was to reduce the power of the merchants, both in their role as moneylenders and their position as the main outlets for agricultural products.

The increasing financial commitments of the state have already been outlined in the review of the five year plans, and current expenditure, including military expenditure, has risen at an even faster rate. At the same time, the government has had to deal with the problems of declining public savings and a chronic and worsening foreign trade deficit. Revenues have increased slower than expenditures and public savings have been declining in relation to Gross Domestic Product and public development expenditures[15]. Foreign trade deficits have also grown, as is shown in Table 50, putting additional pressure on the government to maximise internal savings. In the agricultural sector this has meant ensuring, through the state control of marketing and exporting of agricultural products, the maximum possible profit to the state compatible with political stability.

Continuing low productivity in the agricultural sector has resulted in delays in returns on capital invested. Income to the state, whether from agricultural production taxes, income taxes, state owned industries based on agricultural products or through the control of marketing of agricultural products has therefore fallen below that anticipated.

Low yields and low productivity have always been a feature of Syrian agriculture. However, with the agrarian reforms and the five year

investment plans.the state has tried to implement schemes and policies that would change this. The concentration of the plans on large scale projects has already been discussed, as has the low priority generally given to small scale projects with more rapid returns to capital invested.

TABLE 50 Imports and exports, 1957 to 1973, in millions of Syrian pounds

Year	Imports	Exports	Balance	*Balance
1957	616	548	- 68	
1958	755	437	- 318	
1959	678	425	- 253	
1960	821	405	- 416	
1961	671	395	- 276	
1962	862	617	- 245	
1963	896	721	- 175	
1964	898	673	- 225	
1965	812	644	- 168	- 181
1966	1103	661	- 442	- 452
1967	1009	591	- 418	- 418
1968	1193	673	- 520	- 487
1969	1411	790	- 621	- 621
1970	1375	775	- 600	- 599
1971	1677	743	- 934	
1972	2061	1098	- 963	
1973	2342	1341	-1001	

Sources: Statistical Abstract, 1974, op. cit., p. 391.
*I.B.R.D. Current Economic Position and Prospects of Syria, op. cit., Table 3.1.

Almost all the large scale projects have been brought into operation behind schedule and, as a study of the Ghab will show, with a neglect of small scale aspects of the schemes which has often negated the possible benefits in terms of increased productivity.

In the absence of rapid developments of yields and production, the state has had to turn to other means of gaining income from the agricultural sector. Several alternative policies might have been employed to this end. However, those that included a greater or more

independent role for the private sector have been excluded for political reasons. Although a considerable amount of state land has been rented to private interests ever since 1960, the arrangements have been short term and devoid of the security necessary for any improvements to be made to the land by private investors. In any case, the nationalisation programme resulted in a total loss of confidence by the private sector in investments in agriculture which continues to this day.

One other policy that might have been pursued is the reorganisation and reform of the taxation system in agriculture with the development of both direct and indirect taxes which would have increased government income from the agricultural sector substantially. Despite certain changes that have taken place in the taxation system, taxation in the agricultural sector remains low and in its structure is inconsistent with the alleged aims and ideals of the agrarian reforms. It is still basically regressive, with fairly low income tax and low inheritance taxes. There are no direct taxes on agricultural land or on agricultural income.

Indeed, taxation in agriculture is little different from that of 1958[16], although in 1969 some private land owners were affected by the minor increases made in income tax[17]. Indirect taxes, including agricultural production taxes, taxes on the sale of livestock and export taxes are still the major source of tax income to the government from agriculture, and are not progressive. The government has even had difficulty in enforcing some of these taxes. One of these is the tax on water in government owned irrigation projects, which hits many beneficiaries of the agrarian reforms rather than private land owners.

Although a major reform of taxation in the agricultural sector is long overdue, both to help relieve the pressing financial needs of the economy as a whole and to make the structure more consistent with the principles behind the agrarian reforms, there are a number of problems which have so far prevented the necessary changes. Shortage of trained personnel to administer a major reform of the taxation system has been a problem. The enormous and complex difficulties of introducing a new taxation system over and above all the other legal, political and economic upheavals with which the administration has had to cope have resulted in the delay of taxation reforms. In the agricultural sector, too, the fact that land surveys and registrations have not been completed and that redistribution of land has been going on has made the introduction of more progressive taxation based on landownership or agricultural incomes extremely difficult.

The government has, therefore, since 1963, turned to indirect taxation in agriculture through the control of prices. In 1961/2, it was estimated that the agricultural sector contributed only about 14% to total government revenue[18]. It is not surprising that the government has since felt that, despite much lower incomes in the agricultural sector, it has still been supplying less than its share of government revenue, particularly in view of the large proportion of the five year plans invested in agriculture and the cost of the agrarian reform. If it is to be related to the proportion of income generated in the N.N.P. by agriculture, this should have been, in 1962, 30 to 40%. Despite the low capacity to save in the agricultural sector and low incomes, the government has therefore tried to curb consumption and enforce saving through the control of the pricing and marketing of an increasing proportion of agricultural production.

The setting up of a system of price controls and state monopolies in the sale, processing and export of agricultural produce has continued since 1960, when the Ministry of Supply was set up under Decree No. 122. However, it was not until after the major nationalisations of 1965 that the government really took a grip on the internal marketing system and on foreign trade in agricultural products. Government policies in the control of the internal trade of agricultural products covered various aspects. First, wholesale and retail prices were fixed in greater and greater detail from 1960 onwards. Secondly, the export of agricultural products was brought under government control. Thirdly, monopolies in the purchase of major crops were established, usually to sustain government owned processing industries, and fourthly, as has already been mentioned, smaller government owned processing industries established links with local cultivators based on the exchange of credit facilities and sole purchasing rights.

In the control of wholesale and retail prices of agricultural products, the government has been pursuing a number of objectives. Before outlining these it is worth mentioning that for some crops prices are rigidly fixed, while for others only guidelines are laid down. The former are almost exclusively crops that the government wants to take for processing in state owned factories, or for exporting through state controlled organisations. The latter include those for which the government has no direct interest in purchasing, and covers all livestock and many fruits, vegetables and dry legumes.

Fixed prices and price guidelines are set down for national and regional levels by departments of the Ministry of Supply and other interested bodies such as the Cereals Office. The control of prices in this way and

to this extent has both economic and political motives. In the first place, controls are used to try to level out seasonal fluctuations, although seasonal fluctuations in supply are catered for in the fairly flexible price guidelines. However, prices are fixed for minimum periods of a week so that cultivators making long journeys to market will be less cheated by merchants who can bank on the cultivators' need to sell.

In defining retail as well as wholesale prices, the controls can be seen as an important aspect of controlling the profit margins of merchants and businessmen. Indeed, margins of profit to wholesalers and retailers are more closely fixed than prices to cultivators, who are protected by minimum price only. Although the former are more closely controlled, they can be certain of fixed profit margins, whereas despite the guidelines laid down for prices to cultivators, the farmers may still be affected by price fluctuations. Even so, their prospects of getting a fair price for their products are greater than before[19].

Prices to cultivators are, however, rigidly fixed for certain crops. These are crops for which the government, through various organisations, has monopoly control over the purchasing and processing, and includes the most important and largest crops, namely cotton, tobacco, wheat, barley and sugar beet. As the government nationalised or built the processing factories for cotton, tobacco and sugar beet, control over their marketing has been relatively easy, but attempts to enforce state purchasing of cereals has been extremely difficult.

The government has taken control of these crops for a number of reasons. Successive regimes have, for political reasons, wanted to take control of the most important aspects of crop production and to take over the

main sources of income from the agricultural sector from the merchants and businessmen who until 1965 still largely controlled the trade and processing of agricultural products.

Secondly, governments after 1963 have hoped to finance a large part of the proposed current and development expenditure from its surpluses from state owned industries. Up to the present, however, state owned agricultural enterprises have contributed relatively little to these surpluses, which have fallen behind planned levels[20]. For this reason pricing policies have been introduced for the crops for which the state holds monopoly rights of purchase and processing which are aimed at giving maximum returns to the state. Officially, price levels are set to compensate for fluctuations in world prices, and give returns to both government and cultivator. In fact, price levels for these crops are extremely low and consistently below international prices or prices given in adjacent countries for similar crops. The actual division of costs and profits is not made public when accounts with cultivators are settled, a practice which is a source of great dissatisfaction among farmers.

It therefore seems surprising that cultivators continue to grow the industrial crops, although the important subsistence element of cereal production is enough to ensure their continued widespread cultivation. As Table 43 shows, the area planted of industrial crops, more or less stable from 1962/3 to 1969, has indeed declined since that time. However, although profits are very small, especially from growing cotton, several factors dissuade cultivators from changing, particularly those with smallholdings. The greater financial risk of growing vegetables or other crops is daunting for those with very small capital assets and land

holdings. The government extends special credit for operations related to the cultivation of these crops and there is a guaranteed market, so income is secure, even if small. In the co-operative sector the government can put additional, though limited, pressures on members to grow certain crops. Finally, and most important, by having a system of licences renewable annually for growers of cotton and tobacco, the government can ensure that the large majority of cultivators will continue to grow these crops. If a cultivator chooses not to renew his licence, it may be very difficult for him ever to grow cotton or tobacco again. In view of the insecurity of production, and the history of success of cotton production in Syria, cultivators are reluctant to relinquish their right to these licences.

The state has also extended its role in the purchase, marketing and sometimes processing of some other agricultural products without holding monopoly rights over them. For these products that are purchased and processed by state owned factories local producers may benefit from having contracts to supply the factories. Because the factory has to compete with the open market, prices given for crops cannot be far below those available from wholesalers. In addition, to help ensure the supply of the crop to the factory, credit may be given by the factory itself to their suppliers. This has happened with the state owned factories processing onions, tomatoes, fruit (for jam) and milk, and has formed the basis for much more equally divided benefits to state and cultivators.

The state, through various organisations, has involved itself in the marketing and export of almost all other crops. Two particular

organisations, the Peasants' Union, and the Union of Local Agricultural Co-operatives, have taken on these marketing roles. Although the marketing activities of these organisations are expanding, their operations for each crop are generally still confined to certain areas; for instance, the Union of Local Co-operatives markets tomatoes in Damascus and Dera'a, potatoes in Hama, Aleppo and Damascus, and rice in Rakka[21].

Government policy has been to expand its role in marketing and trading but if monopoly controls are to bring a fall in prices paid to cultivators as they have, for instance, in cotton, many problems that have appeared as a result of the state's policies in the pricing of cotton, tobacco and even cereals will become more and more serious. In particular, it will be difficult to persuade cultivators to invest money and labour in the proper production of these crops and attempts to improve and intensify cultivation will continue to have disappointing results.

Finally, the export of all agricultural products has become either a state monopoly or the subject of state licensing. The state, in order to control the income from exports, has been taking over complete control of the export of more and more agricultural products, whether processed or not. After cotton, the export of wheat and its derivatives was taken over in 1963, and later an increasing number of minor crops, including maize, lentils, chick peas and onions were brought under state control. This trend has not been reversed since the change of government in 1970.

The results of what have been, in general, exploitative pricing policies by the state in the agricultural sector have had a serious effect on attitudes of cultivators to the improvement and investment in their land,

and on the relationship between cultivators and the state. It is true that the agricultural sector has contributed less than its share to both current expenditure and government development schemes, of which it is the major beneficiary. It is also true that the agrarian reforms have been extremely costly to the government. Although other methods of increasing revenue from the agricultural sector, particularly the reform of taxation, have limitations, the policies of price control followed by governments since 1963 have been no less difficult to implement and are contradictory to the professed aims of the agrarian reforms. The price controls are not, in general, progressive, and have prevented significant rises in rural incomes. As the ability of the state to organise the control of marketing increases, the number of crops controlled in this way will grow. This will mean the progressive cut-back of profit making opportunities in the private as well as the state controlled sectors of agriculture.

Although monopoly price controls have been extended to the largest crops, they have not been used in a positive way to encourage the diversification to other crops, one of the aims in the agricultural sector. Sugar beet, which comes under state monopoly price control, is one of the most important crops in Syrian agricultural planning. Table 49 shows that in 1973 imports of sugar and sugar products were worth L.S. 143 million, and they contributed the largest amount towards the food imports bill. Yet because of the low prices given to cultivators the three sugar beet processing factories at Douma, Homs and Jisr esh Shughur do not receive enough winter sugar beet and are closed during the spring.

As price controls, and the control of marketing has been extended, sales to government factories and through government institutions have become

less popular. In the co-operatives, sales through the co-operative to the Union of Local Co-operatives or General Union of Peasants of crops such as potatoes have been subject to a number of levies and fees, which makes the sale less profitable than through outside channels. Compulsory sale of crops to the state owned industries brings such small returns to cultivators that resentment is widespread.

Although relations between the government and the private sector in agriculture have never been good, the pricing policies of the state have contributed towards the alienation of tenants and beneficiaries of state owned and expropriated land from the government. This has had serious implications in particular for the development of the co-operative system. Some of the results of the suspicion and anxiety felt by members of co-operatives and others of the state's role in agriculture will be outlined later. However, throughout the agricultural sector smuggling, illegal sales and the cynical use of loopholes in price regulations have all increased. Smuggling of cotton to the Lebanon and Turkey has grown and was particularly serious in 1973 when the world price of cotton was so far above that received by Syrian producers. Illegal private sales of wheat, barley and sugar beet are also growing.

Although these abuses indicate the attitude of many farmers towards price controls, a far more serious result of low prices is the lack of incentive and the ability to invest, and therefore continued low productivity and stagnating rural incomes. The pricing policies employed by the government have not been used to stimulate production, but may almost be considered as punitive, with the government determined to recoup its losses from the execution of the agrarian reforms and from the implementation of large and unprofitable development schemes.

As the number of crops directly affected by state purchasing and marketing increases, the need for more flexible and positive pricing policies will grow. A far closer balance between incentive and opportunity for the cultivators and income to the state must be struck if productivity in agriculture and rural incomes are to increase significantly.

NOTES

1 M.A. Zarka, Product, Capital and Productivity in Syrian Agriculture, 1937-63, op. cit., p. 57.

2 B. Hansen, Economic Development of Syria, op. cit., p. 335.

3 Interview with the Head of the Statistical Department, Department of Agriculture, Hama.

4 M.A. Zarka, Product, Capital and Productivity in Syrian Agriculture, 1937-63, op. cit., p. 9.

5 S-M. Yeh, A Study of the Marketing of Fruits and Vegetables in Syria, U.N. Expanded Technical Assistance Programme, Ministry of Agriculture and Agrarian Reform, Damascus, 1967, p. 8.

6 Statistical Abstract, 1973, op. cit., pp. 416-419.

7 Statistical Abstract, 1973, op. cit., p. 387.

8 Statistical Abstract, 1974, op. cit., p. 464.

9 Statistical Abstract, op. cit., various years.

10 Statistical Abstract, op. cit., various years.

11 Le Bureau de Documentations Syriennes et Arabes, Etude Mensuelle Sur L'Economie et le Marche Syriens, Damascus, January 1965, p. 8.

12 Statistical Abstract, 1974, op. cit., p. 229.

13 B. Hansen, op. cit., p. 341.

14 S. Kaylani, The Role of Agriculture in the Economic Development of Syria (1948-62), M.A. Thesis, unpublished, Department of Economics, American University of Beirut, 1964, p. 86.

15 I.B.R.D., Current Economic Position and Prospects of Syria, op. cit., pp. 6-13.

16 This is described in E.Y. Asfour, Syria; Development and Monetary Policy, op. cit., pp. 92-4.

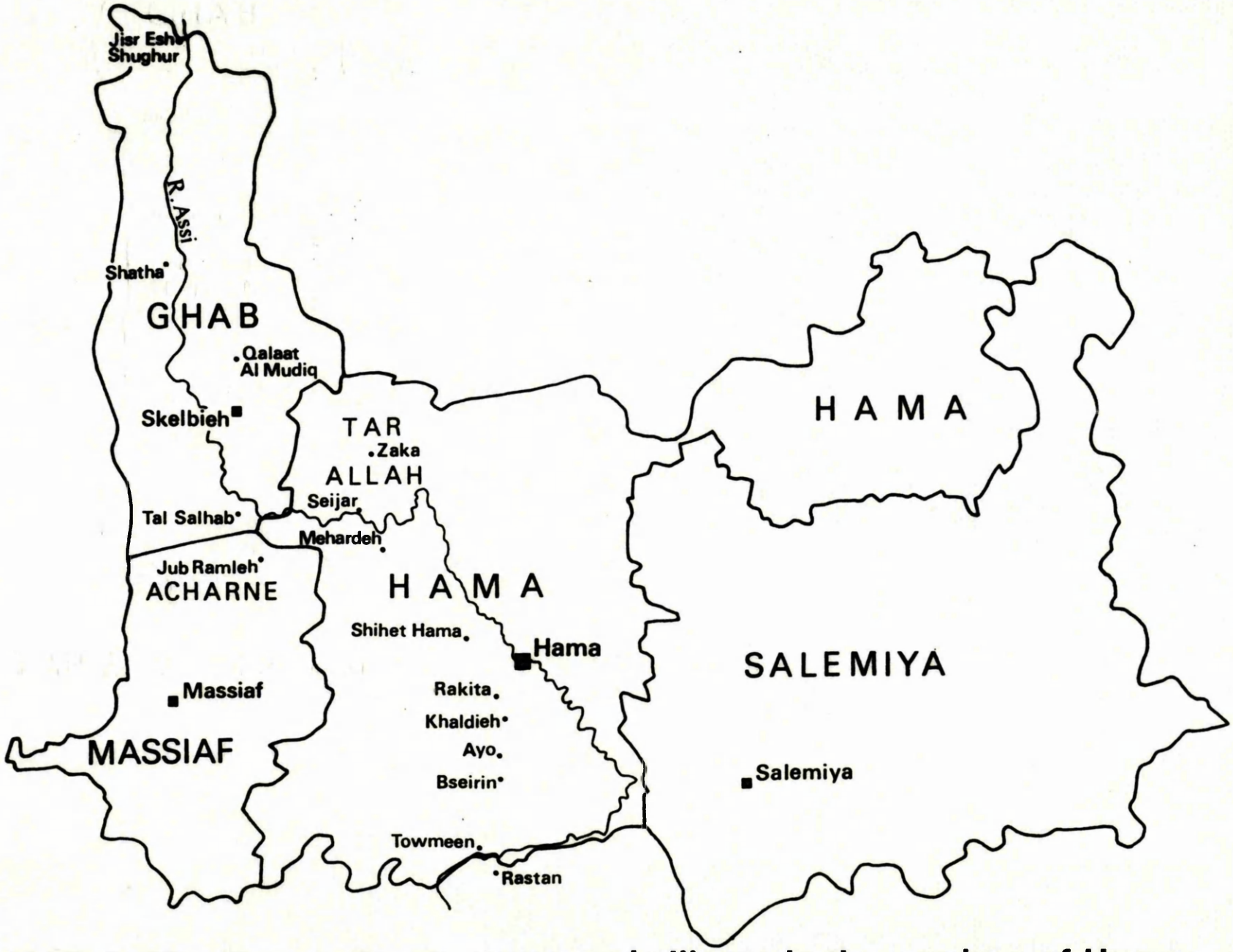
17 I.B.R.D., Current Economic Position and Prospects of Syria, op. cit., p. 7.

18 S. Kaylani, The Role of Agriculture in the Economic Development of Syria (1948-62), op. cit., p. 97.

19 M. Hassan, The Syrian Pricing System, United Nations Development Programme, Damascus, 1967, pp. 24-25.

20 I.B.R.D., Current Economic Position and Prospects of Syria, op. cit., p. 23.

21 Office Arabe de Presse et de Documentation, Le Movement Co-operative en Syrie, excerpts from Nidal al Fellahine, in L'Agriculture Syrienne, op. cit., p. 97.



MAP 3. Mantikas and main towns and villages in the province of Hama.

CHAPTER VII The Agrarian Reform in the Province of Hama

In the next three chapters, the agricultural reform and how it affected one particular province, Hama, will be examined in detail. From a number of points of view Hama is a suitable province for such a study. Although relatively small it includes a cross-section of the different types of agricultural zones in Syria. In the west in the mantika of Massiaf upland cultivation occurs. In the central part of the province there is the main traditional agricultural belt, and this gives way, in the mantika of Salemiya, to dry zone agricultural areas and desert. In the north west of the province the Ghab is now a large scale irrigation project.

The province is also interesting from a tenurial and political point of view. As Figure 4 shows, in the Ghab and in Salemiya a great proportion of the land was state owned, either as state private or state common land. The distribution of this land reflects the policies the state has followed both in the marginal agricultural areas and in state owned areas of reclamation and irrigation, of which the Ghab is only one. The state has been responsible for the protection and utilization of both these zones, but it has proved extremely difficult to compromise the agricultural and technical considerations in the utilisation of these areas with the various political demands and pressures that exist. This will be examined in detail.

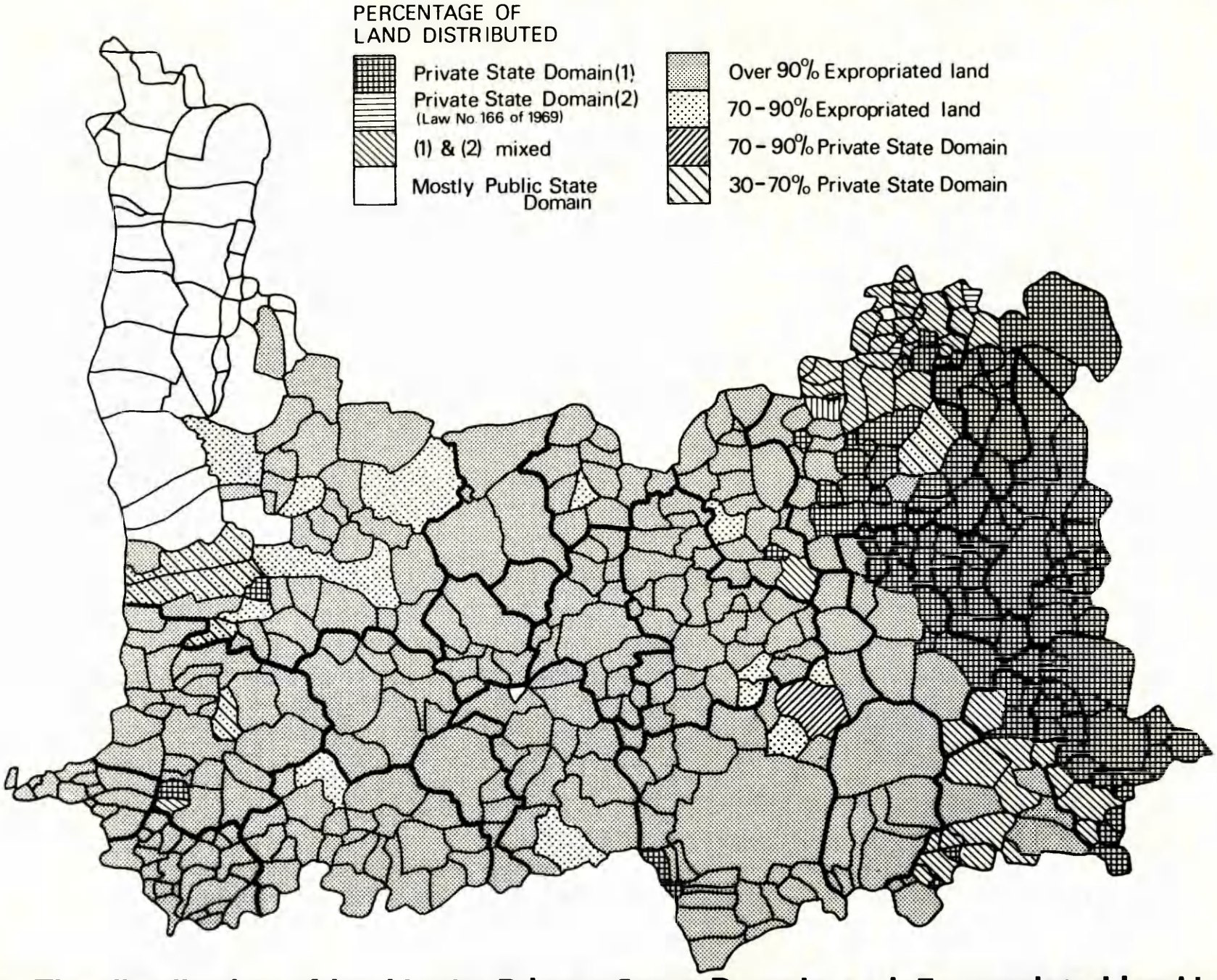
In the rest of the province private ownership predominates though increasingly under the control of agricultural co-operatives. Hama, indeed, was the province which included many of the largest landowners, a large number of whom played an important part in maintaining the political and economic conditions in Syria before 1958. A detailed study of the land ownership and

expropriations will show this. At the same time Hama was also the centre of the earliest demands for land reform and other social, economic and political changes. A number of radical leaders, in particular Akram Hourani, came from Hama and looked to the landless rural population of the province for their support. Some of these leaders themselves came from landed families, usually the smaller ones, an interesting and important factor in the agrarian reforms.

Other aspects of the agrarian reform, particularly the setting up of co-operatives and investment in the agricultural sector, both through the Agricultural Bank and through other channels, including the 'Great Projects Administration', will be studied. Investment and financing policies, discussed on a broad level in Chapter V, will be discussed in detail with some of the local implications of these policies being examined. Both the tenurial reforms and the other policies will be examined in the light of the developments of agricultural production.

(a) <u>The expropriation of land</u>

As has already been stated, the main area of private land holdings in the province of Hama is and was in 1958 in the mantikats of Hama and Massiaf and the western half of the mantika of Salemiya. This can be seen on Figure 4 which is divided into villages and sub-regions of the province called 'nahiyas', and which shows the distribution of state and private land by the province. Apart from those in the Ghab and eastern Salemiya, most villages were completely or almost completely in the hands of private owners. Since 1958, state lands have been distributed so in theory, private ownership has increased in the province, as in the rest of the country. Table 51 shows the 1958 position on



MAP 4. The distribution of land in the Private State Domain and Expropriated land in the Province of Hama by nahiya.

ownership of land excluding the unregistered and unsurveyed land in eastern Salemiya.

TABLE 51 Land ownership in the province of Hama, 1958, in hectares

Region	Owner	Area
Massiaf) Hama) W. Salemiya)	Private	525,150
	State	151,310
Ghab (1)	Private	42,470
	State	55,530
Total	Private	567,620
	State	206,840
		774,460

Sources: Statistical Abstract of Syria, op. cit., various years.

(1) Derived from figures in R.T. Ratnatunga, Report on Land Tenure, Land Settlement and Institutional Considerations, U.N. Special Fund, Ghab Development Project, F.A.O., Damascus, 1968 (mimeo), pp. 5-12.

The actual number of landowners in the province in 1958 is, unfortunately, unclear. The 1970 Agricultural Census[1], from which preliminary figures for landownership for the province have been obtained, does not indicate how the numbers may have grown. Although the number of beneficiaries of expropriated and state land since 1958 can be estimated from other sources, the number of new landowners from inheritance or the purchase of land is not available. This also makes it difficult to suggest an accurate figure for the numbers of land holdings of different sizes in the province in 1958, though this figure is available for 1970.

The structure of private land ownership in 1958 is of crucial importance in a consideration of the agrarian reform from both economic and political points of view. The political unrest in the province before

1958 suggests that there was a demand for the redistribution of land and that there was a pressure of population on the land, with a large proportion of the rural population being landless. This has already been established for Syria as a whole. The radical leaders could not have been so strongly supported as they were in rural Hama had there not been discontent among the rural population.

The dominant position of a small number of landed families will be discussed later. However, in 1958 just five families owned more than half the land in the province and the vast majority of the 78,000 that it was estimated in the 1960 census earned their living from agriculture in the province were landless labourers[2]. This position was made worse by the large numbers of inhabitants of the neighbouring province of Lattakia who were temporary residents of Hama and squatted on agricultural land in the west and north-west of the province. It was estimated that by 1964, for instance, at least 26% of the inhabitants of the Ghab area were temporary residents[3]. Most of these came from the province of Lattakia.

As a result of this particularly uneven distribution of land, the proportion of private land affected by the expropriation measures was almost certainly greater in Hama than in any other province. Although estimates of the amount of land expropriated in the province differ to some extent, all of them agree that between 19% and 23% of the total area of the private land in the province was eventually expropriated. The figures for expropriation produced by the Department of Agriculture in Hama and the Central Bureau of Statistics in Damascus are reproduced in Table 52.

TABLE 52 Estimates of expropriation of land in the Province of Hama as shown in the Statistical Abstract of Syria and records of the Department of Agriculture in Hama, 1959 to 1970, in hectares

Year	A Statistical Abstract[1]	B Department Records[2]
1959	38593)	20887
1960	)	19538
1961	6833	7032
1962	6686	13224
1963	4774	3871
1964	7386	7948
1965	37063	42895
1966	532	1644
1967	1089	3906
1968	5066	5017
1969	15239	1571
1970	-	573
Total	123261*	128137

*The Statistical Abstract of Syria, 1974, p. 221, shows a revised figure of 110,300 ha. for the total expropriated land in the province up to 1970.

Sources: (1) Statistical Abstract of Syria, op. cit., various years up to 1969.

(2) Records of the Department of Agriculture, Hama.

Apart from inaccuracy, there seems little reason why the figures from the different sources should differ to such an extent, particularly when the total of expropriation shown in the Statistical Abstracts tends to fall below that actually recorded as having been carried out by the Department of Agriculture in Hama. The further adjustment in the Statistical Abstract of 1974 is particularly strange. The Office Arabe de Presse et de Documentation, which obtains all its figures from government sources, produces in one publication a figure for the expropriated land in the province of 123,261 ha., the same as the figure in the Statistical Abstract[4], suggesting that in 1970 at least the government

had a consistent figure of its own of the area expropriated in the province.

The discrepancy between the annual Statistical Abstract figures and those of the Department in Hama throws doubt on a comparison of the trends of expropriation in the province with those of the country as a whole. From a comparison of the two sets of figures, it seems that in general the Statistical Abstracts have underestimated the area expropriated. Only two of the eight years up to 1969 shown in column A of Table 52 exceed the equivalent years in column B, and it seems that much of the shortfall of previous years is made up in column A by the very high figure for 1969. Column B suggests that this figure is completely misleading in terms of the actual expropriation in that year.

Bearing this in mind, a comparison of the annual expropriations of land in Hama and in Syria as a whole should be treated with caution. However, it is interesting that although 1959 and 1960 were important years for expropriation in the province, they were probably less important than for Syria as a whole. The peak year for expropriation in Hama was clearly 1965, an important year for the whole of Syria as Table 22 shows.

This feature is slightly surprising given the comparative dominance of large landowners in the province and the history of agitation and demand for change that centred on Hama. Perhaps in this province in particular larger scale and more immediate expropriations could have been expected, particularly in 1963/4. While some expropriations did take place immediately the government had difficulties carrying out the administrative

and technical aspects of the reform. There was also resistance to the expropriations from the landed families in the province in the early years of the reform.

Administrative and technical factors

The administrative and technical factors in the reform may be said to be those that concerned the process of establishing the lands to be expropriated and actually executing the expropriations. There are obviously political elements in both these operations. On the one hand the regime was determined to make sure the landowners did not keep any land to which they were not entitled, and on the other, the landowners were determined to obstruct the new legislation for as long as possible. However, the political aspects of the reform will be discussed later.

One of the main problems of the reform has been establishing actual land ownership over and above the limits of the various laws. This has been due to the chaotic state of the land registers, the fact that some areas have not been surveyed, problems of delimiting various categories of land and, of course, evasion. In Hama large areas of the province had still not been surveyed. Although in 1958 most of the mantika of Hama had been surveyed, much of Massiaf, (which then included Acharne and the southern part of the Ghab), and of the drier areas of Salemiya, had not. Without a proper survey the correct delimitation of land holdings has been extremely difficult and controversial. As the Statistical Abstract of 1972 shows, large areas of Massiaf and Salemiya, and even some areas of the new mantika of the Ghab, have still not been surveyed. Altogether, 16% of the province had still to be surveyed in 1972[5].

Given the lack of a complete survey and the state of land registration, which by 1958 was out of date and almost impossible to unravel, the

frequent adjustments to expropriated areas in the villages have been almost inevitable as the land tenure situation has been cleared up. Furthermore, definitions of various categories of land were not tightened up completely until the 1963 Reforms and the reclassification of, for instance, non-irrigated to irrigated land probably contributed to a number of secondary expropriations.

With irrigated land in particular, but also with orchards, a great deal of evasion of the reform measures occurred, particularly before 1963. Some interesting figures will be shown when the distribution of land is discussed detailing the number of villages in which this occurred. The low proportion of irrigated land expropriated was not only a question of evasion. In Hama, only 6.5% of the area expropriated was irrigated[6]. Two other factors were of particular importance in producing this low figure, and were to some extent inter-related. In the first place, the drought conditions of 1959 to 1961 seriously hit irrigation in the province, as elsewhere in Syria. At the same time, landowners were cutting back on investments in irrigation and removing pumps and other irrigation equipment, partly to prevent their expropriation, and partly in the hope that, as non-irrigated land, they might be permitted to retain more of it. As a result, the irrigated area in the province declined as shown in Table 53, and did not recover until the Ghab and Acharne schemes came into operation.

TABLE 53 Irrigated area of Hama, 1955 to 1963, in thousands of hectares

Year	1955	1956	1957	1958	1959	1960	1961	1962	1963
Irrigated Area	69	67	66	64	48	42	40	44	48

Source: Office Arabe de Presse et de Documentation, L'Agriculture Syrienne, Damascus, 1964, p. 29.

Apart from the factors mentioned above, three other factors have influenced the execution of the expropriations. The first was the changes in laws, particularly the reduction in the maximum permitted holdings in 1963. Altogether, of the 102 villages in Hama in which expropriations occurred before 1963, 82 were subjected to further expropriations after 1963. In these 82 villages, of a total of 157 expropriations carried out after 1963, 128 were smaller than the largest, usually single, expropriations carried out before 1963, which suggest that many expropriations after this date in these villages were adjustments either because of the new expropriation laws or because of adjustments made as registration was completed or evasion uncovered[7].

The second factor in the delays in the expropriations that must be remembered is the long procedure of expropriation and appeal that existed. As has already been mentioned a priority of the 1963 and 1966 regimes was the speeding up of the execution of the expropriation laws. Their attempts were not particularly successful and the expropriations continued to lag behind the official programme.

The third factor was the scale of the expropriations that were to be carried out. Great strain was put on the limited number of officials available for the task of delimiting lands subject to the Agrarian Reform laws, which was partly reflected in the strong emphasis placed on Article 5 of Decree No. 1109 of 1963 demanding that private owners should declare annually their total land holding. In the 301 villages in the province (excluding the Ghab) that were partly or wholly private land, 199 were affected by the expropriation laws. Yet as Figure 5 shows, in only 18 of these was more than 90% of the land expropriated.

This contrasts with Egypt, where very often whole villages were expropriated and the administration of the expropriation was therefore much simpler. As a result in each village a great deal of work was required to delimit land which was to be expropriated, to select which lands the victims of the reforms could keep, and to examine appeals and other disagreements.

As a result of all these factors expropriation in the province was a long, drawn out affair. This is shown in Table 52 but is also true of a large proportion of individual villages in Hama. As Table 54 shows, of the 211 villages affected by the reforms in the whole province of Hama, about one third were completed in one year. The rest were subjected to expropriations over a period of two or more years, often with gaps of several years between expropriations.

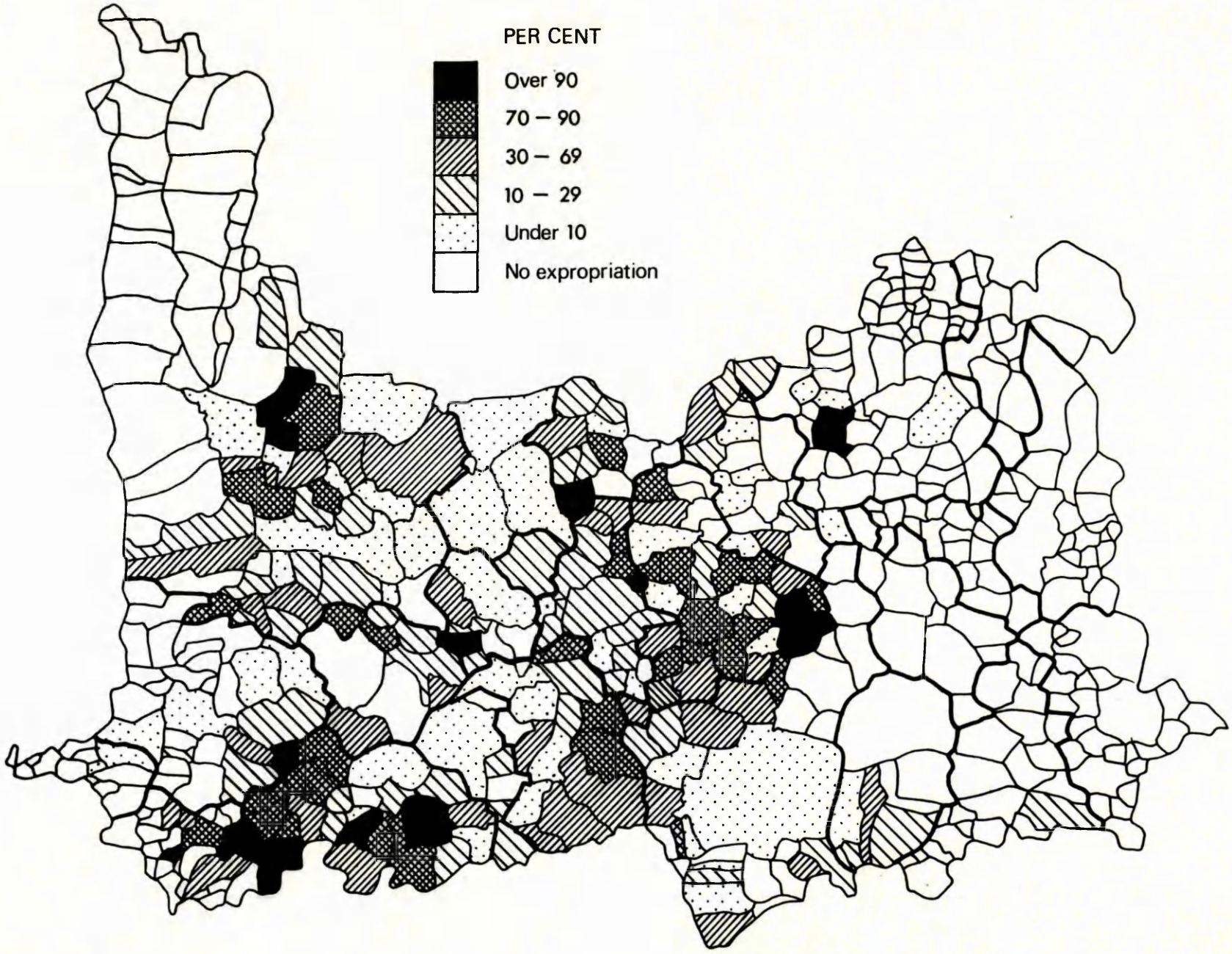
TABLE 54 Period of time required to complete expropriations in the villages of the Province of Hama, from 1959*

No. of Years:	1	2	3	4	5	6	7	8	9	10	11	12
No. of Villages:	71	7	11	17	20	23	23	13	7	5	9	4

*Information for one village, Kurayat, in Acharne, is not available.

Source: Derived from the records of the Department of Agriculture, Hama.

As might be expected, in villages in which expropriation was started several years after the 1958 reform laws, expropriation occurred over a shorter period of time. However, the disruption to agriculture caused by the non-expropriation of lands that the landowner knew would be taken was probably no less serious than the disruption caused by expropriations in a village carried out over a long period. Figure 5 shows the



MAP 5. Expropriation in Hama by nahiya: percentage of area subject to expropriation.

province sub-divided into villages and nahiyas, and shows the proportion of each village area that was subjected to expropriation. Table 55 compares the length of time over which expropriations were carried out in each nahiya and shows the year in which most villages in the nahiya were first affected by expropriation.

TABLE 55 Average period over which expropriations occurred in each area, and the year in which most expropriation was started

Area*	Average period over which expropriations occurred	Year in which most expropriation was started**
4/5/7	6.2	1962
22	6.2	1961
20	5.7	1961
23	5.2	1963
18	5.0	1964
14	4.6	1961
10	4.5	1961
12	4.4	1963
16	4.3	1964
13	4.3	1963
19	4.1	1963
11	3.7	1964
9	3.6	1964
15	3.5	1964
17	3.0	1967
21	3.0	1965
8	1.5	1964

* See Figure 7
**Some minor expropriations may have been acrried out in years before the years major expropriations were started.

Source: Derived from the records of the Department of Agriculture, Hama.

Table 55 indicates little regional strategy as far as expropriation is concerned, and it is probably to the political element in the reform that we must turn in order to search for a rationale to the order of expropriation.

As Table 55 shows, expropriations in each village took place over a number of years. In less than half of these villages did expropriations occur in only two separate years. Of the 139 villages that were affected by expropriation in more than one year, 60 were affected in two years, 39 in three, 25 in four, 12 in five and 3 in six years[8].

There does not appear to be a strong regional factor in the number of expropriations required to carry out the reform laws. In the expropriations in the mantika of Salemiya a slightly larger percentage of villages were completed in two years than in the rest of the province and a slightly smaller percentage required three to five years. This was due in part to the fact that in the mantikas of Hama and Massiaf there was a greater amount of irrigated land which was subject to drought at the beginning of the period, or may have been degraded to non-irrigated land by the owners to avoid expropriation. Eventually such land was usually expropriated, though often not until after the initial expropriation in the village. As more of the villages in the western part of the province were irrigated more of them were affected in this way by the further reform laws of 1963. On the other hand, many villages in Salemiya, where expropriation was often carried out before proper land registration, a further series of expropriations could be expected after registration was completed. These might be dealt with all at one time in a later year.

Political factors

It has already been suggested that the agrarian reform was dominated by the political interests of successive regimes after 1958. This is underlined by the fact that after the end of the union with Egypt expropriations virtually ceased until the change of government in mid 1962. In Hama only two out of the thirty six villages in which expropriation was carried out in 1962 were dealt with in the first five months of the year[9]. A return of an anti-conservative government strongly influenced by Baathist and Nasserist elements in mid 1962 meant the acceleration of expropriations.

An examination of the families and individuals affected by the expropriations in Hama supports the argument that the regime was determined to strike at the largest and most powerful families which had in the past dominated the local political and economic life and played a major role in national politics. Altogether, from 1958 to 1972, the expropriations affected 70 family groups in Hama who owned altogether 281 villages or parts of villages. Five families, Barazi, Kaylani, Azm, Baroudi and Tayfour owned 151 villages or parts of villages, and although other families, notably Shishakli, were also important in both local and national politics, these five families were the main target of the early reforms.

Table 56 shows the way in which the family groups were affected by the reforms. In many villages expropriation occurred in more than one year and therefore some duplications of recording will occur, probably obscuring the extent to which, at least in the early years, the expropriations concentrated on the lands of the five largest families.

TABLE 56 Affect of the expropriations on the five main family groups and other families in the Province of Hama, 1959 to 1972

Year	Villages and Parts of Villages Affected by Expropriations	No. of Villages Owned/Part Owned by Five Families	%	No. of Villages Owned/Part Owned by other Families	%
1959	36	27	75	9	25
1960	54	35	65	19	35
1961	21	16	76	5	24
1962	57	32	56	25	44
1963	32	12	38	20	62
1964	41	19	46	22	54
1965	218	111	51	107	49
1966	42	21	50	21	50
1967	73	30	41	43	59
1968	75	27	36	48	64
1969	50	25	50	25	50
1970	34	19	56	15	44
1971	8	5		3	
1972	2	1		1	

Source: Derived from the records of the Department of Agriculture, Hama.

Table 56 refers to the dates that expropriation was actually carried out, and gives only a general idea of how the reforms were directed. As the five largest families owned an estimated 54% of the villages or parts of villages expropriated, Table 56 shows that the early years, 1959, 1961, and perhaps also 1960, were those in which the large families were most affected. Table 56 suggests that after 1962 proportionally more expropriations were going on in the lands owned by smaller families, particularly in 1963, 1967 and 1968. The year of greatest expropriation in the province, 1965, shows a slight, probably insignificant, bias towards the other families in terms of villages or parts of villages, though the figure is high for the five main families considering how much of their land had already been taken.

These figures are based on the dates of the actual execution of expropriation in the province. Apart from the five main families, family groups were affected by expropriation as follows in Table 57 which shows the number of families who actually suffered expropriation for the first time in each year from 1958.

TABLE 57 Number of families affected by expropriations for the first time, 1958 to 1969

Year	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Families Affected:	8	5	15	4	5	6	3	19	1	2	1	0

Source: Records of the Department of Agriculture, Hama.

What is interesting from Table 57 is that although as Table 56 indicates the large families were the main targets of the early reforms, a large number of smaller families were also affected by the expropriations: 33 out of 65 smaller families to be affected by the reforms actually had lands taken from them under Nasser's regime. Many of the middle sized land owners in Hama were therefore affected and many others must have realised they were also going to lose lands.

The severity of the reform therefore affected many of the people who might otherwise have acquiesced in a less radical reform. In Hama the large families were disliked not only by the landless peasantry but also by many of the small and medium sized land owning families who saw their way to political and economic power and social prominence blocked. Indeed, several members of the smaller families were involved in the regimes of 1958 to 1961, and 1962 onwards, though they had usually made

their way into the national political scene through the armed forces. Perhaps the most prominent of these from Hama was Abdel Hamid Sarraj, the head of military intelligence in Syria during the U.A.R.[10]. The support that Nasser and subsequent regimes might have gained from these families by cutting down the economic and political power of the largest landowners was not forthcoming. Nasser needed that support because, as in Egypt, he looked to the middle and smaller landowners as part of the middle and lower-middle class in general to maintain his regime. Because he misunderstood the different nature and scale of land ownership in Syria, he alienated a large part of this group.

The Baath, on the other hand, particularly the Regional Command of Baath, did not look to this group for its political support, but to the peasantry. The radicalisation of the agrarian reform laws in 1963, the distribution of state lands, and other measures should be seen in that light. The opposition to the reforms in Hama among the smaller landowners became more and more widespread as it was realised how many of them would be affected. On one or two occasions, this opposition showed itself in violent demonstrations, usually linked with other economic and religious grievances. The troubles of 1964 were particularly serious[11]. For the most part, however, landowners' opposition showed itself in reduced investment in land improvements, the removal of machinery and pumps and declining agricultural production. Instead private capital was invested in building, commerce or abroad. In Hama, this had particularly serious affects for unlike most of the rest of Syria landowners had comparatively few commercial or other interests outside agriculture. Many landowners - though by no means all - had invested in land improvements, irrigation and machinery, and such investments were cut back severely. The affects of this will be dealt with in detail below.

While Table 57 shows how more and more family groups were affected by the expropriations, including many smaller and less powerful families, a closer look at the first three expropriation decrees that actually affected the province confirms the fact that in the early stages of the reform the regime was primarily interested in destroying the power of the largest families, particularly those that had been involved in national politics. This is shown in Table 58.

TABLE 58 Families affected by the first three expropriation decrees affecting Hama, 1958 to 1959

	Numbers who lost land		
Family	1st	2nd	3rd
Barazi	1	5	44
Kaylani	2	3	23
Azm	2	2	22
Baroudi	1		9
Tayfour		1	
Shishakli		1	1
Rustom	1		4
Jneid	1		
Marhaj		1	4
Hashim			2
Kadour	-	-	2
Total	8	13	111

Source: Centre d'Etudes et de Documentations, La Reforme Agraire de la Province Syrienne, Selection de Legislation Arabe, No. 2, Damascus, 1959.

The figures of Table 58 above do not show the full extent to which the regime was directing its expropriations for political motives. The first expropriation included Husni Barazi, the former Prime Minister of Syria, Hulmi Baroudi, the head of the National Party in the province, Abdel Karim Rustom, the Deputy for Jisr esh Shughur, and Aref Kaylani, the father of Anwar Kaylani, a prominent local politician and deputy director of the Agricultural Office in Hama.

The second expropriation included three brothers of Husni Barazi, and Mohammed Barazi, a member of the Provincial Assembly and National Economic Council. It also included Fareed Marhaj, a former Deputy for the province of Hama, and the sons of Najib Barazi, another Deputy for Hama.

The third expropriation included a number of prominent politicians and their relatives. Those affected in the Azm family included the brother of Khalid Azm, the former Minister of Foreign Affairs, and the daughter of Reja Azm, the Ambassador to Cyprus. Among the Barazis, the sons of Najib Barazi lost more land, as did the children of Darwish Barazi, the Head of Administration in the province. Of the Baroudis affected, several were closely related to Hulmi Baroudi. Four sons of Abdel Karim Rustom lost land, as did Nathan Marhaj, the former Chief Secretary of the Chamber of Deputies. Among the Kaylanis, Anwar Kaylani himself lost land in the third expropriation.

Others who lost land in expropriations in 1959 included Mohammed Barazi, Mohammed Bakri Sarraj, formerly a Deputy for Hama, and the sons of Emir Mustapha Merzah, formerly a Deputy for Salemiya and Minister of Agriculture. Throughout 1959 and 1960 the relations of almost all those mentioned above also lost land[12].

All of these people in particular could, and no doubt would, have been a danger to the new regime in 1958 and 1959 if they were not made the target of the earliest attacks through the land expropriations.

As has already been mentioned, unlike Egypt, a number of smaller families were affected by the reforms as well as the large landowning families.

However, only a few individuals in the large landowning families actually owned large estates of three or four villages themselves. The subdivision of land between children through inheritance prevented all but the richest and most acquisitive landowners from building large estates. In both the larger and smaller landowning families ownership was distributed between numerous members and branches of the family. As a result the economic and political controls exercised in the province by the larger families were a matter of alliance and negotiation rather than direct control. The five or six largest family groups in particular did not look to any one branch of the family for long term leadership, but to an oligarchy of family elders. Their position in the province was jealously protected by the strictest control of the marriage of their children, either within the family group, or on an exchange basis with one of the other largest families. This exclusiveness was particularly galling to the other, smaller landed families of the province although these families also protected their lands in the same way. To many supporters of the Baath and the agrarian reforms it was the social as well as the economic and political implications of this exclusiveness which were important. To many smaller landowning families it was only the knowledge that due to the severity of the reforms they would also lose land that alienated their support from the government as many were happy to see the power and position of the largest landowning families attacked.

Although it is impossible to find out just how much land was owned by the large families, an examination of the distribution of expropriated land will help to give some idea of how extensive and contiguous their estates were. Even though in some areas large holdings belonged to the same family group, in few cases was land expropriated from the same family

or a family group in adjacent villages. Figure 5 shows that in only 18 of the 199 villages outside the Ghab was 90% or more of the village area expropriated. For 16 of these information about former ownership is available, with the Barazi family owning seven, Azm and Kaylani three each, Baroudi one, and Kaylani, Tayfour, Barazi and Baroudi sharing the other two[13].

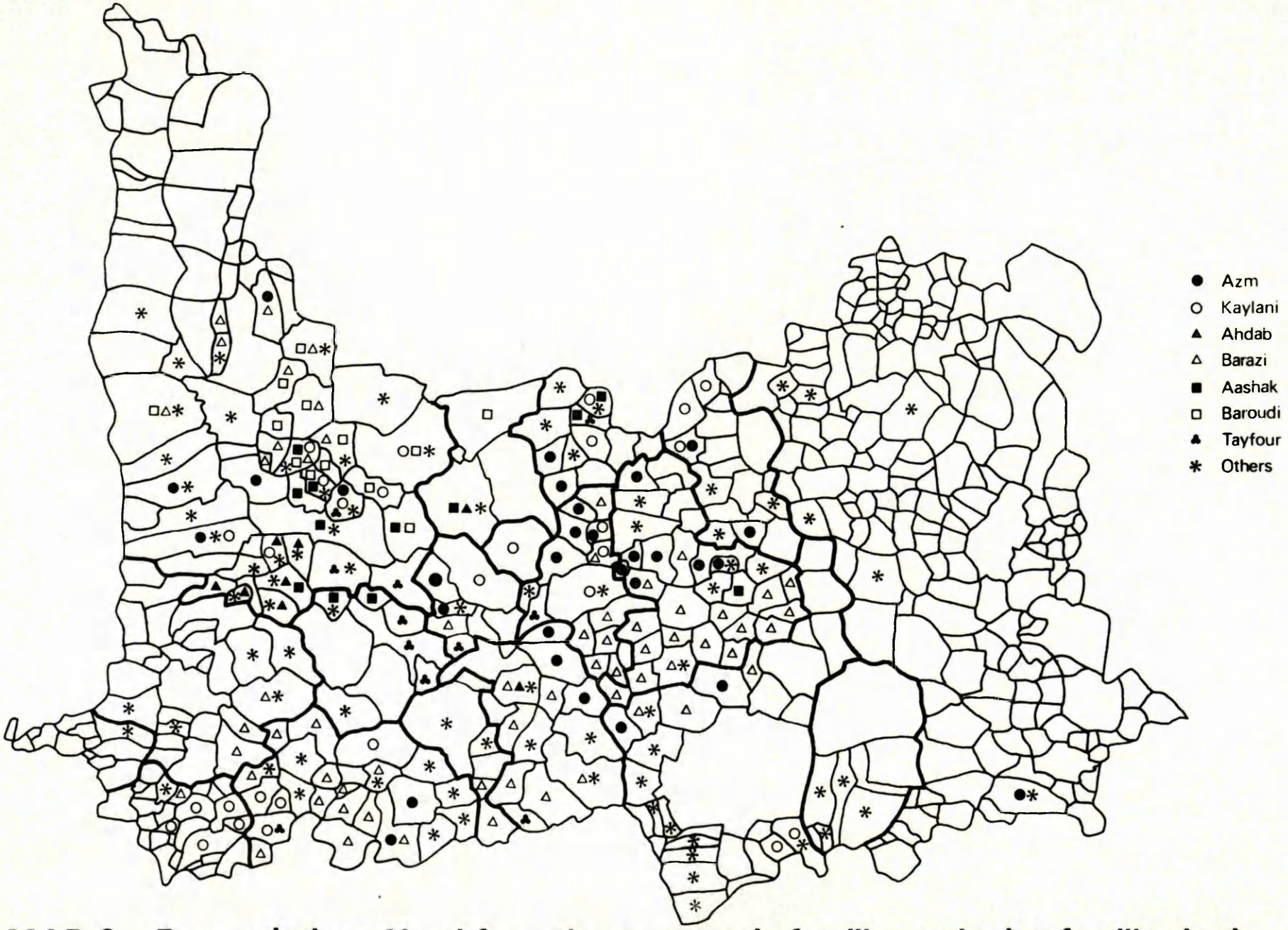
In considering the group of villages in which 70 to 90% of the land was expropriated, the largest families again predominate. In only 10 out of 37 cases where land was expropriated from such villages was land owned and partly owned by family groups outside the five largest, the other 27 being owned exclusively by Tayfour, Barazi, Kaylani, Baroudi or Azm family members. Table 59 shows, in percentage terms, how the family groups were affected by the expropriation.

TABLE 59 Proportion of villages subject to expropriation owned by large and smaller landowning families

	Owners	Area of Village Land Expropriated (in %)				
		Over 90%	70-90	40-70	20-40	Below 20
A	Azm Barazi, Baroudi, Tayfour, Kaylani	16	27	21	23	18
B	Shared between A and C	-	4	7	12	8
C	Other families	-	6	13	18	26
	Total no. of villages	16	37	41	53	52

Source: Derived from the records of the Department of Agriculture, Hama.

Table 59, when taken in conjunction with Figure 6, illustrates a number of points. Though Figure 6 refers only to expropriated land, it indicates



MAP 6. Expropriation of land from the seven main families and other families in the province of Hama.

that smaller landowning families had not been pushed out of the best agricultural land which even before the development of the Asharne/Ghab irrigation schemes was mostly west of the city of Hama. Indeed, Figure 5 shows that many villages in this area were still the domain of small and medium landowners not subject to the reforms at all, or only having up to 20% of the land of their villages expropriated. In those nahiyas of the province marked on Figure 7 as 13, 19, 22, 23, 21, 20 and 15 which included the best agricultural land in the province, 29 villages out of 95 were not affected by expropriation at all, and 24 had only up to 20% taken. Large landowners who were affected by the reforms elsewhere did perhaps try to keep land in these villages, but these figures suggest that small and medium owners predominated in some areas of even the best agricultural land.

Figure 6 also suggests that in several areas certain family groups predominated. This may have been true to some extent, but Figure 6 shows clearly that in few areas did families own so much of an area that a large proportion of several contiguous villages was expropriated from the same family group. This is largely because each family group contained so many owners. There are one or two exceptions where one family had a large proportion of several neighbouring villages taken from them. In the south west of the province, the Kaylani and Barazi families each had four or five villages which were almost all expropriated. In the mantika of Salemiya the Barazi family owned a number of villages that have been mostly expropriated, while west of the city the Tayfour family group owned several contiguous villages and much of this land was expropriated.

Figure 6 and Table 59 suggest that although there were many smaller landowning families affected by the reform, most of the land that was expropriated was taken from the largest families. This does not affect the validity of Table 57 which underlines the fact that many smaller landowning families were affected by expropriation in every part of the province, very often in villages in which families of the largest families also lost land. Altogether, from the information that is available, the total area expropriated was taken from the different families as is shown in Table 60.

TABLE 60 Land taken from landowners in villages through expropriation in the province of Hama, 1959 to 1972, in hectares

Villages owned by:	Area	%
Five largest families	54458	42.5
Five largest families shared with other families	41132	32.1
Other families	32547	25.4

Source: Derived from the records of the Department of Agriculture, Hama.

The information outlined above shows that the five largest families had a considerable hold on the private land of the province in 1958. The nature of the families, however, meant that in few cases did land holdings of more than one or two villages fall to an individual. Yet the severity of the expropriation laws meant that many medium sized holders both in and outside the five main families were affected, as well as the larger owners. This has had serious political and economic affects and though the former have been discussed, the latter, also of importance, have not. These economic implications of such extensive expropriation will be discussed below.

To conclude this section it may be interesting to look briefly at the attempts of landowners to avoid expropriation. Some of these have already been mentioned, including the non-declaration of land, which was so heavily penalised after 1963, and the alteration of land from irrigated to non-irrigated land. In Hama, as elsewhere, several families also tried to backdate land transfers or sales. In 1963, when expropriation was backdated to 1950, a number of families that had escaped heavy expropriations before that date were hit. Particularly prominent among these were the Tayfour and Aashak families. Of the nine villages in which only land belonging to the Tayfour family was expropriated, none were affected before 1965. The Aashak family had only two villages in which they alone lost land, but they were not affected in these until 1965. In each village or part of a village that these two family groups lost through expropriation, they averaged 14.8 and 9.8 owners respectively. This contrasts with, for instance, the Baroudi family that averaged 4 individual owners per village or part of village expropriated, and the Barazi and Azm families which averaged 2.6 and 2.9 respectively. However, with the new laws on expropriation as in 1963, such loopholes were closed. The integration of these laws with the distribution of lands and the setting up of co-operatives will now be examined.

(b) The distribution of land

As elsewhere in the country, distribution of expropriated lands in Hama lagged far behind expropriation. According to the Statistical Abstracts of various years from 1954 to 1970, by 1970 90642 ha. of expropriated lands in Hama had been distributed[14]. As in the case of expropriation, the programme of distribution was held to have been completed by the end of 1969.

In Table 61 the information recorded in the Statistical Abstracts is related to the distributions recorded by the Department of Agriculture in Hama from 1959. The latter show that, as with the expropriation, distribution continued after the end of 1969.

TABLE 61 Distribution of expropriated land in the province of Hama, 1959 to 1972, in hectares

Year	A (1)	B (2)
1959	-	-
1960	-	-
1961	923	284
1962	19,686	8,861
1963	8,918	3,760
1964	1,630	3,249
1965	2,524	3,074
1966	1,486	13,162
1967	7,423	7,473
1968	19,435	8,477
1969	28,617	25,304
1970	-	3,998
1971	-	937
1972	-	742
Sub-total		79,321
	Acharne	12,351
Total	90,642	91,672

Sources: (1) Statistical Abstract, op. cit., various years.

(2) Records of the Department of Agriculture, Hama.

The two sets of figures in Table 61 are not directly comparable, as the Department of Agriculture in Hama did not include distributions in Acharne and Ghab in its annual figures. Total distribution in Acharne is shown separately, while the minor distributions in the Ghab are excluded from column B.

Despite this there are a number of interesting similarities and differences between the two sets of figures which need to be examined.

In the first place, the figures for total area distributed in the province from the two sources are close, a contrast to the details of expropriation shown in Table 52. Though one might expect the two sources to have similar figures for distribution, in view of the differences in the figures of expropriation some difficult questions are raised about the extent of land expropriated and not distributed, an important political and economic issue. The Statistical Abstract for 1970 suggests that at the completion of expropriation and distribution, 32619 ha. were not distributed, while the figures of the Department of Agriculture in Hama indicate that 36465 ha. were still undistributed. The revised figure of the Statistical Abstract of 1974 of 110300 ha. indicates that only 19658 ha. were still to be distributed in 1970.

The difference between the figures of the Department of Agriculture in Hama and the Statistical Abstract of 1970 appears to be largely due to the varying estimates of the amount of land expropriated. However, a reduction in the figure of the total area expropriated (and therefore to be distributed unless otherwise specified) to 110300 ha. greatly reduces the area to be distributed. It seems likely the balance between the area expropriated according to the 1970 and 1974 Statistical Abstracts of just under 13000 ha. has been set aside as land which is excluded from distribution and therefore falls under a different category from the bulk of the expropriated land.

Turning to a more detailed analysis of the figures in Table 61, both sources agree that in the period of Nasser's regime little distribution was carried out in the province despite the expropriation of 47457 ha.. In the country as a whole, however, an estimated 63612 ha. were

distributed in this period, and it is noticeable that in Hama so little land should have been distributed. Although it was a stronghold of the political Right it was at the same time an area in which demands for agrarian reform had been stronger than perhaps anywhere else in Syria where the landless would have demanded the immediate distribution of land.

Another source suggests that in fact distribution of land had been carried out in the province before the dates shown in Table 61[15]. In 1959, 18 co-operatives were formed on expropriated land followed by 1 in 1961. Some of these co-operatives were formed among tenants to whom the land did still not actually belong, although it was envisaged that it would do so. However, some distribution of land certainly went on in some of these villages, although it was not recorded in either of the sources of Table 61. This was due to the delays that occurred between the dates on which the distribution was actually carried out and those on which it was officially registered. These delays underline the protracted and inefficient procedures that bedevilled the whole process of expropriation and distribution. These procedures only improved slowly despite the attempts of the Baathist regime to speed up the administrative and appeals process, and delays in the recording as well as the execution of the reforms continued.

Over the period of the reforms the delays in distribution of land have had damaging economic and political consequences. Large areas of expropriated land have remained without responsible owners for periods of up to 10 years, with serious consequences for investment in and care of the land. Delays in distribution, for whatever reason, have been badly received by potential beneficiaries, whom the Baath have always sought

as the basis of their civilian political support. A detailed analysis of villages in Hama shows how serious delays have been. Table 62, which excludes the 33 villages concerned in Ghab and Acharne, shows the delays between the initial expropriation and the first distribution in each village in the province.

TABLE 62 The delay between first expropriation and first distribution in the villages of the province of Hama affected by expropriation, in years

No. of Villages	No Distribution	Completed in Same Year	After 1	2	3	4	5	6	7	8	9	10
(Total 175)	36	0	14	21	23	27	7	14	18	3	8	4

Source: Derived from the records of the Department of Agriculture, Hama.

In 22 of these villages there were two official distribution dates and, in a further 6, 3 distributions. Only 6 of these 28 villages were affected by distribution before 1963, so only in these could second or third distributions have been due to the new expropriation laws of 1963. In 21 of these villages, expropriation post-dated the final recorded distribution, which confirms that in these villages as well as in those recorded 'no distribution' expropriated land has not been distributed.

Looking at the problem of the delay of distribution from another angle, Table 63 shows the years in which distribution began in villages subject to expropriation in each year of the reform period.

While it must be remembered that Table 63 refers only to first distributions in villages affected by expropriations, it shows that in the villages subject to expropriation in the early years of the reform,

TABLE 63 Delay between first expropriations and first distributions in the villages affected by expropriation in the province of Hama, 1959 to 1972

Year of First Expro-priation	Year of First Distribution														
	59	60	61	62	63	64	65	66	67	68	69	70	71	72	Total
1959			1	7	1	4	2	3			3				21
1960				8	2	1		5	1	1	7	1			26
1961					2		2	2	2	2	2	1			13
1962					3	1		3		2	11				20
1963							1	2	2	1	2				8
1964								1		2	1				4
1965								7	7	11	15			1	41
1966									1						6
1967															
1968											1	1	1		3
1969												2			2
1970															
TOTAL			1	15	8	6	5	23	13	19	42	5	1	1	139

Source: Derived from the records of the Department of Agriculture, Hama.

between 1959 and 1962, the first distribution did not occur for at least 5 years (excluding the year of expropriation itself) in 43 out of the 80 villages concerned. Although villages subject to expropriation in later years had their land distributed more quickly, the adverse effects on cultivation were probably no less serious as landowners in these villages were aware for longer that their land was going to be expropriated.

Returning to Table 61, the next point of similarity between the two sets of figures is that 1962 was the first year of importance for distribution. Despite the distributions that went on before 1962 in other parts of the country little was carried out in Hama before this year. The Statistical Abstract shows that the bulk of the distribution in the

country in 1962 was carried out in central Syria, in Hama, Homs, Idlib and Aleppo[16]. In Hama, as in these other provinces, the execution of the agrarian reforms had been delayed by inadequacies in administration and manpower and by the resistance of landowners who still had a powerful hold over their areas in social and economic as well as political terms. Landless workers and tenants, despite the lead given by the Arab Socialist Party in the province in the 1950's, were unsure of the major legal changes brought about by the reforms and wary of the upheaval in traditional economic and political life and the traditional social order that seemed to be approaching. While some welcomed the change to get rid of their landlords and recognised the economic and political opportunities the reforms offered, others preferred the patronage of their landlords, or simply through ignorance or uncertainty feared change. In traditional rural provinces such as Hama, intimidation, reprisals and even unlawful re-appropriation of land were factors which influenced officials, tenants and agricultural workers.

In 1962, however, after the coup of April 2nd and the re-introduction of Law No. 161 with modifications, the more progressive regime that had emerged at the expense of the conservative politicians of the previous government pursued expropriation and distribution in central Syria, as Tables 52 and 61 show. In order to satisfy the very large if fragmented Leftist forces in the army and in civilian politics, the regime took up the execution of the agrarian reform with great zeal, particularly the distribution of land. As Table 63 shows, however, all the land distributed in Hama in 1962 had been expropriated under Nasser's regime, and much of the land expropriated in 1962 was not distributed until 1969.

Table 61 also shows that the Baathist regime of 1963 to 1966 was not so active in the distribution of land. Although the agrarian reform laws promulgated by the new regime were far more radical than those of April 1962, as with expropriation the rate of distribution of land declined considerably. In Hama the distribution of land might have been used to cement the support for the Baath whipped up by Hourani, but, in fact, as Table 61 shows, expropriated land was distributed very slowly.

The slow implementation of the reforms at this time was almost certainly due to two main factors, the shortage of manpower and the bitter quarrelling between factions of the ruling Baath party. The lack of national facilities for the training of agricultural officers, surveyors and agricultural engineers capable of executing the reforms properly has already been discussed. The struggles between various factions of the Baath, particularly the moderate and radical groups, also had an effect on the execution of the reforms, as on other aspects of policy. Indeed, it has been suggested that the National Command of the Baath, theoretically in power until 1967, held back on the agrarian reforms in the hope of gaining support in Syria's political centre. The figures of Table 61 suggest that may have been so, though on the other hand both factions of the Baath looked to the mass of landless rural population for support and it is difficult to believe that either faction would have risked this support in this way.

A final point of similarity of the two sets of figures in Table 61 is the great importance of 1969 in the distribution of land. Three factors may be taken into consideration in trying to explain why this year was so important. The first is statistical. As 1969 was to be the last year

of expropriation and distribution, distributions that may not have been recorded for previous years may have been recorded for 1968 or 1969. This may not have affected column B of Table 61, but almost certainly contributed to the higher figures for 1968 and 1969 in column A.

Secondly, with the political situation temporarily resolved in favour of the Regional Command of the Baath, the government was able to pursue certain policies more strongly, among them the completion of agrarian reform. In the communist Abdel Karim al Jundi the Ministry of Agriculture and Agrarian Reform had a particularly zealous head from 1967 to 1969.

Thirdly, the merging of the Ministry of Agriculture with the Ministry of Agrarian Reform contributed to a more efficient administration and released a number of agricultural engineers and officers for work on the completion of the reforms.

Differences in Table 61 between the figures of the two sources on distributions must also be examined. However, because both record the official distribution of land and seem to refer to the same category of land, that of private expropriated land, it is difficult to see on what basis their figures differ. Two factors throw some doubt on the figures of the Statistical Abstracts. First, it has been suggested above that the very high figures of 1968 and 1969 indicate that some distribution from previous years was not recorded in earlier Statistical Abstracts but included in the last two years. Secondly, the records of the Department of Agriculture show that some distribution continued after 1969, which is not surprising considering the large areas left undistributed.

Altogether there are four main differences between the figures of the two sources. The Statistical Abstracts suggest that distribution from year to year was more uneven than do the records of the Department of Agriculture in Hama. The Statistical Abstract claims a much greater distribution of expropriated land in 1962 and also shows much higher figures for the 1968 to 1969 period. Although it would be possible to speculate on the reasons for these differences, little can be said, except on the basis of statistical adjustments in 1968 and 1969, that would throw any light on them.

The size of plots

An analysis of the size of plots of land distributed to beneficiaries reflects the political aims of successive regimes as well as their awareness of the physical constraints on agriculture. The distributions of state land, which are particularly interesting in this respect especially in the Ghab, will be dealt with later.

The figures available for such an analysis have a serious defect. As Table 67 shows, distributed land was divided into three categories, irrigated, with trees, and non-irrigated, but all these categories are included in one figure of land holdings. It is therefore difficult to determine the size of plots of different types of land that have been distributed and these can only be assessed in villages where only one category of land was distributed. Non-irrigated land was distributed in every village, though only in villages in which no irrigated land or land with trees was distributed can an accurate idea of the size of non-irrigated plots be obtained. In no villages was either irrigated land or land with trees the only type of land distributed. Analysis of the

size of plots will therefore be confined to villages in which only non-irrigated land was distributed.

The collection of regional data within the province in Table 64 shows that the size of non-irrigated plots increases from west to east. This characteristic which is even more marked when those regions in which only one village is included are put aside. This is in conformity with the provisions of Law No. 88 of 1963.

TABLE 64 Size of plots of non-irrigated land distributed to beneficiaries according to nahiya

Number of Nahiya*	Number of Villages Affected	Average Size of Plots Distributed
5	1	10.2
9	9	17.3
10	26	17.6
11	6	15.3
13	5	16.0
12	11	13.3
14	8	18.2
19	4	8.1
18	1	6.5
20	13	9.0
21	6	8.1
22	5	7.0
16	3	5.3
15	1	3.9
23	NA	NA

*Shown in Figure 7.

Source: Derived from the records of the Department of Agriculture, Hama.

While this shows some consideration for the differences in climate and agricultural potential in different parts of the province, two other factors must be considered. The first is that in non-irrigated areas the plots distributed were invariably far below the maximum of 30 ha. that was allowed. In the 101 villages where only non-irrigated land was

distributed, the average size of plots exceeded 22 ha. in only 2 villages. It has clearly been a deliberate policy to keep the size of plots distributed as low as possible even though many non-irrigated areas, particularly in the eastern part of the province, are areas of low productivity, unpredictable rainfall, and produce low and uncertain incomes.

Secondly, there has been little attempt to increase the size of plots distributed in non-irrigated areas over the last fifteen years. Most of the distribution of non-irrigated land done before 1966 was done in the eastern part of the province, and here there is evidence that the size of plots distributed has, if anything, decreased. Table 65 shows how the average size of plots distributed in the eastern part of the province has changed from 1961 to 1971.

TABLE 65 Average size of non-irrigated plots distributed in eastern Hama, 1961 to 1971*

Years	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Average in ha.	21.9	19.9	17.9	14.5	19.1	13.5	16.5	18.6	14.1	21.2	11.8
No. of Villages**	1	7	3	1	2	12	7	5	11	1	1

*Including areas 5, 9, 10, 11, 12, 13, 14, shown in Figure 7.

**Not including villages in which distribution of land occurred in more than one year.

Source: Derived from the records of the Department of Agriculture, Hama.

In the western half of the province the distribution of land has been concentrated to an even greater extent than the eastern part into the years 1967 to 1969. It is therefore more difficult to detect a trend in the size of plots distributed. However, as Table 66 shows, there is no evidence that the size of plots distributed has increased.

TABLE 66 Average size of non-irrigated plots distributed in western Hama (excluding Ghab), 1961 to 1971

Years	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Average in ha.		14.4	4.5	-	8.7	15.2	13.4	6.4	6.5	-	-
No. of Villages*		2	1		1	2	2	6	12	-	-

*Not including villages in which distribution of land occurred in more than one year.

Source: Derived from the records of the Department of Agriculture, Hama.

Tables 65 and 66 show the disregard of successive governments for one of the most persistent criticisms of the agrarian reform, namely that the size of the plots distributed are too small to be economically viable or to stimulate investment in the land. However, governments have had their reasons for distributing very small plots. In the first place it has been the policy to develop co-operatives in all parts of the countryside, beginning with the beneficiaries of the land reform. Large numbers of small plots have therefore been given out so that the development of co-operatives has become an economic necessity to smallholders who need services, agricultural inputs and marketing facilities. To successive governments the development of co-operatives as a method of increasing control by the state in agriculture and in the countryside has been as important as the more widely advertised economic and social benefit they may bring.

Secondly, distribution of plots far smaller than the maximum allowed under Law No. 88 has meant that a greater number of beneficiaries have been able to receive land, a point to which governments have attached a

great deal of political importance. However, attempts to gain rural support in this way have to some extent been nullified by the delays in distribution already outlined. Furthermore, even in those villages in which distribution has taken place, large areas of land remain in the state's hands. It is therefore interesting to note that proportionally far more irrigated land and land with trees has been held back from distribution than non-irrigated land. This is shown in Table 67.

TABLE 67 Percentages of irrigated, non-irrigated and land with trees expropriated and distributed in villages in the province of Hama

% of Land Distributed	Irrigated	Type of Land with Trees*	Non-Irrigated
+ 100	17 villages	13 villages	11 villages
90 - 100	7 "		40 "
80 - 89.9	2 "		27 "
70 - 79.9	1 "		25 "
50 - 69.9			28 "
30 - 49.9	1 "		8 "
10 - 29.9		1 village	3 "
0 - 9.9	11 "	12 "	4 "
TOTAL	39 "	26 "	146 "

*Fruit bearing trees.

Source: Derived from the records of the Department of Agriculture, Hama.

39 villages contained irrigated land in which other land was also distributed, but in 11 less than 10% of the irrigated land was distributed. 26 contained trees, but when distribution was carried out in those villages, in 12 less than 10% of the land with trees was distributed. On the other hand, of the 146 villages affected by distribution in which non-irrigated land was available for distribution, in only four was less than 10% of that non-irrigated land distributed.

Table 67 also indicates that in a number of villages land classifications were altered between expropriation and distribution. In 17 villages in which irrigated land was distributed the area of irrigated land distributed was greater than that expropriated. This was partly due to some reclassification of land after expropriation, and partly due to the development of irrigation, particularly in Acharne. The same is true of villages with land with trees, though the difference is largely due to reclassification in this case. In 11 villages in which non-irrigated land was distributed, irrigated land or land with trees had been re-classified as non-irrigated land.

The information in Table 67 supports the possibility that the state was holding back some land that could have been distributed. It has been claimed that this has been because there are insufficient farmers to take over the land, but the conclusion above on the pressure of population on land in the province suggests this to be untrue[17]. Two more likely possibilities are that the state intended to develop state farms on these lands, or that the state has found the rents from these productive lands useful and more attractive than the costs and problems of official distribution and the setting up of co-operatives.

Although the governments have developed small state farms in the Ghab, few, if any, have yet been developed in expropriated land. The income from rented lands has been a useful source of income while the agricultural sector as a whole has been such a drain on public resources. Between 1962 and 1968/9, between 32,000 ha. and 65,000 ha. of expropriated land was rented in the province, with rents for irrigated

land at between L.S. 70 and L.S. 105 per ha., about L.S. 24 per ha. for land with trees, and L.S. 7 to L.S. 9 per ha. for non-irrigated land[18]. While it would be cynical to place too much emphasis on this reason for holding back on the distribution of expropriated land it is nevertheless interesting that a proportionately larger percentage of higher value, more productive land should have remained in the hands of the state.

One further factor that may be considered in the distribution of small plots is the desire of governments not only to please as many of its potential supporters as possible but also to stabilise rural population by giving as many as possible a small piece of land. The strict laws preventing the resale, sub-letting or absentee ownership of distributed land form an important part of Law No. 161 and Law No. 88. Desertion of the land and absenteeism, with the likely redevelopment of large land-holdings, have been a worry for the Baathist governments in particular as the comprehensive legislation on these matters shows.

Finally, small plots have almost certainly been distributed despite the growing realisation of the uneconomic size of the plots because many beneficiaries hold land of another type or in another area. For political reasons governments have not insisted that an individual's holdings must be contiguous, or be confined to state, expropriated or private land. Consequently, many beneficiaries were already tenants or held private or state lands, sometimes in a different part of the province. Governments have been well aware of this but instead of preventing it have given out smaller plots. Recipients of smaller plots without other land are therefore encouraged inadvertently to look elsewhere for income, and for many this involves working on, buying or renting another piece of land.

The status of distributed land

The precise legal status of distributed land has been an extremely controversial political issue and has contributed to a great extent to the slow development of the co-operatives and of investment in the land.

In the first place although a title of a particular sort is given, land that is distributed is not registered as 'miri' land. Although paragraph 2 of Article 10 of Law No. 88 suggests that land given to beneficiaries will be formally registered in their name, this has not occurred. Land 'belonging' to the government after expropriation has been distributed, but formal ownership not handed over to the actual recipients. So in the land registers this land is noted as being held by the 'Government of Syria', a contrast to all pre 1958 owners and beneficiaries of state land.

This issue is obviously a particularly sensitive one and difficult to investigate. While the land certificate shown in Table 68 may help to throw some light on the question, it is in some respects deliberately obscure, and information from other sources is also necessary.

In the first place the land area mentioned as being assigned to the recipient in the certificate refers to a share of the land to be distributed, and to numbered plots of land. Land has been distributed under the supervision of the Ministry of Agrarian Reform (after 1967 of the Ministry of Agriculture and Agrarian Reform), usually with the agreement of the recipients, on the basis of size of family, number of people wanting land, the type of land and so on. The distribution of numbered plots of land was not consistent with various governments' plans

to develop production co-operatives, which in the long run would result in the recipients becoming shareholders and labourers in a farming unit of village size or larger. However, it reinforced the belief of the large majority of recipients who were led to believe, particularly in 1958, that smallholdings were to be distributed as personal private property. It was indicative of government aims that after 1963 numbered plots of land were not included in the land certificates distributed to beneficiaries.

This has been an important factor in the suspicion of recipients that they might, at some stage, lose control over the land given to them. Recipients who have other land or are tenants elsewhere have continued to interest themselves in other properties which they were not permitted to retain. There is almost certainly a considerable amount of illegal use of inputs in co-operatives being used in other areas as peasants take advantage of the favourable rates of interest for loans in co-operatives. There is also the problem of the illegal sale of the production of co-operatives through these other properties in order to avoid levies and payments due to the co-operative.

In short, many recipients of land who are members of co-operatives lack confidence in the co-operatives because they are unsure of the status of their land and of their future independence as landowners. Most peasants seem to be aware that although they have received land, Baathist policies on co-operatives, shelved for the moment, threaten their permanent land ownership. Particularly significant in this respect is the reference to possible future amendments to the laws concerning the distribution of land and distributed land holdings.

بسم الله الرحمن الرحيم

الجمهورية العربية السورية

وزارة الإصلاح الزراعي

رقم طلب التملك T-٣٣٢٥٧

اسم المنتفع جدوع سليم العبود

شهادة

تنفيذاً للمادة ١٣ من القانون ١٦١ لسنة ١٩٥٨ الخاص بالإصلاح الزراعي والتي قضت بتوزيع الأراضي المستولى عليها على الفلاحين .

وبناءً على القرار الصادر من وزير الإصلاح الزراعي بتاريخ

باعتماد توزيع الأراضي المستولى عليها بقرية جرنية العاص منطقة حماه محافظة حماه

أعطيت هذه الشهادة للسيد جدوع سليم العبود

المقيم بقرية الجرنية منطقة حماه محافظة حماه عما الأراضي الزراعية المخصصة له والمبينة بالجدول أدناه وذلك بالشروط المنصوص عليها في القرار بقانون المشار إليه أعلاه وبشروط التوزيع الصادرة بموجبه وما أوخل وسيدخل عليه من تعديلات . وذلك في مقابل قسط سنوي لتلك الأراضي يحدد وفقاً للقوانين التي تعين القسط وكيفية الوفاء به .

بيان الأراضي

س	المساحة آر	المساحة هكتار	رقم العقار	رقم الخلة بالخارطة	القرية	الناحية	الحصة من ٢٤٠٠ سهم	ملاحظات
٥٧	٨٦	٢١	١	٣٩	جرنية قاصي	حماه	٣٫٧٤٤	سهم
١٥	٥٥	٥٦	٢	"	"	"	٨٫٠٠٠	"
٦٢	٦٩	٣٠٩	٣	"	"	"	٥٫٢٠٠	"
٦٠	٦١	١٧٥	٤	"	"	"	١٠٫٢٨٠	"
٥٥	٥٩	٨٠	٥	"	"	"	١٠٫٢٤٠	"
٠٠	٩٣	٣٧	٧	"	"	"	١١٫٩١٦	"
٦٢	٩١	٢٤٥	٩	"	"	"	١٠٫٩٣٢	"
					الجملة فقط بقية الحصة على الوجه الآخر			

هذا بخلاف ما يتحمله المنتفع من المنافع والارتفاقات المختلفة

ملاحظة : — تحتفظ وزارة الإصلاح الزراعي بحقها إلى ما قبل إجراء البيع النهائي في إلغاء هذا القرار إذا ما تبين لها عدم صحة البيانات التي أدلى بها المنتفع

تحريراً في ١٨ / ٩ / ١٩٦٣

٨٩	٧٤	٣٩	١٠	٣٩	جرنية قاصي	حماه	١٠٫٨٩٦ سهم
٤٩	٠٥	٤٨	١٣	"	"	"	٧٫٤٦٨ "
٨٧	٣٢	٢٤	١٦	"	"	"	٩٫٦٩٢ "
٤٣	٦٠	٢٤٩	١٧	"	"	"	١٢٫٨٤٤ "
٣٦	٢١	٨	١٨	"	"	"	١٣٫٧٥٤ "
٧٢	٧٣	٦	١٩	"	"	"	" "
٨٦	٦٨	١٦٧	٣٠	"	"	"	٨٫٣٦٠ "
١٦	٣٥	٢٨	٢١	"	"	"	١٣٫٧٥٤ "
٩٣	٢١	٦١٢	٣٣	"	"	"	١٠٫٣٩٦ "

TABLE 68. Land ownership certificate of the Ministry of Agrarian Reform, 1958.

TABLE 68 (continued)

In the name of God the Compassionate, the Merciful

Syrian Arab Republic

Ministry of Agrarian Reform

Number of application for right of possession: 22357 A

Name of beneficiary: Jaddu' Sallum al-'Azu al-'Abbud

Certificate

In implementation of Article 13 of Law 161 of 1958 concerning the Land Reform, and which (Article 13) provided for the distribution to the farmers of the confiscated lands;

And in accordance with the decision issued by the Ministry of Agrarian Reform on the date of --- with the purpose of the distribution of the confiscated lands in the village of Jurniyyat al-'Asi in the district of Hama;

This Certificate has been given to Mr Jaddu' Sallum al-'Azu al-'Abbud, resident of the village of Jurniyya in the district of Hama in the province of Hama concerning the agricultural lands assigned to him and defined in the table below; and that is in accordance with the conditions set out in the decree by law set out above, and the conditions of the distribution which are referred to in the decision, and whatever amendments have been included and what in future might be introduced as amendments.

This is in exchange for annual instalments for those lands which are defined according to the laws which specify the instalment and the method of payment.

Definition of the land

Share of 2,400 parts, Remarks	District	No. of Village	No. of property area	No. of property	AREA

This is apart from whatever benefits and easements which the beneficiary may enjoy.

NB The Ministry of Agrarian Reform reserves the right, up to the time of the final sale to cancel this decision if it becomes clear to it that the statements made by the beneficiary are not correct.

Signed: Administration of the Agrarian Reform Institute

Issued on 18.9.63

These doubts are backed up by further ambiguities in the certificates. It is unclear whether the certificates are restricted to the named beneficiaries, to a certain number of descendants, or whether their children and subsequent generations may also be entitled to the land. The question of the extent to which sub-division of the plot or plots through inheritance is permitted, is also uncertain. These doubts, however, while they are widespread among recipients, are also reflected in the disagreement that was found among officials in the Ministry of Agriculture and Agrarian Reform interviewed about this question*.

Apart from the certificates themselves, the agrarian reform laws of both 1958 and 1963 include very strict regulations about the sale, sub-letting and actual working of land which have already been mentioned. Article 15 of Law No. 88 deals with the right of the Ministry of Agriculture and Agrarian Reform to deprive a beneficiary of his land if the land is not cultivated to the state's satisfaction. Article 16 forbids mortgaging of the land received, except to the Agricultural Bank. Article 17 insists on the recipient's membership of a co-operative. All these provisos and conditions that have helped undermine the confidence of the beneficiaries that the land is indeed theirs.

Suspicion of the government's medium and long term aims with private land, particularly expropriated land, makes rural support for the government almost entirely dependent upon the non-implementation of various policies of consolidation and real co-operative activity in the co-operatives. The Peasants' Union, which the Baath regime set up to influence and

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*These included officials in both Damascus and Hama.

control its principal supporters, the peasantry, have also become the principal channel through which peasants have been able to make clear their attitudes towards clearly defined, legally enforced private land ownership. The regime has found it an almost impossible task to make any progress towards the sort of co-operative agriculture it envisages and has advocated through the Peasants' Union, Co-operatives, Agricultural Bank and other official and semi-official channels. On the other hand, the beneficiaries see little progress towards or chance of fully independent plots of land with full personal legal entitlement. The results will be discussed in more detail below but low investment, inefficient cultivation techniques and stagnating productivity are all, in part, attributable to the conflict of the recipients' ambitions and the regime's long term aims in the agricultural sector.

(c) The distribution and renting of state land

As has already been mentioned in the national context, the distribution of state land lagged behind the distribution of expropriated land. This is also true of the distribution of land in the province of Hama.

In the previous decade some attempts had been made to distribute state lands, particularly following the Ministry of Agriculture Decree No. 768 of 3 November 1952, which provided for the distribution of plots of land of up to 50 ha. (non-irrigated) and 10 ha. (irrigated). These were largely thwarted by political opposition from the existing landowning groups and the inadequate survey and registration details of much of the state domain.

However, with Law No. 252 of 10 October 1959, the distribution of state lands was put high on the list of priorities in the Agrarian Reform programme. In Hama an estimated area of some 255,000[19] to 270,000 ha.[20] was, theoretically, available for distribution. In fact the first figure is a more likely approximation as the second figure comes from a 1950/1 source, and a certain amount of state land was registered by private owners in the 1950's. This figure includes only the private state domain and excludes the state common land which in the province of Hama is almost entirely confined to the Ghab and will be discussed separately.

The 255,000 ha. of private state domain can be divided again into registered and unregistered areas. As has been stated above about 100,000 ha. remain unregistered in the eastern part of the province and have been excluded from authorised cultivation since 1958. Small areas of state land in Massiaf, Hama and western Salemiya, totalling some 3,000 to 4,000 ha., also remained unregistered in 1973. A total area of some 155,000 ha. has therefore been available for distribution depending on various political considerations and on policies connected with the control of cultivation in semi arid areas.

Table 69 shows how private state domain land had been disposed of by 1973. Virtually no state land was sold or otherwise distributed from 1958 to 1961.

Although the figures of the Statistical Abstract and the records of the Department of Agriculture in Hama are close, there is a discrepancy between the total figures for 1973 of just over 3,000 ha. It is not

TABLE 69 Private state domain land sold and distributed in the province of Hama, 1961 to 1973

Category	Area	
Sold in Hama and Salemiya	73212(1)	68245(2)
Sold in Massiaf		1872(2)
Sold in Hama and Salemiya, 1962*	6300(1)	
Sold and distributed in Hama and Salemiya, 1968**	20359(1)	
Total	99871	956746

* Sold as a result of Announcement Number 6 of 18/6/62.

**Sold or distributed as a result of Law No. 166 of 15/2/68.

Sources: (1) Statistical Abstract, op. cit., various years.

(2) Records of the Department of Agriculture, Hama.

clear why this discrepancy exists. A comparison between the annual figures of the two sources is shown in Table 70. In any case, this left, in 1973, an area of some 55,000 to 58,000 ha. of registered private state domain for distribution or which could be rented out.

The figures of the two sources are similar but those of the Statistical Abstract are consistently slightly higher than those of the Department of Hama. The only major difference concerns 1962 and 1963. Inadequacies of the recording procedures may have resulted in the figure of the Statistical Abstract for 1962 being very low and that of 1963 high. The figures of the Department of Hama suggest that land other than distributed as a result of Announcement No. 6 was distributed in 1962, and it is possible that the new government did not adjust the figures for 1962 after they had been collected.

TABLE 70 Private stock domain land sold in Hama, 1961 to 1973, in hectares

Years	Statistical Abstract(1)	Department of Hama(2)
1961	298	
1962	55	5,172
1963	12,435	9,424
1964	3,480	2,713
1965	10,971	14,132
1966	6,106	4,510
1967	11,803	9,351
1968	10,720	9,148
1969	2,079	1,297
1970	347	329
1971	1,465	941
1972	12,023	9,850
1973	1,430	1,378
Total	73,212	68,245

Sources: (1) Statistical Abstract, op. cit., various years.
(2) Records of the Department of Agriculture, Hama.

As Table 70 shows, the sale of state land can be divided into two periods, the first covering 1962/3 to 1968, and the second 1972. The distribution of state land was, in 1963, a political priority as virtually no state land had been sold at all during the period of the U.A.R.. It is interesting that although great publicity was given to the distribution of expropriated land, particularly during the first period, between 1963 and 1968 the Statistical Abstracts show that the amount of state land distributed was consistently greater than expropriated land. The records of the Department of Agriculture in Hama are less conclusive on this point but still indicate this to be so, as can be seen in a comparison of Tables 61 and 70.

The 1969 to 1971 period in which little distribution of state land was carried out coincides with the period of the maximum distribution of

expropriated land. When this was completed by 1971 the distribution of state land again became of importance. Indeed, 1972 saw a greater distribution of state land in than in any year since 1965*.

One minor point of interest emerges from this course of distribution. In north-western Hama, although only about 200 ha. of private state domain land was distributed this was not actually sold until 1971 and 1972. This indicates the delays and indecision that beset the Ghab/ Acharne Scheme which will be discussed below.

The renting of state land

A certain amount of state land that was not sold was rented out. Table 71 shows the amount of registered state land that was rented.

TABLE 71 Renting of registered private state domain in Hama, 1960 to 1973, in hectares

Year	A Area of state land available for renting*	B Area rented	B as % of A
1960	151,200	NA	
1961	150,902	111,010	74
1962	144,547	17,347	12
1963	132,112	5,924	4
1964	128,632	2,803	2
1965	117,661	18,241	16
1966	111,555	22,886	21
1967	99,752	28,209	28
1968	68,673	24,516	36
1969	66,594	7,405	11
1970	66,247	48,122	73
1971	64,782	2,066	3
1972	52,759	50,670	96
1973	51,329	47,295	92

*The total area of registered state domain minus the area distributed.

Source: Statistical Abstracts, op. cit., various years.

*According to the Statistical Abstracts. 1963 according to the Department of Hama statistics.

Unfortunately information about the renting out of state land from 1958 to 1960 is not available. However, Table 71 shows that in 1961 at least a large area was rented out. Much of this was rented by private operators on an annual basis mostly in the eastern part of the province. It is interesting that these people were still prepared to rent lands in this way despite the political uncertainties and the poor weather conditions in that year.

After 1963 the renting out of state lands to private operators working on a large scale was stopped by the Baathist government. State land that was rented out was subject to strict controls in terms of the area which each individual could rent. Some of this land was in the more fertile western part of the province but much of it was in the eastern part, including the area outside that officially permitted for cultivation. Because this land was only rented out the state gave no assistance in terms of credit or materials for its cultivation.

After 1965 the area of state land rented out increased and in 1970, 1972 and 1973 a very large proportion of available state land was rented out. Most of this land was in the eastern part of the province and the income to the state from rents was low. As the government gave little help to cultivators in these lands the policy of renting them out was ill-conceived and a dangerous risk in such highly marginal agricultural land. However, the government was subject to pressure from smallholders and local residents to rent out the land so did so for political reasons.

The distribution and renting of state land in relation to agricultural policy

These main aspects of agricultural concern arise from the course of the distribution and renting of state land outlined above.

Firstly the distribution and renting of state land continued in the semi-arid areas of the province despite explicit local provision for the consolidation of the cultivated area. The Department of Agriculture in Hama had clear guidelines, based on isolyets thought to be critical to cultivation, on the areas that were to be cultivated. These are shown in Figure 7.

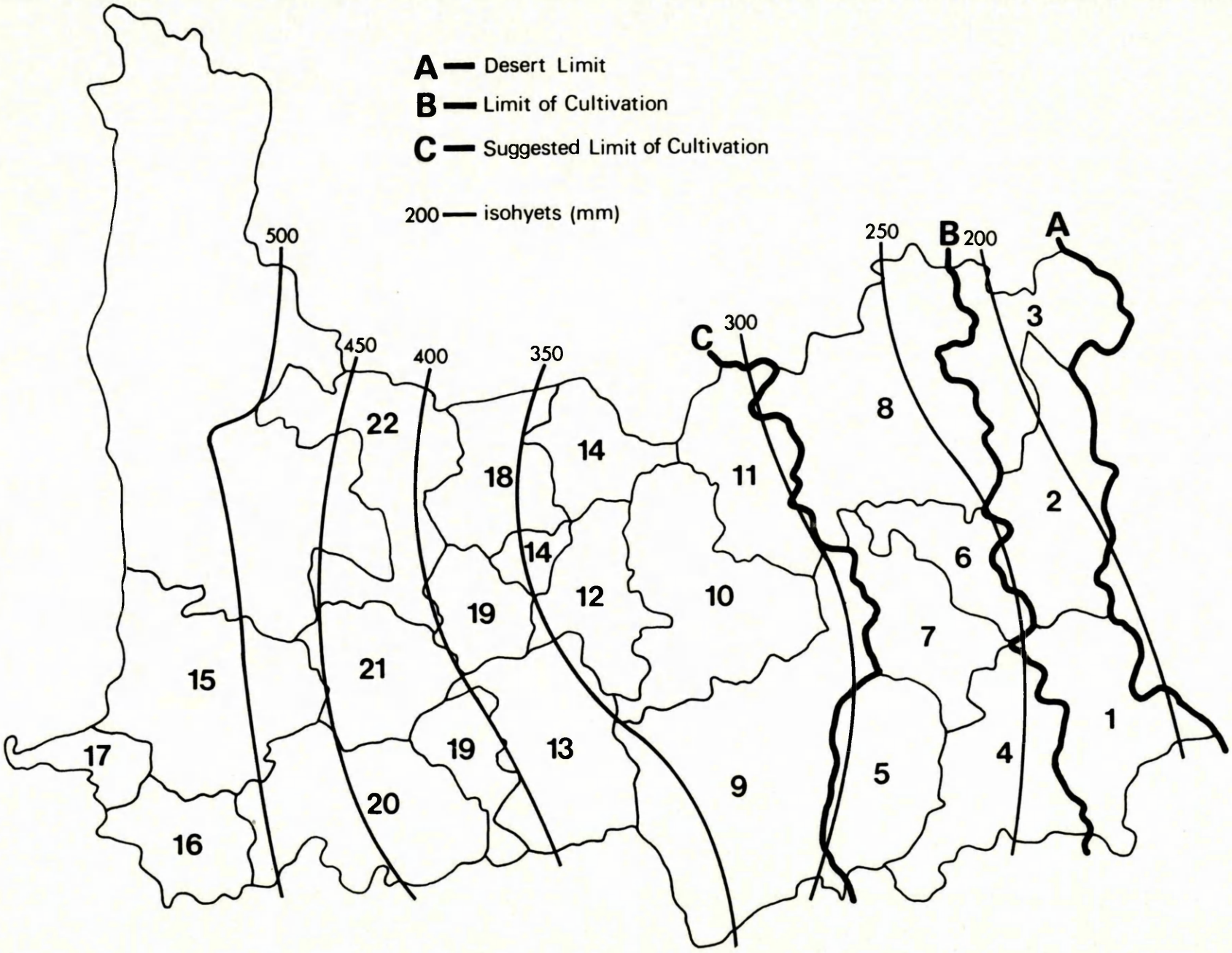
However, as Figure 4 shows, practically all the state domain land distributed or rented was in areas that these guidelines stated were unsuitable for cultivation or in which cultivation was forbidden. Although these guidelines were introduced in 1963 Table 72 shows that they were broken immediately.

TABLE 72 The distribution of state land in eastern Salemiya by village zones, 1962 to 1973, in hectares

Village Area*	Sold State Land		State Land Distributed Free	
	Cultivable	Useless	Cultivable	Useless
1	3,191	5,466	2,032	437
2	8,924	7,730	1,949	620
3	5,020	3,078	968	379
4	692	804	6,620	1,499
5	7	-	-	-
6	4,622	2,223	-	-
7	2,323	2,276	489	358
8	2,198	2,024	2,096	1,065
Total	26,977	23,601	14,154	4,358

*See Figure 7.

Source: Derived from the records of the Department of Agriculture, Hama.



MAP 7. Nahiya boundaries, isohyets and limits of cultivation in the province of Hama

While it is true that not all the land referred to in Table 72 that was sold was cultivated, or was not cultivated every year, the official attempt to prevent cultivation in these areas was undetermined by another official policy, that of selling this land. Table 72 shows that over the 1963 to 1973 period the emphasis on the sale of state land moved beyond the zone between the suggested limit of cultivation and the 'limit of cultivation' to the zone between the 'limit of cultivation' and 'the desert limit'. In these areas the policy of consolidating the cultivated area was set aside. Furthermore the size of plots that were distributed was unsuitable for extensive cultivation or sheep raising. Smallholdings were distributed against explicit agricultural policy for political reasons, which with inevitable longer term agricultural problems for the state. In these areas the state is pledged to provide co-operatives, credit and other agricultural assistance, and this will provide a constant drain on its resources. The longer term problems, however, have been put aside to satisfy the political need to distribute land to as many as possible, and to get rid of the enormous land holdings of the state which in the past were always criticised by those who demanded agrarian reforms.

A second point of interest is the income from the sale and rent of state land in these areas. For historical reasons very little of the private state domain was irrigated. Although complete figures on this subject are not available, the figures for 1963, 1964 and 1965 shown in Table 73 indicate how little of the land was irrigated.

Almost all irrigated land and land with trees in the province outside the state common land was in private hands, and the high incomes that

TABLE 73 Private state domain sold and rented in the province of Hama, 1963 to 1965, irrigated and non-irrigated, in hectares

Year	Sold		Rented	
	Irrigated	Non-Irrigated	Irrigated	Non-Irrigated
1963	1	12,434	2	5,922
1964	0	3,480	276	2,527
1965	0	10,971	460	17,781

Source: Statistical Abstracts, op. cit., various years.

the state could have expected from selling or renting irrigated land were therefore not available. In 1964 and 1965, for instance, rents in irrigated state land were six times and fourteen times those of non-irrigated land respectively.

The period after 1961, for which there are official figures (shown in Table 74) which should be treated with caution, shows that state land was sold at very low rates and rented for a nominal sum. This was the direct result of the political attitude the post-1963 regimes took towards the marginal agricultural areas. Extensive cultivation or ranching by private enterprise was not permitted, but the distribution of smallholdings, whether for sale or rent, was encouraged by low prices and rents, although little agricultural assistance was given particularly in the areas of rented land.

Table 74 shows the estimated value of sales and rent from 1962 to 1972. It also shows income from sales and rents contributed relatively little to the state's outlays on agriculture in the province. As in the Jezeireh rents and prices for land were below those that could have been charged. Table 74 shows that only the years in which the smallest areas

TABLE 74 Sale and rents of private state domain in the province of Hama, 1962 to 1972, in Syrian pounds and hectares

Year	Sale			Rent		
	Value	Area	AV L.S. per ha.	Value	Area	AV L.S. per ha.
1962	NA	NA	NA	135000	17347	7.8
1963	226000	12435	18.2	9000	5924	1.5
1964	65000	3480	18.7	100000	2803	35.6
1965	176000	10971	16.0	99000	18241	5.4
1966	77000	6106	12.6	78000	22886	3.4
1967	210000	11803	17.8	75000	28209	2.7
1968	151000	10720	14.1	98000	24516	4.0
1969	36000	2079	17.3	50000	7405	6.8
1970	13000	347	37.5	106000	48122	2.2
1971	29000	1465	19.8	25000	2066	12.1
1972	NA	NA	NA	111000	50670	2.2

Source: Statistical Abstract, op. cit., various years.

TABLE 74 Sale and rent of private state domain in the province of Hama, 1962 to 1972, in Syrian pounds and hectares

of land were rented, 1964 and 1971, and sold, 1970, were prices or rents per hectare at all substantial. This was probably because these smaller areas contained a comparatively large proportion or irrigated land which was sold and rented at far higher prices. In 1964, for instance, 10% of the land rented was irrigated, which brought in 38% of the rent. Non-irrigated land that was rented in these years also commanded higher prices and was probably of better quality than the large areas of land rented in other years. Non-irrigated land in 1964, for instance, was rented at an average L.S. 24.5 per ha., while in 1965 this figure was L.S. 4.1 per ha.[21].

There is no evidence from Table 74 that the state was prepared to raise the rents or prices over the period of the agrarian reforms. It seems that government policy was to encourage smallholders to rent or buy this land, uneconomic though it was given plot size and climatic conditions, and keep rents low instead of providing adequate services and credit. In this the regime sensed the widespread demand for land ownership but neglected its responsibilities to the smallholders who took these plots and its wider responsibilities in protecting the semi-arid lands for future use.

As has already been mentioned above, after 1963 state lands were rented and sold as smallholdings but in 1961, and probably before, large areas of state land were rented out to individuals just as they were in the Jezeireh, for large scale exploitation. However, Table 75 confirms that after 1962 land was sold well within the limits set down in the 1963 laws.

Table 75 shows that the average plot size of state land sold from 1969 to 1971 was small compared to the other years. This may be due to the

TABLE 75 Average size of holdings of state land sold and rented in the province of Hama, 1961 to 1973, in hectares

Year	Sold Land			Rented Land		
	Area	No. of Beneficiaries	Plot Size	Area	No. Renting	Plot Size
1961	298	NA		11010	NA	
1962*	55	30	1.8	17377	1422	12.2
1963	12435	390	31.9	5924	340	17.4
1964	3480	108	32.2	2803	1372	2.0
1965	10971	347	31.6	18241	1699	10.7
1966	6106	104	58.7	22886	1749	13.1
1967	11803	360	32.8	28209	2207	12.8
1968	10720	419	25.6	24516	1967	12.5
1969	2079	532	3.9	7405	686	10.8
1970	347	264	1.3	48122	3536	13.6
1971	1465	395	3.7	2066	1299	1.6
1972	12023	638	18.8	50670	3017	16.8
1973	1430	98	14.6	47295	2516	18.8
Totals	73212	3685				

*Excludes land sold under Announcement Number 6 of 18.6.1962.

Source: Statistical Abstracts, op. cit., various years.

decline of sales in the eastern part of the province at this time, shown in Table 72. Plots sold in the western part of the province were even smaller than those sold in the eastern part because agricultural conditions were better and the demand for land greater.

Between 1963 and 1968, however, the average size of plots sold was around the maximum permitted. Despite this, the smallholdings in most areas were too small to be viable given the climatic conditions. Furthermore, as will be shown below, the development of operational co-operatives in

the eastern part of the province was very slow, so the extensive cultivation or stock rearing that might have proved viable in these areas was not developed.

Perhaps the most depressing figure from Table 75 is that of 1972, when just over 12000 ha. of state land were sold. Far from allowing for the agricultural conditions in the desert fringe areas the distribution of land, mostly in the areas 3, 8, 2 and 6 shown in Figure 7, showed that the authorities were distributing plots well below the maximum size. The figure for 1973, though for a comparatively small area, does not indicate that the government is likely to alter this policy.

The average plot size of rented land, with the exception of 1969, 1970 and 1973 is well below that of the sold land. As state land that was rented was in the same areas as that sold, the criticisms made above about the viability of such smallholdings given the agricultural conditions are even more applicable. Rents were so low that the government was clearly trying to encourage landless people to rent land. However, some of those who did may have been people who already owned land up to the maximum area although the extent to which this happened is not known. What is clear is that in almost all cases government policy of distribution and renting of the private state domain disregarded the agricultural conditions in the areas where most private state domain was to be found and contradicted policies aimed to control and consolidate the cultivated area.

NOTES

1 Central Bureau of Statistics, S.A.R., 1970-71, Agriculture Census Data, First Stage - Basic Data, Hama Mohafaza, (mimeo), 1972.

2 Records of the Department of Agriculture, Hama.

3 N.S. Randhawa, Socio-Economic Survey of the Ghab farmers, Land Use and Production Series No. 11, U.N. Special Fund, Ghab Development Project, S.A.R., Damascus, 1969, (mimeo), p. iv.

4 Office Arabe de Presse et de Documentation, Syrie et Monde Arabe, op. cit., April/May 1970, p. 26.

5 Derived from Statistical Abstract of Syria, op. cit., 1973, p. 223.

6 Records of the Department of Agriculture, Hama.

7 Records of the Department of Agriculture, Hama.

8 Records of the Department of Agriculture, Hama.

9 Records of the Department of Agriculture, Hama.

10 P. Seale, The Struggle for Syria, op. cit., p. 294.

11 I. Rabinovich, Syria Under the Baath Party, 1963-6, The Army - Party Symbiosis, Jerusalem, 1972, pp. 119-121.

12 Al jaridat al rasmiyah, Official Journal of the Republic of Syria, op. cit., 1959, 1960.

13 Records of the Department of Agriculture, Hama.

14 Statistical Abstract, op. cit., various years.

15 Records of the Department of Agriculture, Hama.

16 Statistical Abstract, op. cit., 1963, p. 327.

17 S. Atallah, The Problems of Land Reform: The Case of Syria, op. cit., p. 50.

18 Statistical Abstract, op. cit., various years.

19 Figures derived from the records of the Department of Agriculture, Hama.

20 A. Al Ricaby, Land Tenure in Syria, in K.H. Parsons, R.J. Penn, P.M. Raup (editors), Land Tenure, Madison, Wisconsin, 1966, p. 91.

21 Statistical Abstract, op. cit., 1964, 1965.

CHAPTER VIII The Setting Up of Co-operatives and the Agricultural Bank in the Province of Hama

(a) The setting up of co-operatives

As has already been shown in Chapter V, the setting up of co-operatives lagged behind the expropriation of land and the distribution of state land, although according to Laws No. 161 and No. 88 beneficiaries were obliged to be members.

Apart from the co-operatives on distributed land, the growth of co-operatives was to be encouraged in areas of private smallholdings and where private owners wanted to form their own co-operatives. Before 1967 these two types of co-operatives were to be dealt with separately, the former under the Ministry of Agrarian Reform and the latter under the Ministry of Agriculture. In 1967 the two ministries were amalgamated in an attempt to reduce the duplication of activities. It also had the effect, however, of radicalizing the co-operative policies as these co-operatives formerly under the Ministry of Agriculture were treated more and more in the same way as those under the Ministry of Agrarian Reform.

The co-ordination of agricultural development through co-operatives in the large areas of smallholdings in the province has been a fundamental part of agricultural policies since 1963. It has been felt that the "socialist transformation of the countryside" could best be achieved through the development of a government controlled and organised programme of agricultural co-operatives, and these bodies would increase production through more efficient utilization of resources and the education of the farmers.

At the same time government supervision of the smallholding sector would prevent the development of medium and below medium sized private, independent properties[1]. To help in this policy the Peasants' Union was set up by Legislative Decree No. 127 of 1964, the aims of which included the introduction of socialism, improvement of methods and production, the protection of peasants' rights and the raising of rural standards of living. Other bodies, the Federation of Agricultural Co-operatives and the Union of Local Agricultural Co-operatives, were set up as a result of the 6th Congress of the Baath in 1966[2], with more or less the same goals.

Needless to say, the smallholders who formed co-operatives under the Ministry of Agriculture before 1967 were not in general sympathetic towards these policies. They had almost all joined co-operatives voluntarily in order to take advantage of the various benefits membership held, particularly reduced rates of interest on loans and concessionary prices on fertilisers and other inputs. As smallholders realized the implications of the amalgamation of the two ministries some attempted to disband their co-operatives. Others tried to avoid joining the co-operatives which the government were trying to expand in villages of private smallholdings.

One co-operative, that at Khaldieh, just south of Hama, is an example of how individuals from co-operatives that were voluntarily formed were not permitted to resign on the grounds that some other members wanted to retain the co-operative. In another village, Towmeen, a number of farmers refused to join a co-operative and later found that permission to build a new church in the village had not been granted. When they agreed to join the co-operative the government gave them financial help in building the church.

Similar examples, though often exaggerated on both sides, are widespread through the province. Although the government has tried to make co-operatives attractive, for a number of reasons the smallholders generally have not found them so and the government has had to resort to force to make them remain or become members. This is partly due to the lack of understanding of farmers of the advantages that might be gained from greater co-operation in cultivation and marketing. However, it has also been due to the delays in implementing the co-operative programme, poor co-operative management and the clear political elements in the formation of co-operatives. Other factors have included the uncertain nature of the future plans for co-operative structures, and the failure to complement advantageous rates of interest on loans and purchases with technical assistance and advice and improved marketing facilities.

The proposed role of the co-operatives was to be both agricultural and political. It was to assist smallholders, whether beneficiaries of the agrarian reforms or not, with the technical and financial requirements to cultivate their plots. It was also to transform the individual, private enterprise system to one of collective production units organised and run by the state, and to prevent the re-emergence of landowners as a political force.

However, both aspects of co-operative policy have not, in general, been fulfilled. The technical and financial requirements, which will be discussed below, have not been met. Indeed, in many villages the medium and small scale investments made by landowners or businessmen have not been kept up by the new co-operatives. Although many landowners, particularly in the province of Hama, did not invest in agricultural

improvements, it is worth mentioning some examples of those that did. In Shihet Hama in 1953, for instance, water was pumped from the Assi river in a joint venture between the Barazi owner and some local merchants. Soon after the reform laws the scheme fell into disuse, even though a co-operative was formed in the village in 1959. In Zaka a well dug by the Baroudi landowner has been neglected, again despite the formation of a co-operative in the village. The same owner, who retained some land near the village, built another well in 1973, and his land is now irrigated while that belonging to the co-operative is not. A member of the Karkour family, a former owner and renter of land in the Ghab, introduced rice cultivation into the Ghab as early as 1946. In 1958 the new legislation, while ending his activities there, did not provide the co-operative organisation necessary to continue his project[3].

Such examples are so common that it is clear that the co-operative organisations were not set up or were not adequate to take over the state's new responsiblities. In some areas, of course, the landlords were so bad that the farmers benefitted greatly from the increased incomes that resulted from the alterations and controls on the sharecropping arrangements. In these areas, and indeed in other areas, landlords have found it difficult or impossible to collect their rents since the 1958 reforms.

It is also true to say that after the struggles of 1958 to 1963 landowners have tended to avoid investment in lands which tenants still farm. Much of their money is now invested in other sectors of the economy or abroad but if they invest in the agricultural sector it is either in improving lands on which there are no tenants, or in developing capital intensive projects with small areal requirements. The Karkour family at Ayo, for instance, has built a chicken unit and fish tanks.

Medium and large landowners, however, universally avoid investment in community projects or in agricultural projects outside their own land, and avoid contact or co-operation with co-operatives or any other state controlled agricultural organisations. The widespread activities of landlords before 1958 in small and medium scale projects and in cash loans to tenants for agricultural and other needs have stopped with a few noticeable but unpublicized examples. However, the more formal, impersonal and impartial arrangements made under the Agricultural Bank and the co-operative system have been very slow to take over their role.

The transformation of the agricultural system to one of collective co-operative cultivation has not occurred either. An article that appeared in Nidal Al Fellahine in 1968 spelt out Baathist policy in the agricultural sector as aiming for the collective working of land, operation of machinery, building of houses, stores and shops, and development of new projects[4]. Such statements, together with the unease with which most beneficiaries of land view the ambiguous terms of their certificates of ownership, have made peasant farmers who traditionally wish to own and retain their own smallholdings defensive about their newly won holdings and suspicious of the government's intentions.

However, since 1968 the state's policy, which has been adjusted slightly, has been to develop co-operatives in which the peasant has a defineable piece of land which he cultivates, but conforms to an overall village cultivation plan[5]. Eventually the cultivation of individual plots in this way is to give way to proper collective farming.

Apart from inadequacies of the financial and technical provisions to develop this structure, the opposition of the peasants themselves has

meant that even these plans have, for the present, been shelved. Peasants are allowed to own their own means of production, to chose the crops they grow, to retain their own share of the village land on a permanent basis, and simply combine over the few operations that are clearly better and more cheaply done on a large scale, for instance ploughing. The fact that the co-operatives have been so ineffective in the past, that farmers lack perception of the possibilities for co-operation among smallholders, and that farmers realise the state is taking advantage of the co-operative structure for economic and blatently political motives, means that the long term plans of the Baath for the co-operative sector will probably be resisted by the peasantry for a long time to come.

The development of co-operatives in the province

Up to the end of 1970, the 'year of co-operatives', 175 co-operatives had been set up in the province. Only five of these were without land, one in the city of Hama, and four in or near Salemiya. These were specialised marketing or livestock co-operatives, while the rest were ordinary co-operatives based on a village with the role of supplying various services and acting as a unit of production. Table 76 shows the annual development of co-operatives from 1959 to 1970, outside the Ghab.

In the Ghab and Acharne region there is less specific information about the nature of co-operatives than there is in the rest of the province. This is because although figures for the area of land expropriated for each village area is available, many of the village areas, particularly in the Ghab, have a number of co-operatives. The Qalaat al Mudiq area, for instance, includes six co-operatives, Salhab four and Skelbieh three. The development of co-operatives in Ghab and Acharne over the 1959 to 1970 period is shown in Table 77.

TABLE 76 The development of co-operatives in the province of Hama, 1959 to 1970

Year	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	TOTAL
Co-operatives in Private land		1		1			2	1	4	2	1	12	24
Co-operatives in Expropriated land	26		1	7	4	12	1	4	1	4	9	48	117
Co-operatives in State land								2				1	3
Co-operatives in mixed Private and Expropriated land	4				1	1			2		1	7	16
Co-operatives in mixed State and Expropriated land								1				3	4
Co-operatives in mixed Private and State land								3				3	6
Co-operatives without land										2	1	2	5
TOTAL	30	1	1	8	5	13	43	11	7	8	12	76	175

Source: Derived from records of the Department of Agriculture, Hama

TABLE 76 The development of co-operatives in the province of Hama, 1959 to 1970

TABLE 77 Development of co-operatives in Ghab and Acharne, 1959 to 1970

Year	Number of Co-operatives
1959	11
1960	1
1961	
1962	
1963	
1964	1
1965	
1966	
1967	
1968	1
1969	2
1970	41
TOTAL	57

Source: Derived from records of the Departments of Agriculture, Hama and Skelbieh.

In Acharne all the co-operatives have been formed in areas of expropriated land whereas in the Ghab most of the co-operatives have been formed recently on state land. In the area of Tar Allah and the eastern fringe of the Ghab, where a great deal of the early expropriation of land took place, co-operatives are also largely made up of expropriated land.

From these figures a number of interesting points emerge. Firstly, the relatively small number of private co-operatives that were formed in the province reflects the disinterest in the past of co-operative activity and a lack of tradition of co-operation*. In the areas controlled by landlords this was to be expected since landlords in Syria have always feared and opposed such organisations.

*This despite the musha system which has been thought by some observers to facilitate the introduction of co-operative farming.

However, in areas where landlords have not controlled land ownership it has also been rare for private co-operatives to have been formed voluntarily. One exception to this has been the village of Khaldieh which has already been mentioned. Others, in the same area, Rakita and Bseirin, contain only private land and have been formed under the same circumstances as Khaldieh. On the other hand some co-operatives in private land have been formed in the same circumstances as Towmeen, and most of the privately owned land that is in co-operatives that include expropriated or state land has also been drawn in compulsorily, particularly in the period from 1967 to 1970. In a number of villages in the fertile and productive plain west and north west of the city of Hama and in large areas of the eastern part of the province, where large estates did not exist, the development of co-operatives has been very slow.

Secondly, the development of co-operatives in areas of state land - except the Ghab - has been particularly slow, and up to 1970 only 13 co-operatives in the province outside the Ghab were made up wholly or partially of state land. Because most of the state land is in the eastern part of the province, the difficult agricultural conditions suggest that the development of co-operatives should have been pushed forward in these areas. However, these state lands have been a lower priority than both the expropriated lands and the Ghab for the development of co-operatives. This has almost certainly been for the political reason that it was felt desireable to consolidate state control of the expropriated land and land in a prestige project, and for the economic reason that greater returns and fewer costs could be expected from co-operatives in these areas.

Thirdly, the development of specialised marketing or processing co-operatives or machinery co-operatives, only started in 1968. The possibilities for

co-operatives for specialised functions are very good particularly in livestock, but also in the marketing, of particular products or the supply and use of certain sorts of machinery and other inputs. However, it is unlikely that the co-operative movement in the agricultural sector will include the development of such co-operatives except perhaps in livestock areas, as specialized co-operatives run counter to the Baathist ideas of a mass co-operative movement.

Fourthly, the pattern of co-operative development shows that after the initial enthusiasm of 1959 the number of new co-operatives in the province increased very slowly until 1970. Indeed in the whole province nearly 52% of the co-operatives were formed in 1970. Between 1970 and 1974 the number of co-operatives hardly increased as the large number of new co-operatives put a great strain on the financial and manpower resources of the co-operative sector.

Finally, the delays in setting up of co-operatives in the Ghab and Acharne were particularly marked. These delays were not entirely due to the shortage of trained manpower and other resources, though throughout the 1960's such shortages plagued the co-operative organisations. The other reasons will be discussed below.

Despite the great efforts to extend the co-operative system in 1970, large areas of state land and expropriated land that were distributed are still not in co-operatives. As Tables 61 and 69 have shown, the total area of state and expropriated land distributed amounted to some 188,000 to 191,000 ha.* in 1973. On the other hand the total area of co-operatives in 1970 was approximately 100,753 ha., of which perhaps 19,820 ha. was not expropriated or state land, but private land[6]. As few

*Excluding the state common land distributed in Ghab and Acharne.

co-operatives have been formed in the province since 1970, approximately 75,300 ha. of state and expropriated land that should have been in co-operatives in 1974 was not.

Unfortunately an accurate figure of the percentage of expropriated land that was distributed and put into co-operatives is difficult to obtain as the areas of co-operatives in the records of the Department of Agriculture in Hama do not differentiate between what was private, state or expropriated land before the co-operative was formed. However, an estimate based on a combination of figures for expropriated land and the area of co-operatives suggests that approximately 71,600 ha., or about 80% of distributed expropriated land, was in co-operatives. On the other hand only about 9,300 ha. of state land that was distributed, or just under 10% was in co-operatives in 1970[7].

Table 78 shows how the amount of distributed expropriated land that was put into co-operatives in the various nahiyas of the province.

In the first place, columns D and G show that in the eastern part of the province the setting up of co-operatives has not kept pace with the distribution of expropriated land. In areas 8, 9, 10 and 11 in particular the proportion of distributed expropriated land in co-operatives is much lower than in the western part of the province. Areas of state land which have been distributed and which are mostly in the easternmost parts of the province have even fewer co-operatives.

As has already been shown successive regimes have pursued a policy of distributing smallholdings in the marginal eastern areas of the province despite agricultural arguments against it. The Agricultural Bank, which

TABLE 78 Distributed expropriated land in co-operatives in the nahiyas of the province of Hama

A	B	C	D	E	F	G
1	3	23	0	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	3	20	0	NA	271	Over 90%
5	5	3	1	39	1461	About 80%
6	1	17	-	-	-	-
7	1	10	5	4	647	Over 90%
8	1	61	5	80	1799	NA
9	14	19	5	29	8358	About 80%
10	22	9	6	27	16689	About 40%
11	5	14	6	59	2030	About 60%
12	12	3	2	9	5632	Over 90%
13	11	4	4	38	6176	Over 90%
14	8	4	1	8	5537	About 90%
15	10	15	4	74	1557	About 60%
16	13	14	1	13	4141	About 90%
17	8	5	1	NA	NA	NA
18	2	2	0	1	1597	Over 90%
19	10	3	0	28	3287	About 90%
20	21	3	0	32	12033	Over 90%
21	7	2	0	48	3169	About 80%
22	6	3	0	15	3642	NA
Ghab/ Acharne	58	25	-	NA	NA	NA

A: Area number (see Figure 7)
B: No. of nahiyas with co-operatives
C: No. of nahiyas without co-operatives
D: No. of nahiyas with expropriated land but no co-operatives
E: Percentage of expropriated land in area not in co-operatives
F: Area of distributed expropriated land in hectares
G: Estimate of % of F in co-operatives
NA: Not available

Source: Derived from the records of the Department of Agriculture, Hama.

will be discussed below, has continued to distribute credit to small-holders in these areas. However, the delays in setting up co-operatives reflects the fact that limited manpower and technical resources have been concentrated in the better, more profitable western agricultural areas. As a result the eastern part of the province has remained a backward and increasingly expensive agricultural area, its inhabitants

subsidized through the Agricultural Bank but given comparatively little help otherwise in maintaining or improving agricultural practices and production.

In the second place the high percentages of distributed land in co-operatives in the western part of the province shows that in these areas most of those given land have been included in co-operatives. However, column E serves as a reminder that large areas of expropriated land have not yet been formally distributed and their occupants are not members of co-operatives but simply tenants of the state.

With this in mind it must be remembered that although a high proportion of distributed expropriated land is now in co-operatives there were delays in the formation of co-operatives just as there were with the distribution of land. Table 79 shows the date of the formation of the co-operative in relation to the date of first formal expropriations and distributions in each co-operative area. These co-operatives with known elements of private and state land have been excluded.

TABLE 79 (A) The number of years before or after the first expropriation that co-operatives were formed in villages in the province of Hama

	Before												After									
No. of Years	11	10	9	8	7	6	5	4	3	2	1	same	1	2	3	4	5	6	7	8	9	10
No. of Co-operatives	0	0	0	1	0	2	1	0	11	1	6	16	2	15	6	6	27	7	7	6	2	2

(B) The number of years before or after the first distribution that co-operatives were formed in villages in the province of Hama

	Before												After									
No. of Years	11	10	9	8	7	6	5	4	3	2	1	same	1	2	3	4	5	6	7	8	9	10
No. of Co-operatives	1	7	2	-	-	-	8	3	4	3	2	19	2	15	6	6	27	7	7	6	2	2

Source: Derived from the records of the Department of Agriculture, Hama.

Not surprisingly, Table 79 (A) shows that in most cases there was a considerable delay between expropriation of land and the formation of co-operatives, just as there was between expropriation and distribution. It is interesting that a number of co-operatives were formed before formal expropriation began. This is probably due to the fact that in some villages expropriation was delayed, either because of disputes or because of administrative or technical problems, and a co-operative was set up before formal expropriation began. These co-operatives, however, must have contained members who not only had not officially received their land, but whose land still formally belonged to the ex-landowners. It is difficult to see how these co-operative members could identify with the co-operative and put their full energies into co-operative activities under these conditions.

Table 79 (B) shows that in village areas that were distributed and formed into co-operatives, 49 out of 110 co-operatives were formed in the same year as or before the land was formally distributed. 30 of these co-operatives were formed before the first official distributions in the village area, and it is difficult to see how the members of the co-operative could have participated in or supported the co-operative without the same knowledge they were to receive land in it.

The formation of the other co-operatives followed the first distributions of land. 34 co-operatives were set up in the two years following the first distributions, and 21 were set up three or more years later. In 50% of cases, therefore, the formation of the co-operative lagged behind the first distribution of land.

(b) The operation of co-operatives

The shortage of staff

It has already been shown that the shortage of trained staff in co-operatives has been a serious problem in both the operation of co-operatives and the expansion of the co-operative programme. In the province of Hama each co-operative supervisor and accountant may be responsible for five or six village co-operatives. The lack of trained supervisors has been particularly serious since 1970 when so many new co-operatives were formed.

To a large extent co-operative supervisors are either poorly trained or too young and inexperienced to be successful. Some supervisors may themselves come from a co-operative or be smallholders in their own right, but they will only have been sent on a fifteen day training course as their preparation. Others, who may have been to Agricultural secondary school, will also have only fifteen days specialised training in co-operative management, and despite the education they will have received in agriculture their inexperience and youth generally make it difficult for them to gain acceptance in village co-operatives.

In theory co-operatives are managed through the supervisor and accountant, through a co-operative committee of about seven. Either one or both of the paid officials or a committee member represent the Baath party. Membership of this committee may be advantageous to the individual concerned as it offers opportunities in the organisation of marketing, cultivation, and loan distribution. Perhaps more important, as most beneficiaries and smallholders are extremely independent, such a position may ensure non-interference by the co-operative authorities in their private agricultural operations.

The great reservoir of experience and knowledge that exists in the private sector is, of course, excluded from co-operatives. No one possessing more than 16 ha. or who was subjected to land expropriation may join or form a co-operative[8]. While this measure is to prevent former landlords from dominating the new co-operatives or acquiring extra land in the co-operatives, it has resulted in a complete lack of contact between the co-operative sector and the private sector. This has been to the disadvantage of the former which is so much poorer in terms of expertise as well as capital.

The organisation of crop production

Crop production in co-operatives remains in the hands of the smallholder and progress towards the integration of production and land ownership has been slight. In all co-operatives the smallholders share of land is still a defined plot and there is little redistribution of shares to deal with changing numbers in the co-operative as there would be if land control was integrated.

Crop production is theoretically planned two years in advance in each co-operative and should conform to an overall agricultural plan, the details of which are distributed to co-operatives by the Department of Agriculture at the provincial centre. The Department of Agriculture for the province decides the agricultural plan on the basis of national directives, together with consultation with the co-operative supervisors and co-operative committee members. In fact what usually happens is that the smallholders in each village inform the co-operative supervisor what they intend growing, and as long as this is more or less within the wider objectives of the Department of Agriculture these requests are embodied

in the co-operative's plan. Individuals are then expected to keep to this plan and loans and other inputs are, theoretically, allocated on this basis and sanctions of fines or even expulsion exist if the plan is not followed[9].

In some cases, particularly with cotton, the government has had difficulty in maintaining a sufficiently large area of cultivation to supply its processing factories and to sustain cotton exports. Some degree of compulsion is therefore exercised in co-operatives to grow cotton even though government pricing policies have made it an extremely unprofitable crop for the cultivator. In the private sector, of course, there are no such controls on cultivation, though the state can sustain areas of such crops as cotton through the licencing system. If a private owner wishes to reduce his area of cotton he may do so, but only at the risk of losing his licence to grow cotton altogether.

As Table 76 shows, practically all co-operatives are based on village cultivation with very few specialized co-operatives. The political reasons for this have already been mentioned but for financial and management reasons as well specialized co-operatives have either not been successful or have not been tried in the province. At present the possibility of sheep fattening co-operatives is being considered but other specialized product or function co-operatives, which would be an important development in the agricultural sector, have not been introduced.

The quality of co-operatives, both in terms of management and the organization of production varies a good deal, as might be expected. Some of the best co-operatives are in Christian villages, for instance

Mehardeh just north-west of Hama. No doubt the sense of minority among the Christians in this part of Syria partly explains their willingness to co-operate, and their generally high level of education and entrepreneurial skill accounts for the success of their production. In addition Mehardeh is the largest machinery and agricultural implement centre in central Syria and has a high proportion of traders in machinery, mechanics and machine operators.

The Department of Agriculture in Hama has graded the co-operatives in the province (excluding the Ghab) into excellent, average and poor. This division is unsatisfactory because no criteria are put forward for making distinctions which were made subjectively by the officers of the local Department of Agriculture. As Table 80 shows, a very large number of co-operatives were classed as average, undoubtedly covering a wide variation as the quality of service and management offered.

TABLE 80 Grading of co-operatives in the mantikas of Hama, Salemiya and Massiaf, 1971

	Excellent	Average	Poor
Hama	5	80	-
Salemiya	9	31	15
Massiaf	10	22	2
TOTAL	24	133	17

Source: Derived from the records of the Department of Agriculture, Hama.

The marketing of co-operative products

As has already been stated the benefits of co-operatives so far has been largely artificial in the sense that governments have created concessions

on loans and rates of interest and prices of imputs. Greater profits through improved administration, management and production methods have not emerged as the result of the co-operative programme. As a result the state can only recoup its subsidies through the control of the marketing and prices of co-operative products and prices given to co-operative producers are generally low.

For the most important crops, cotton, wheat, barley, sugar beet and tobacco, the crop is sold compulsorily to the state at a fixed price. This is also true for private farmers though they avoid the extra charges to co-operative members for co-operative services. In the private sector other crops can be sold on the open market but in co-operatives all crops should be sold through the co-operative. In most cases prices given to co-operative members for these crops are well below those obtained by private producers. They not only avoid the standard charges made to co-operative members but can also look round for better prices or hold their produce back until prices in the open market improve.

One serious result of this has been the attempts by co-operative members either to avoid paying their co-operative charges or to sell their products on the open or black market* and thus obtain better prices. The Department of Agriculture tries to prevent such evasion by checking the areas of crops planted in each co-operative and calculating the expected crop. If the crop falls below the expected level by more than 15% the co-operatives activities are investigated. In the province of Hama about 50 co-operatives are investigated each year[10].

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*In 1973 the prices given to producers for cotton was twice as high in Turkey as in Syria, so smuggling was a serious problem. Prices fixed by the government for sugar beet frequently offer such small profit that cultivators obtain better prices by selling their produce to sheep herders for fodder.

One of the contributory causes of such evasion in the co-operative sector is that individual farmers are still entitled to hold land in private smallholdings or as tenants elsewhere. In 1958 it was hoped that this would eventually be prohibited and landowners would be allowed to buy out tenants on their land in order to reduce this multiple ownership pattern. However, nothing has been done to carry this out. It has been estimated that more than two thirds of all private land still has tenants on it, many of whom own land in co-operatives too[11]. It is therefore fairly easy for co-operative members with land elsewhere to neglect their co-operative land, rent or lend it out, or transfer a certain amount of the production of their land in co-operatives to their other holdings. Such evasion is probably widespread but, of course, illegal.

A further problem is that of corruption in the marketing of crops. A co-operative supervisor, who may be responsible for five or six villages, may only earn L.S. 300 a month. He is obviously in an extremely important and powerful position recording production by individuals, the requirements of individuals for credit, and recording village production. Others, including graders at cotton and other government-owned processing plants, supervisors of the irrigation networks, and those responsible for distributing seeds and fertilizers to the co-operatives, are also able to use their position to their own advantage. Problems of bribery are undoubtedly widespread, largely because of the very low salaries and inadequate supervision[12].

In the co-operative sector, though less than in the private sector, farmers are usually keen to grow profitable crops which are not yet the subject of government monopoly marketing controls. A recent crop of this

type has been sunflowers, as sunflower seed oil now fetches good prices. It is profitable, but not particularly labour intensive, an aspect that is usually attractive to co-operative farmers who are not prepared to work intensively even on profitable crops like vegetables if they are not going to be the sole recipients of the profit. It is unfortunate that enthusiasm for growing new or labour intensive crops in the private sector cannot be generated by the reorganisation of price controls to encourage co-operative farmers to cultivate the most important and largest crops in Syria, and to market them willingly through the co-operative system.

(c) The Agricultural Bank

In the province of Hama the Agricultural Bank has a central office at Hama, and three branches at Massiaf, Salemiya and Skelbieh. The Skelbieh branch was set up in 1965 for the Ghab project, but the other offices were in existence before 1958.

The development of the role of the Agricultural Bank has been a critical factor in the progress of the agrarian reforms and any assessment of the reforms must include a close look at the activities of the Agricultural Bank. Without adequate credit for both working capital and small and medium scale development, improvements in cultivation would be impossible. Without adequate funding the viability of co-operatives would be very questionable and the disillusionment among their members would grow. On the political front, failure to supply adequate working capital would leave farmers with no alternative but to continue using non-institutional credit sources, the landlords, merchants and others against whom the reforms were aimed.

Table 81 gives an estimate of the value of credit extended by the Agricultural Bank in Hama over the period 1956 to 1973, though the records of the four branches of the Agricultural Bank, particularly before 1967, are in a disorganized state and are not easy to follow. This is particularly true of the record of the debt situation and debt repayments. The whole question of loan repayment will be dealt with below, but it is important to bear in mind that the levels of repayment in one year have been an important factor in the willingness of the Agricultural Bank to lend in following years, as each branch is allocated a credit quota which it may only exceed under extraordinary climatic or other circumstances. This quota has risen over the period concerned, so increases in outlays by the bank have occurred.

TABLE 81 Total loans extended by the Agricultural Bank in the province of Hama, 1956 to 1973, in thousands of Syrian pounds

1956	2143	1965	1745
1957	6324	1966	7026
1958	3400	1967	8653
1959	3595	1968	12593
1960	2358	1969	15334
1961	2172	1970	16800
1962	1476	1971	(18194)
1963	(245)*	1972	(17205)
1964	(353)	1973	(16123)
			(18194)
			(17205)
			(16123)

*Figures in brackets show incomplete loan figures

Source: Derived from the records of the Agricultural Banks in Hama, Massiaf, Salemiya and Skelbieh.

Although the short term loans can easily be extracted from the records of the Agricultural Bank, it is extremely difficult to discover how much credit was extended on a medium or a long term basis. This is because the arrangements for the repayment of debts were made over periods of one to

five years (medium) and one to ten years (long) and are included in many cases in the overall figures for medium and long term loans. Medium and long term loan figures therefore usually include an element of loan repayment as well as new loans. However, there is no consistency in either the scheme of loan repayments that was included in the figures for medium or long term loans, or between branches on how the figures were made up. In trying to assess the ratio of short to medium and long term loans it has therefore been necessary to pick out years for which the figures are clearer. This is unsatisfactory as it means that the overall relationship between short and medium/long term loans cannot be shown.

Table 82 shows the relative importance of short term loans to the private sector, co-operative sector, and government sector (organized by the government controlled sugar and onion factories). It reflects the continued importance of the private sector, which includes not only freehold owners but some beneficiaries of state and expropriated land who have not yet been included in co-operatives. Even during and after 1970, when so many co-operatives were formed, the total area of co-operatives, including the Ghab and Acharne amounted to only about 25% of the cultivated area of the province[13], and up to that date the preponderance of private land was reflected in the distribution of short term loans to the private sector.

Two important points are shown by Table 82 in connection with the distribution of laons between the private and co-operative sectors. In the first place the lack of lending through co-operatives before 1964 is obvious. In Salemiya loans of this sort did not start until 1970, even though by the end of 1969 there were 33 co-operatives in the mantika.

TABLE 82 Value of short term loans extended in the province of Hama, 1956 to 1973, in thousands of Syrian pounds

	Private Sector					Co-operative Sector				Government Sector			
	Massiaf	Hama	Salemiya	Ghab		Massiaf	Hama	Salemiya	Ghab	Hama	Salemiya	Ghab	Total
Year				Private	State								
1956		2143											2143
1957	779	2892	2653										6324
1958	200	2696	504										3400
1959	290	3305	0										3595
1960	180	2178	0										2358
1961	142	2030	0										2172
1962	127	509	840										1476
1963	245	NA	NA										(245)
1964	270	NA	NA			43	40						(353)
1965	295	887	410			10	79						1691
1966	470	384	1367	1030	3347	45	64		191				6998
1967	609	2236	2405	873	2207	65	39		99				8553
1968	1030	3353	2440	1368	3173	84	144		182	75		438	12287
1969	1216	4010	2712	3131	2717	105	153		381	184	14	108	14731
1970	1215	3945	2620	2109	2759	250	272	247	889	468	24	917	15715
1971	1065	3534	2873	2215	933	800	555	1825	2327	452	26	749	17354
1972	995	2975	1724	3013	1758	800	772	613	2437	796	44	798	16725
1973	1000	2776	1501	1662	448	1000	886	2379	2084	630	115	883	15364

Source: Derived from the records of the Agricultural Banks in Hama, Massiaf, Salemiya and Skelbieh, 1956 to 1973.

TABLE 82 Value of short term loans extended in the province of Hama, 1956 to 1973, in thousands of Syrian pounds

Members of co-operatives were able to get small loans from the Agricultural Bank as private owners before loans were made through co-operatives but had to guarantee the loans personally. Later the co-operative guaranteed the loans on their behalf. The fact that credit was not given through co-operatives at this time shows that most of the co-operatives that had been formed were not functioning properly. As Table 83 confirms, by the end of 1968, by which time 87 co-operatives had been formed, only about 4% of all short term credit was being loaned through co-operatives.

Secondly, the period from 1968 to 1973 showed major changes in the distribution of short term loans, as is also shown in Table 82.

TABLE 83 Total short term loans to private and co-operative sectors, 1968 to 1973, in Syrian pounds*

Year	Total Private Loans	%	Total Co-operative Loans	%	Total
1968	11413840	97	409490	3	11823330
1969	13786270	96	639340	4	14425610
1970	12647090	88	1656960	12	14304050
1971	10619040	66	5507200	34	16126240
1972	10465680	69	4622680	31	15088360
1973	7387320	54	6347980	46	13735300

*Loans in the 'government' sector, shown in Table 82, which went to farmers in and out of co-operatives, are not included.

Source: Derived from the records of the branches of the Agricultural Bank in the province of Hama, 1968 to 1973.

Table 82 shows that during and after 1970 a serious attempt was made to make co-operatives operational, at least to the extent of acting as a channel for credit. From 1971 the concentration of Agricultural Bank resources on the co-operative sector is obvious and indicates that at last

the government was giving priority to developing co-operative credit. Despite this, after 1970 many co-operatives did not give out credit. It has been estimated that in 1971, for instance, only 25 out of 43 co-operatives in the Ghab were obtaining credit from the Agricultural Bank for their members[14].

Although the total amount of short term loans given out by the Agricultural Bank has, rather surprisingly, declined since 1971, the change of emphasis from loans to the private sector has meant enormous increases in credit going to co-operatives. This belated development shows that even though co-operatives are not operating production and marketing methods in their envisaged form, they are at last receiving credit for the beneficiaries of the agricultural reform and other smallholders.

The proportion of long and medium to short loans that have been given out is not clear for the reasons outlined above. However, medium and long term loans have been given by the Agricultural Bank for the purchase of machinery, digging wells, and construction work. Before 1958 farmers and landowners sought medium and long term loans from private banks, but such loans were also given out to co-operatives by the Agricultural Bank on a small scale. In 1957 L.S. 25000 and L.S. 17000 were given out by the Agricultural Bank in medium term loans in Massiaf and Hama respectively. With the exception of 1960, when L.S. 116210 was given out in medium term loans in Hama, a significant increase in the total amount of medium term loans did not occur until 1964.

In 1965 and 1966, at the time the private banks were nationalized, lending on medium and, for the first time, on long terms, increased

greatly. In Hama the total medium and long term loans in 1966 was L.S. 2613720, the highest ever in the mantika, yet this still fell below the amount loaned on short term. From 1967 no long term loans were given out at all while medium term loans were cut back to pre 1965 levels. However, medium term loans were given for the first time in the new branch of the bank at Skelbieh.

In Salemiya, although medium term loans had been given out before 1958, none were given in 1959, 1960 or 1961. After that a handful of loans were given out each year, the largest number being in 1962 when 84 farmers received medium loans. In no other year since has even half that number been given out. From 1966, unlike Hama, some long term loans were given out, but the combined outstanding medium and long term loans in the Salemiya branch did not surpass the figures for short term loans for any year.

From 1969 the amount of medium term credit given to the private sector increased slightly, at least in Hama. In the Ghab a considerable amount of medium and long term credit was given out in 1971 and 1972, though the total given out from these years came to less than half the 1971 short term credit total for the mantika[15].

In the co-operative sector more detailed information is available and is shown in Table 84. It shows the development of medium and long term loans in the co-operative sector has been even more recent than that of short term loans. Furthermore, with the exception of 1968 and 1969 in Massiaf and Hama, medium and long term loans given out each year total far less than short term loans extended for any year in any of the branches.

TABLE 84 Medium and long term loans extended in the co-operative sector in the province of Hama, 1965 to 1973, in Syrian pounds

	Medium and long term loans			
Year	Massiaf	Hama	Ghab	Salemiya
1965	53560			
1966	27500			
1967	97875	3680		
1968	67200	238944		
1969	100000	451499	52000	
1970	65000	846133	13000	160553
1971	13000	297850	529150	NA
1972	110000	317821	51295	NA
1973	150000	226000	383280	NA

Source: Derived from the records of the branches of the Agricultural Bank in the province of Hama, 1965 to 1973.

Despite the increase in medium and long term loans in co-operatives which exceeded those in the private sector after 1968, the co-operative sector, like the private sector, was clearly short of longer term credit. Such credit was essential in the co-operative sector for investments in machinery and so on, but co-operative members lacked the personal security necessary to obtain longer term loans. It was only as the co-operatives became operational from a credit point of view that improvements and repairs that required larger and longer term loans could be carried out. The private sector, on the other hand, could and did borrow capital from the Agricultural Bank on medium and long term arrangements throughout the 1958 to 1970 period. The comparatively small amounts that were loaned, however, reflect not only the shortage of available capital for anything other than short term loans, but also the unwillingness of medium and larger scale private operators, particularly those who were affected by the expropriations, to take loans from the Agricultural Bank. They preferred to use their own capital for what investment they did make.

The balance of short and medium/long term loans from the Agricultural Bank shows that the Agricultural Bank is still concerned almost entirely, in both the private and co-operative sectors, with the perennial problem of supplying adequate working capital. The essential capital for developments and repairs which should be available as medium and long term loans has taken second place to the annual requirements.

In spite of this policy it is doubtful whether the needs for working capital of the agricultural sector are being met, with the result that some of the essential cultivation operations are not all being carried out because of lack of money. Even in the Ghab, an area of special attention for the government, it has been reliably estimated that the Agricultural Bank is providing only a small proportion of working capital needs. In 1972, for instance, in the co-operative sector of the Ghab an average of L.S. 70 was given out in short term loans to each farmer, or between one sixth and one seventh of annual farm expenses. In Acharne the figure was about L.S. 80, or about one fifth of annual farm expenses[16]. Even taking into account profit margins, most of those would have to go into covering annual expenses so little would be available for saving or larger scale capital expenditure. A large proportion of the agricultural sector, particularly the smallholders, whether in co-operatives or not, still carries on a 'hand to mouth' existence which the recent developments of longer term credit are only beginning to affect. In this the decline of the total credit made available to the agricultural sector since 1971 is a depressing development but the redistribution of loans between private and co-operative sectors since 1970 is encouraging.

Since 1968 loans have also been given by the Agricultural Bank through certain government owned processing factories. This has been encouraged

by the government in order to try to ensure supplies of raw materials so that the factories can operate to full capacity. The extent of these loans can be seen under 'Government Sector' in Table 82, and in detail in Table 85.

TABLE 85 Distribution of short term loans in the government sector, 1968 to 1973, in Syrian pounds

Year	Ghab		Hama		Salemiya
	Sugar	State Farms	Sugar	Onion	Onion
1968	437764		75410		
1969	107843		170482	13852	14251
1970	716970	20310	463791	4605	24101
1971	604506	14238	446011	6319	25946
1972	736709	61552	785221	10563	43976
1973	309067	149483	574389	55331	115172

Source: Derived from the records of the branches of the Agricultural Bank at Hama, Salemiya and Skelbieh.

Loans of this sort, which are all of seeds, fertilizer or other imputs, are becoming a more important element in short term credit. The distribution of imputs for a specific purpose is important as the government is trying to develop specific industries aimed at cutting down imports or processing raw materials for exports. However, the government owned sugar factories at Jisr esh Shughur and Homs, which are partly supplied by the Ghab and Hama areas respectively, are not working to full capacity. This is partly due to poor cultivation and low yields but as has been mentioned already it is also due to poor prices given by the factories for sugar beet. Sugar beet is, in any case, not popular because it is a new crop, but it is also unpopular because of the low return it

gives to the cultivator. It is therefore essential that with credit or other help given by the government an encouraging price level is also put on such crops.

In Salemiya the onion drying factory is not in as good a position as the sugar factories to give low prices for onions, for, unlike sugar, there is no government monopoly on the purchasing of onions from cultivators. Although the farmers who take credit from the onion factory must sell their product to the factory, to maintain interest in sale to the factory the government has had to give prices that compete with the open market.

There is considerable scope for the further development of processing industries in Hama, which is the centre of one of the richest agricultural areas in Syria. So far, apart from cotton ginning, only the onion factory at Salemiya and the sugar factory at Jisr esh Shughur have been developed.

The other loans given out in the Ghab through the government sector are for the state farms and research centres that have been established. These include the state farms actually in the Ghab valley, several of which are to be developed as cattle centres, and the cattle research centre at Jub Ramleh in Acharne. This state land is of course separate from the state land that has been distributed and which receives credit through the Agricultural Bank as shown in Table 82. The development of the state farms will be discussed in relation to the Ghab.

All loans distributed in the government sector, except to the state farms, are loans in kind rather than cash. In the private and co-operative

sectors, however, short term loans have been distributed in both cash and kind form. The requirements for annual loans are, of course, of both kind and cash type. Apart from seeds, fertilizer and so on, cash is needed to pay for ploughing, labour costs, storage and other outlays. It is difficult to obtain details of what proportion of the annual loans were given in cash and kind, as the records have not always been kept in that way. However, some figures are available from 1968, and are shown in Table 86.

TABLE 86 Percentage of short term credit in the private and co-operative sectors given in kind, in the province of Hama, 1968 to 1973

Year	Private				Co-operative			
	Massiaf	Hama(2)	Ghab(2)	Salemiya	Massiaf	Hama(2)	Ghab(2)	Salemiya(1
1968	NA	73	1	NA	NA	63	79	NA
1969	NA	62	46	NA	NA	53	79	NA
1970	NA	66	40	NA	NA	52	63	NA
1971	NA	55	51	NA	NA	50	72	NA
1972	NA	51	61	NA	NA	36	70	NA
1973	NA	NA	NA	22	NA	NA	NA	93

Sources: (1) Derived from the records of the branches of the Agricultural Bank in Salemiya 1973.

(2) Statistical Abstract of the Province of Hama (No. 1), Central Office of the Province, 1972, Arabic text.

Unfortunately, the figures in Table 86 are not complete, but for the three branches of the Agricultural Bank for which there are some figures a number of points are of interest. First, the Agricultural Bank has made a great effort to distribute a large percentage of its loans in kind. This can be seen in the Ghab, where after 1968 an increased proportion of the private loans was given in kind, and in the private sector in Hama

the figures from 1968 to 1973 compare with 20% and 41% for 1965 and 1966 respectively[17]. The Agricultural Bank has given out loans in kind to try to ensure that they are used for agricultural purposes, and government control of the marketing of cotton seed and more recently wheat, barley and other seeds has helped ensure to some extent that such loans are not sold for cash.

Secondly, in both the Ghab and Salemiya, and, according to officials in the Agricultural Bank in Massiaf, in Massiaf as well, the percentage of loans given in kind to the co-operative sector has been higher than in the private sector. This has been partly because the Agricultural Bank has wished to keep a closer control on loans in the co-operative sector, which are not guaranteed personally as they are in the private sector but by the co-operative itself, which is in turn guaranteed by the government. It is also an attempt to give the co-operative sector priority in supplies of imputs over the private sector in the hope that cultivation practices and production in the co-operatives will improve. It is interesting that Table 86 shows a particularly high proportion of loans to co-operatives in Salemiya being given in kind. This reflects the low profitability of agriculture in most of Salemiya and the pressure on cultivators to use their loans for purposes other than agriculture, a practice the Agricultural Bank is trying to stamp out by extending loans in kind rather than cash.

The slight decline in the percentage of loans in kind, particularly from 1968 to 1970, may have been partly due to the increase of the total short term loans as shown in Table 82. The programme of building government

owned stores and supply centres only got underway seriously after the beginning of the third five year plan, so in those three years in particular the increase in amount of cash given out exceeded the increase of the values of loan in kind. It is also important to note that 1969 to 1970 was not a particularly good rainfall year so a greater proportion of the grain that would have been used for seed was sold for consumption. The importance of the weather on not only the production of the year in question, but also the availability of imputs for the subsequent year cannot be ignored. The increased role of government in the purchase of crops and in the storage of and distribution of seed particularly during the period of the third five year plan may help to reduce the effects of the weather in this respect.

Finally, the figure of 1% for the proportion of loans given in kind in the Ghab in 1968 shows that in many areas the storage and distribution of imputs by the Agricultural Bank and Departments of Agriculture has developed very slowly. Virtually all loans in the Ghab in 1968 were cash loans (the co-operative sector, as Table 82 shows, was only a small proportion of all short term loans in the Ghab), because there was no storage, distribution or supervisory organization in this area. It is only since 1969 that progress has been made in setting up the necessary storage and other facilities there.

(d) Agricultural debts

The debt problem in the province of Hama

The overriding preoccupation of the Agricultural Bank in Hama, as is the case in many other parts of Syria, has been that of debt and trying to ensure the repayment of loans. The Agricultural Bank has been left with

the problem of trying to run itself as a business and at the same time having to follow the government's political and social policies by extending credit to a large number of smallholders[18].

In pursuing the first objective, the Agricultural Bank would have made loans to the private sector and to those offering their property as security. However, in following the second objective it has had to extend loans to a number of smallholders and others who did not even have the security of land to offer. Furthermore the Agricultural Bank has had to try to replace credit given by landlords and merchants that was based on personal relations and was far more flexible in terms of interest rates and repayment schedules than could be incorporated into any system run by a bank.

Most farmers in Syria have a long tradition of debt and their only experience of borrowing has been from non-institutional sources. In general they have a poor knowledge of and attitude towards the role and problems of the Agricultural Bank. Non-repayment of loans and the avoidance of repaying loans has been more usual than a businesslike attitude towards the service provided by the Agricultural Bank. Loans are frequently used for non-agricultural purposes, particularly if they are cash loans, and there is for this reason a widespread preference for cash credit[19].

A further factor contributing towards the problem of debt has been that the Agricultural Bank, like the Department of Co-operatives or the Ministry of Agriculture and Agrarian Reform, has had a severe shortage of trained managers, credit supervisors and inspectors. As a result of the

shortage and poor quality of the staff in the Agricultural Bank and the attitude of the majority of farmers to loans from it, both problems which have been only partially solved to this day, debt has become a serious feature of the Agricultural Bank.

The debts that have burdened the Agricultural Bank over the period 1958 to 1973 are of three kinds. In the first place there are the debts that were incurred before 1958, secondly there are those that resulted from the 1959 to 1961 period of drought during which many repayments were postponed, and finally there are the debts that have been building up since 1961 as a result of the unwillingness and inability of borrowers to repay them.

Although levels of debt are a sensitive matter to the Agricultural Bank it has been possible to get some idea of levels of debt repayment and the size of outstanding debts in 1958 and 1961 in the province. Table 87 shows the level of outstanding debt in 1958.

TABLE 87 Outstanding debt in 1958 in the province of Hama, in Syrian pounds

Year	Type of Loan	Massiaf	Hama	Salemiya	Total
1958	Short	445132	3218341	2251253	5914726
	Medium	9800	1700	NA	

Source: Derived from the records of the branches of the Agricultural Bank in Hama, Salemiya and Massiaf.

It is interesting that the outstanding debt for short term loans exceeded the short term loans given out in 1958 by 223%, 109% and 445% in Massiaf, Hama and Salemiya respectively. Although the medium term debt for Salemiya

could not be extracted from the records, it is almost certainly much larger than the medium debt for Massiaf or Hama. This is due to the considerable activity during the 1950's in this part of the province in digging wells, installing water pumps and carrying out small scale irrigation activities[20].

Between 1959 and 1961, although repayments continued in a satisfactory manner in Massiaf, the wettest part of the province, the level of outstanding loans in the rest of the province increased enormously. In Hama the level of outstanding short term loans reached about L.S. 8,963,000 nearly three times the level of 1958. In Salemiya the debt increase was avoided only by the drastic measure of cutting all credit facilities in the mantika. However, the government did give out a considerable amount of money and seeds as relief totalling perhaps L.S. 1,550,000.

The debts incurred before 1958 and the debts that resulted from the disastrous weather conditions of 1959 to 1961 gave the Agricultural Bank a difficult start in its new and expanding role. Table 88 shows that although the level of short term debt repayment improved, the failure to repay even the short term loans continued. Figures shown in Table 88 give the repayments as a percentage of short term loans given out in that year. Those figures that exceed 100% show that from time to time the farmers were able to pay back some of their outstanding debt from previous years.

Figures for medium and long term loans that have fallen behind scheduled repayment cannot be deduced from the available records in the various branches. In any case the volume of medium and long term loans was small compared to short term loans, and longer term loans required greater security, in the private sector at least.

TABLE 88 Repayments as a percentage of short term loans given out for each year, 1958 to 1973, in the private, co-operative and government sectors

YEAR	PRIVATE				CO-OPERATIVE				GOVERNMENT			
	Massiaf	Hama	Ghab	Salemiya	Massiaf	Hama	Ghab	Salemiya	Hama & Salemiya Onion	Hama Sugar	Ghab Sugar	Ghab State Farm
1958	104	44		30								
1959	160	68		0+								
1960	123	0		0								
1961	96	NA		0								
1962	124	330*		104								
1963	105	NA		NA								
1964	87	0		0	76	100						
1965	107	NA		114	106	53						
1966	96	81	113	91	30	100	43					
1967	130	97	101	68	146	73	170					
1968	72	93	108	85	83	68	78			77		
1969	83	98	78	70	114	116	97	63	100	0	82	
1970	103	96	108	65	87	47	63	61	100	105		30
1971	92	104	92	76	38	117	80	74	100	89		129
1972	101	104	71	66	69	101	129	75	100	88		111
1973	93	89	100	99	49	62	86	75	100	106		64

*The 1962 distribution of short term loans from the Hama branch was very low, amounting to 25% of the 1961 total.

+No loans given out, but some repayment made on previous debts.

Source: Derived from the records of the branches of the Agricultural Bank at Massiaf, Hama, Skelbieh and Salemiya.

TABLE 88 Repayments as a percentage of short term loans given out for each year, 1958 to 1973, in the private, co-operative and government sectors

The record of repayment shown in Table 88 brings out a number of important considerations in the activities of the Agricultural Bank. In the first place the figures for 1958 to 1962 show the dominant importance of rainfall and water availability to the agricultural performance in the centre and east of the province. The higher rainfall areas in the west, where cultivation is more predictable, can sustain a sufficiently successful agriculture to enable fairly consistent repayment of loans.

In the eastern part of the province, repayment of loans has fallen consistently below the amount given out for each year in both private and co-operative sectors. The figures for Salemiya show the dilemma of the Agricultural Bank between its business function and its role in extending credit to the very large number of smallholders and tenants. In only three years in Salemiya did repayments exceed the loans extended, in 1960, 1962 and 1965, all in the private sector, though in 1973 the level of repayment was also satisfactory. 1962 was one of the best rainfall years of the whole period. In 1965, as Table 82 shows, total short term credit extended in Salemiya was comparatively small, less than one third that of 1966, and approximately one sixth that of 1967. Although repayment is clearly not related solely to the total credit extended, before 1965 the credit was not extended to the great mass of farmers. Even in Salemiya it might be possible to run a small scale, business-like Agricultural Bank without serious losses, except perhaps during disastrous years such as 1959 to 1961. However, this would conflict with other objectives in the agricultural policy so losses in drier areas of the province have been accepted, with continued cultivation in such areas being subsidized through the Agricultural Bank.

In Hama and to a lesser extent the Ghab, the figures of repayments show a high percentage of loans to the private sector were repaid on time. This has partly been due to improved management and organization in the two mantikas. Before 1966 farmers in the Ghab had incurred debts but the figures for 1966 to 1968, the first three years in which the Ghab had credit arrangements separate from Hama and Massiaf, show that farmers in the Ghab were able to repay at least some of their debts. It has been estimated that in the Ghab itself between 60% and 70% of farmers had incurred debts by 1968[21]. Although the Ghab is not without problems in water supply, flooding and cultivation methods, that such a large proportion of farmers were in debt was due to a large extent to poor management and control of the use of credit.

In the government sector, the problems of the state farms, which will be discussed below, are reflected in the figures of Table 88. The onion factory in Salemiya has been able to ensure constant repayment of loans to the Agricultural Bank. The factory manages the loans it gives out so that even if the factory is not receiving 100% repayment for loans it is profitable enough to be able to repay the Agricultural Bank in full. Loans to the sugar factories show a less satisfactory level of repayment and as the loans are given on the same basis as those to the onion factory, the repayment record indicates that operational problems exist in the factories and that they are not consistently profitable enterprises.

Finally, a comparison between the repayment levels of the private and co-operative sectors shows two points of interest. The first is that as the proportion of short term loans given to co-operatives has increased, so the levels of repayment in the co-operative sector have fallen below

those in the private sector. Table 88 shows that from 1966 to 1969 repayments in the private sector exceeded those in the co-operative sector on 5 out of 13 instances, whereas between 1970 and 1973 the figures were 13 out of 16. The rapid extension of credit through co-operatives to smallholders was bound to lead to problems in repayment while methods of cultivation and levels of production have not been greatly improved and co-operative management is of a generally low quality.

Secondly, the levels of repayment in the co-operative sector have been far more uneven than those in the private sector. This may be because in profitable years the greater controls on marketing and supervision of crop production in the co-operative sector ensure that a larger proportion of profits goes towards paying off debts than in the private sector where debt repayment is not a high priority on the long list of expenditures in successful years. The figures also show that in some years cultivation in co-operatives or the financial organization of the co-operatives, falls down seriously. Even in Massiaf, where crop failure due to drought is a comparatively rare occurrence, repayments in the co-operative sector were as low as 38% in 1971 and 49% in 1973. While 1973 was a successful year in the repayment of loans in the private sector, the poor showing in the co-operative sector suggests that serious problems remain in the financial, management and agricultural operations in co-operatives.

Measures taken to deal with debt

As Table 87 shows, debt was a perennial problem even before the Agricultural Bank extended credit to smallholders and members of co-

operatives. After 1958, as the Agricultural Bank extended its credit, the problem of how to prevent and deal with debt became more serious.

In dealing with the problem a number of sanctions were included in the provisions of the Agricultural Bank giving it the right as a last resort to confiscate the land of debtors. This right was embodied, as was the right to withhold loans to anyone with outstanding debts, in the Law No. 130 of 23 August 1958, setting up the Agricultural Bank in its extended role. The right of sequestration of land by the Agricultural Bank was reiterated forceably in Law No. 28 of 8 April 1967. However, apart from the unwillingness of regimes since 1958 to carry out such a threat, the size of the debt problem has made effective implementation of such a policy impossible.

The Agricultural Bank has therefore resorted to a number of methods to deal with the debt problem once it has arisen. It has usually been considered counter productive to withhold new loans from debtors on the grounds that debts would be even more difficult to retrieve, so much of the debt has been added on, with interest, to the subsequent year's debt. This policy, together with the practice of waiving debts, has given a large number of debtors the impression that loans will continue whatever their repayment performances and that in the long run a part or all of their debt will be waived. A large number of debts have indeed been waived. In 1961, after the droughts of 1959 to 1961, approximately L.S. 3.5 million of debts was waived in the mantika of Hama. After the 1963 nationalization of the private banks nearly L.S. 1 million was waived from bad agricultural debts that would otherwise have been passed on to the Agricultural Bank. Since 1961 a number of debts, mostly of a

minor nature, have been waived. In Legislative Decree No. 186 of 29 September 1963 the interest on seed loans in Salemiya was cancelled. In the same year the Ministry of Finance gave the Agricultural Bank money to cover other waived interest. Other similar laws followed for debts of both cash and kind[22].

Even more important than the waiving of debts has been the postponement of debt repayment and the reorganization of debt repayment into instalments to be paid over periods of five or ten years. From an administrative point of view this particular aspect of the Bank's work has taken up a very large part of its efforts. From the point of view of retrieving debts, the argument that the farmer is not being encouraged to think his debts will be waived has some justification. However, postponements and reorganization of instalments to take in new debts and failures to pay previous instalments have been so frequent that most farmers have reached the conclusion that if their debts would not be waived they would certainly be postponed.

The postponement of debts has taken place with both cash and kind loans. Postponement of debts first took place in 1963 and 1964, before the system of repayment by instalments got underway properly. The two main decrees involved were Legislative Decree No. 129 of 31 July 1963 and No. 56 of 24 September 1964, both postponing debts for a one year period.

The reorganization of outstanding debts into instalments to be paid over periods of five and ten years has been a compromise between waiving debts and demanding prompt repayment and applying sanctions if payment was not forthcoming. It was applied initially to short term loans but after 1962 included outstanding medium and long term repayments, all of these being

collected together and set out in instalments over a fixed period for repayment. The first such law was Legislative Decree No. 37 of 1959 in which short term loans were included in five year instalments. This was followed in 1962 by Legislative Decree No. 367 that included debts that had fallen behind from Decree No. 37 and subsequent debts in five year instalments. Later in the same year Legislative Decree No. 29 converted more debts incurred before 1959 into five and ten year instalments. In 1966 Legislative Decree No. 27 put outstanding debts for seed loans into instalments and this was followed in the same year by Legislative Decree No. 11 which included all non-payments of rearranged debts in the decrees before 1962 as well as the debts incurred between 1962 and 1966. Outstanding interest was included with debts that had fallen behind and debts incurred from 1962 to 1966 in a consolidated programme of repayment by instalments. In 1968 Legislative Decree No. 5 was issued to bring Decree No. 11 up to date. In 1972 Legislative Decree No. 46 was introduced and included all debts up to that year, but unlike Decree No. 11 excluded interest from the sum that was to be included in instalments. Outstanding interest payments on all previous loans were waived under Legislative Decree No. 46.

The introduction of repayment through instalments was seen by the Agricultural Bank, until 1972 at least, as being a service to the farmers to help them repay their debts as much as a way of getting repayment, for until 1972 participation in such repayment schemes by farmers was voluntary. By no means all farmers chose to repay their debts in this way; in 1959 in the mantika of Massiaf just under 50% of the outstanding short term loan (or about L.S. 201170) and in Salemiya just over 12%

of the outstanding short term loan (or about L.S. 271800) was included in repayment schemes by instalment. However, in 1972 the Agricultural Bank changed its policy and all outstanding loans and those that had fallen behind scheduled repayment by instalments, were compulsorily included in the new repayment scheme in Legislative Decree No. 46.

The problems of administering these numerous and complicated repayment schemes has been a heavy burden on the resources of the Agricultural Bank. Moreover the schemes outlined above were only the main schemes, and a number of other schemes also existed for specialised loans for specific agricultural purposes. However, Table 89 gives a detailed picture of what the above decrees meant to the Agricultural Bank in Hama.

Table 89 indicates that until Legislative Decree No. 46 of 1972 the repayment of loans was a complicated programme that required a great deal of administration and was not particularly effective. Up to 1971 of the figures available, in 16 years out of 27 medium term repayments of instalments fell behind the required level. Over the same period in 8 out of 15 years long term repayments of instalments also fell short.

Legislative Decree No. 46 simplified repayments up to that date and included all outstanding debts giving the Agricultural Bank a co-ordinated and simple policy to pursue. It also simplified repayments for farmers, some of whom had been repaying debts under several programmes. However, the waiving of outstanding interest charges, particularly after Legislative Decree No. 11 of 1966 in which a special effort had been made to insist that interest payments should be paid can have done little to ensure future payments of interest on new loans after 1972.

TABLE 89 The repayment of loans by instalments to the Hama branch of the Agricultural Bank, 1959 to 1973, in Syrian pounds

Year		1959	1962	1962	1962	1962	1966	1966	1966	1968	1972
		Leg. Decree No.									
		37	29 (med)	29 (long)	369 (med)	369 (long)	27	11 (med)	11 (long)	5	46
1959	Total Outstanding	1612606									
	Repayment	116345									
1960	Total	1571171									
	Repayment	25251									
1961	Total	1550026									
	Repayment	68212									
1962	Total	1376660	11670	328708	49466	38075					
	Repayment	215818	0		45340	13545					
1963	Total	1165428	23914		4116	24530					
	Repayment	66679	2304		1372	3944					
1964	Total	887688	21610	694711	2744	20586					
	Repayment	49354	7250	96140	1372	1926					
1965	Total	838619	14360	618577	1372	18660					
	Repayment	90656	3420	80143	1372	822					
1966	Total	763392	16460*	538467	0	17838	460692	43039	712447		
	Repayment	279747		127864		7944	10166	17214	29068		
1967	Total	484645	5820	In No.		In No.	In No.	25825	1558193		
	Repayment	0	0	11		11	11	0	3791		
1968	Total								1461329		
	Repayment								123933		
1969	Total	411956	4310					14914	1371785	In No.	
	Repayment	6107	0					9461	180338	11	
1970	Total	412292	4640					7746	1229933	In No.11	
	Repayment	20739	330					2294	454079	(1970	
1971	Total	385100	3980					3158	775854	total	
	Repayment	0	0					0	19688	24833)	
1972	Total	All in Decree No. 46									1626134
	Repayment										631287
1973	Total										994847
	Repayment										110361

*A number of figures show additions to instalments at various stages after the Decree came into operation.

Source: Derived from the records of the Agricultural Bank, Hama.

TABLE 89 The repayment of loans by instalments to the Hama branch of the Agricultural Bank, 1959 to 1973, in Syrian pounds

Of the figures of Legislative Decree No. 46 approximately L.S. 950,000 was carried over from previous instalment programmes, (with some L.S. 120,000 interest waived), and L.S. 676,000 was other debts not previously included in instalment payment arrangements.

The records for 1972 and 1973 for Legislative Decree No. 46 suggest that better levels of repayments may be obtained by the Agricultural Bank than before. However, waiving and postponing of debts, concessions or the repayment of interest, and the continuing high debt figure which Table 88 suggests is being slowly increased show that the Agricultural Bank still has a serious problem to deal with in retrieving loans. The inadequate financial and administrative procedures of the Agricultural Bank, particularly the inspection and supervision of loans, and the slow development of cultivation techniques, productivity and investment suggests that the problem of debt will continue to plague the agricultural sector for the foreseeable future. The problems of debt dampen the desire of the cultivator to improve his land, increase production and introduce new methods and crops as profits have to be used continually for repaying debts. At the same time the Agricultural Bank has less capital to loan when a high proportion of it is outstanding debts.

However, the waiving of debts and interest on debts merely encourages traditional attitudes towards debt and delays the development among smallholders and tenants of a responsible and constructive attitude towards credit and debt repayment. This is essential if the concept of mass credit to the agricultural sector is to be achieved without heavy financial loss.

While the Agricultural Bank has greatly increased its total loans since 1967 the enormous requirements of the agricultural sector not only for working and development capital but also for cash for other essential needs, including social needs, has meant that non-institutional credit has continued to be an important feature of the agricultural sector. This has continued despite the attempts of successive governments to eliminate it.

Although non-institutional credit is time-honoured and fulfils numerous functions, it poses problems for the Agricultural Bank. The Agricultural Bank usually takes a lower priority to the non-institutional debt when the farmer is in a position to pay his debts than on the one or two harvest occasions of the year. Governments have hoped that, in the development of control of marketing of products through state owned factories and the co-operatives, the Agricultural Bank could retrieve its loan before the balance was given to the cultivator. Although this has been possible to some extent in the factories, the marketing services for co-operatives are so under-developed in most cases that it has not been possible to take back loans before profit distribution. For cotton and sugar beet the state holds marketing monopolies and the factories have been in a position theoretically to take back loans before profit distribution. However, it has often happened that the crop has not been sufficiently productive to cover the loans or the government has felt obliged to distribute more money than the cultivator was in fact entitled to simply to give the farmer some income for his labours.

Low productivity, therefore, is a critical factor in the problem of debt. At the same time the shortage of institutional credit has encouraged most farmers to look to non-institutional sources to cover their many other

needs. Poor management and controls in the Agricultural Bank and in the co-operatives, together with the changing policies on debt repayment have exacerbated the problem. These factors together not only reflect the slow progress of the past seventeen years but indicate that for many years to come the Agricultural Bank will have difficulties in providing an adequate service for the cultivators or fulfil the different and conflicting roles laid down for it by the government.

NOTES

1 Salah Da'Goul, l'Economie Agricole en Syrie, in Office Arabe de Presse et de Documentation, l'Agriculture Syrienne, op. cit., pp. 28-32.

2 Salah Da'Goul, l'Economie Agricole en Syrie, op. cit., pp. 37-38.

3 Information from farmers and landowners from Khaldieh, Towmeen, Shihet Hama, Zaka and Ayo.

4 Nidal al Fellahine, Le Movement Co-operative en Syrie, in Office Arabe de Presse et de Documentation, l'Agriculture Syrienne, op. cit., pp. 95-96.

5 Information from the Department of Co-operatives, Ministry of Agriculture and Agrarian Reform, Damascus.

6 Derived from the records of the Department of Agriculture, Hama.

7 Derived from the records of the Department of Agriculture, Hama.

8 Information from the Department of Agriculture, Hama.

9 Information from the Department of Agriculture, Hama, and other interviews.

10 Information from the Department of Agriculture, Hama.

11 Information from the Department of Agriculture, Hama.

12 Information from farmers, landowners and individual employees of the Department of Agriculture, Hama.

13 Derived from the records of the Department of Agriculture, Hama.

14 Derived from the records of the Department of Agriculture, Hama.

15 Information from the Agricultural Bank, Skelbieh.

16 Records of the Agricultural Banks in Hama, Skelbieh, Massiaf and Salemiya.

17 K.V. Sriram, Land and Water Use in the Ghab Region and Economic Evaluation, U.N. Special Fund, Ghab Development Project, Syria, Damascus, 1972.

18 Interview with the Director of the Agricultural Bank, Hama.

19 Information from the Agricultural Bank, Hama.

20 Information from the Agricultural Bank, Hama.

21 N.S. Randhawa, Some Improved Farm Plans Implemented in 1966/67, U.N. Special Fund, Ghab Development Project, S.A.R., in M. Obeid and N.S. Randhawa, Land Use and Production Economics, Series No. 13, Damascus 1968 (mimeo) p. 5.

22 Information from the branches of the Agricultural Bank in the province of Hama.

CHAPTER IX The Ghab Scheme and the Development of Production in the Province

No discussion of the agricultural reforms in the province of Hama would be complete without reference to the Ghab Irrigation Scheme. This project not only includes the reclaimed marshlands of the Ghab valley, but also the small villages on the poor land on the mountain slopes round the valley and the rich, traditional agricultural areas of the Acharne plain and Tar Allah. In Acharne and Tar Allah a large proportion of the land was formerly owned by landlords and private ownership still covers a larger area than co-operatives.

In the Ghab valley itself the reclamation of much of the land by the state, which was then owned by the state, gave the government the opportunity to develop the agricultural structure as it wished, at least in theory. The course of the settlement and development of the state land in the valley shows up the conflicting political and economic pressures that governments have faced since the reforms began. Acharne, on the other hand, shows the problems that have arisen on both political and economic levels in areas of traditional agriculture and land ownership when not only redistribution of land has occurred but also a major new irrigation network has been imposed. The way successive governments have faced the problems of adapting land ownership and cultivation to these new conditions again reflects the conflicting political and economic pressures on them.

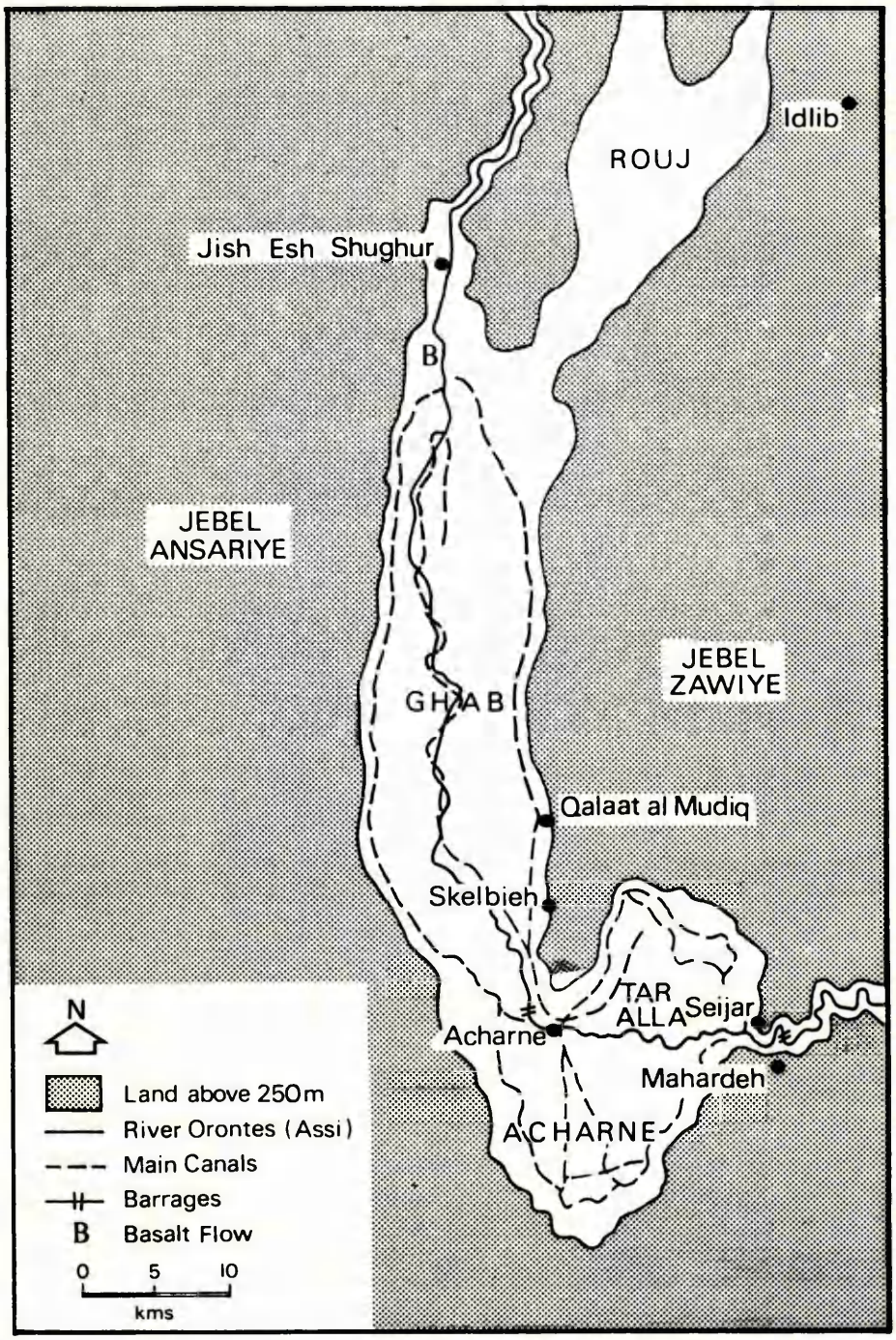
Although previous attempts had been made to drain and cultivate the Ghab valley by private landowners in the 1950's and even by the state during the decade, the idea of the project on its present scale did not emerge until 1959. The valley itself, an area of potentially fertile lacustrine and fluvial deposits[1], was to be drained by cutting through the natural dam at the

northern end of the valley that was the result of a basalt lava flow (see Figure 8). Irrigation from the River Assi was to be supplemented by the streams from the Jebel Ansariye to the west, and the Jebel Zawiye to the east, which, with the rainfall averaging 450mm per annum in the south and 550mm per annum in the north of the project area, was to supply sufficient water for the Acharne plain and the Ghab valley, a total irrigated area of some 75,000 ha. Some 9,000 to 10,000 families from the Ghab and its immediate surroundings were to be settled on the reclaimed land[2].

The declared aims of the project were three fold: To help maximize the rate of growth of the Syrian economy, to increase the standards of living as fast as possible, and to reduce the high levels of income inequality. In fact, the implementation of the scheme was beset by a number of problems. Although some progress has been made towards each of these objectives, the government and the administrators of the project have had to face problems in three main areas. The first of these has been the inability of the government to keep up to schedule with its planned investments and to complete the detailed, latter stages of the project which are essential to its profitable and successful operation.

The second has been the indecision and lack of clear policies on settlement and the setting up of co-operatives and other systems of cultivation. The Ghab is a good example of the conflicts between the aims and ideas of the central government and Baathists on one hand, the economists and technical personnel in the Ministry of Agriculture on the other, and the mass of the rural population on how the agricultural structure should develop on yet another.

Thirdly, the tendency of the government to execute policies without adequate research into the possible problems and requirements of the projects concerned



MAP 8. The Ghab Irrigation Scheme, location and main irrigation canals.

has been an important factor in the Ghab. This has been true not only of the technical aspects of the scheme but also the settlement policies, particularly in relation to the state owned lands of the Ghab valley itself. In Acharne inadequate consideration of the implications of the new scheme in an area where the redistribution of land has also been carried out has resulted in an inefficient and unsatisfactory agricultural structure, as will be shown below.

(a) The financial and technical progress of the Ghab scheme

The Ghab scheme, which was to combine the drainage of the Ghab valley with the irrigation of the Acharne plain and the Ghab valley from a series of dams on the River Assi, was to have been completed by 1970[3]. The costs were to have included a four tier irrigation system, drainage, housing and other services, but not the dams at Rastan and Seijar.

The development of intensive cultivation, partly of traditional crops, but also of new crops such as sugar beet, was to be in line with the objectives of the five year plans already outlined[4]. The planned capital-output ratio, which depended on a rapid and successful adaptation to the new conditions and conclusion of the various parts of the scheme, was such as to suggest that although the scheme was on a large scale a rapid return to capital invested could be expected. At the same time up to L.S. 70 million was to be invested in a settlement programme (included in the total estimated cost)[5], so that the scheme was not only going to pursue stiff economic targets, but include important and expensive socio-economic objectives.

The Ghab scheme was also the first major large scale irrigation scheme of the several that were to take up such a large proportion of the proposed investments in the agricultural sector. It was to transform traditional, small scale irrigation by noria wheel and diesel pump in central Syria into an integrated, controlled system of irrigation that was to be a model for other areas of a similar size, and also, eventually, for the Euphrates scheme.

In fact, although enormous changes have occurred in the Ghab, the problems that were outlined in Chapter V about large scale investments of this sort apply to the Ghab. They have been compounded by problems in the settlement programme and in the development of co-operatives and extension services.

In the first place shortage of government capital that led to shortfalls in investment in the irrigation sector as a whole coincided with serious delay and cost overruns in the Ghab. By 1965 some 80% of the L.S. 248 million that was to have been the total investment in the Ghab scheme had been used. The main dams, main canals and drains, and roads had been completed[6]. However, despite these major achievements and the fact that the groundwork for the successful operation of the project had been achieved, a number of crucial aspects of the plan had not been completed. The main outstanding problem is that the latter stages of the project have not been carried out and the cultivation on the project has suffered accordingly. The most important item that has yet to be dealt with is the quaternary irrigation network, distributing water to the fields. In 1973 it was estimated that only 1200 ha. in the project had a quarternary network and that it would cost approximately L.S. 23 million

to complete the irrigation network at this level[7]. At the same time the field and collector drain network has also not been completed at the lowest level, requiring perhaps a further L.S. 20 million investment[8].

In the settlement and services programme, which included not only the setting up of co-operatives but the construction of villages in the Acharne as well as the Ghab, the setting up of social services including telephones, dispensaries and so on, the introduction of co-operatives and state farms for production and research has not been completed and a great deal of further investment is necessary. These costs, excluding the setting up of co-operatives, were thought to require at least another L.S. 15 million in 1970[9]. In 1966 the government had allocated an extra L.S. 3 million for these purposes but this had been insufficient.

For the machinery and equipment requirements, by 1965 the government had spent L.S. 3.5 million allocated to these needs[10]. In fact there are still serious shortages of machinery in the Ghab itself particularly in the co-operative sector. These deficiencies have been made good by private contractors, particularly from Mehardeh, but an estimated L.S. 15 million is still required for this purpose in the Ghab.

Altogether by 1973 the government had invested L.S. 285 million in the scheme, yet many problems had still to be dealt with. The government was faced with further large scale financial investments if the scheme was to work properly. This became so serious that in 1971 progress on various projects in the scheme including irrigation and drainage, cattle stations, wind breaks, and machinery stations was stopped while a major reassessment of the scheme was carried out. It was only at this stage that the financial, technical and personnel problems that should have been

the subject of much greater study before the scheme was started were properly assessed. Inevitably alterations had to be made to the proposed systems of cultivation and estimates of future production in the scheme and a total reassessment of the rates of return of capital investment made. A number of major problems were put forward for priority consideration. One of these, particularly in Acharne, was that of land levelling, essential if gravity irrigation was to be used effectively. In some areas of the Ghab poor drainage control has resulted in subsidence where peat has dried out and caught fire and levelling is needed here too. Altogether it is estimated that L.S. 12 million will have to be spent on land levelling[11].

A further problem has been that soil surveys and the experience of cultivation in the project have shown that the infiltration rates of soils of much of the scheme are higher than was first thought. In the Ghab valley itself just under half the proposed irrigated land is of Class III standard or below, so even when the irrigation and drainage systems are complete cultivation and cropping practices must take into account various soil difficulties. Much of this land is light alluvial soils with comparatively high infiltration rates. Apart from the effect this has had on the needs for water, it has also made the lining of irrigation channels with concrete necessary, another costly requirement.

Another problem that was not adequately foreseen in the initial stages of the project was that of drainage, both to prevent the water-logging of soil from a high water table, and to prevent flooding. It has been estimated that at least 50% of the area of the Ghab itself is prone to water-logging and flooding. High water tables in the Ghab are partly due to poor irrigation practices, but are also caused by inadequate field drainage systems. The UNDP terminal report states that only 65 out

of 556 necessary second, third and fourth level drains are of the required size[12], and it has even been said that one of the three main drains in the valley needs enlarging, at an estimated cost of L.S. 20 million[13]. The problem of flooding is particularly serious along the slopes of the Jebel Ansariye on the western side of the valley.

The effect of flooding and water-logging has been to make winter cultivation unpredictable. As winter crops cover 40% of the area of the scheme in most years[14], threats to winter cultivation can seriously affect nearly half the total annual cultivation of the scheme. The unpredictable nature of winter cultivation has a serious affect on the confidence of the cultivators in the scheme. Not surprisingly it has made many of them wary both of winter cultivation as a whole and of spending money and time on intensive cultivation or introducing new crops which might be washed away after heavy rain in the hill lands to the east and west of the scheme.

One of the associated problems of water-logging and inadequate drainage has been salinity. It has been estimated that some 8000 ha. has been 'moderately' affected, and 3000 ha. 'slightly' affected, mostly in the Ghab valley itself[15]. The problem is not considered serious as yet, but the government has innumerable examples of the problems of poor drainage in other irrigation schemes in the Middle East which will, hopefully, encourage it to deal quickly and effectively with the drainage problem. The required expenditure to carry out land levelling, drainage and flood control is estimated to be about L.S. 94 million[16].

Turning to the problems that exist in relation to the soil itself in the scheme, a considerable reduction in the organic content of most of the

soils in the Ghab valley has been noted since the first sample survey in 1952[17]. This is likely to accelerate when proper drainage is completed and a careful policy of fertilizer application and planned and controlled crop production is needed to avoid serious losses in fertility. It has been estimated that in fact only about one third of the Ghab valley should be cultivated intensively under present conditions of irrigation, drainage, soil and farming techniques. At present intensive cultivation in this area usually means double cropping and this is restricted by the flooding and water-logging conditions, and in the Ghab is confined to about 30% of the cultivated area mostly to the centre and east of the valley where these problems are less serious.

Other soil characteristics have not been taken into sufficient consideration. Soils in the north and centre of the valley, high in organic content, need to be protected from indescriminate double cropping and preserved by less intensive cropping patterns. The technical advisors and technical staff of the Ministry of Agriculture have become aware of the potential loss of fertility of the Ghab and numerous experiments have been carried out to discover more suitable crops than the traditional cotton and wheat that have continued in the project area as the principal crops. However, implementing changes of this sort has been slow for reasons that will be outlined later and show the difficulties in relations between the agricultural and soil experts of the Ministry of Agriculture and other bodies that have different interests in the agricultural sector.

In the western part of the valley, apart from the problems of water-logging and flooding, high winds are a particularly serious problem. The

Ministry of Agriculture has therefore set aside these areas for its own use, principally in the development of livestock farms. The heavier soils of the south west and western part of the Ghab valley are in any case considered to be more suitable for livestock production.

One of the paradoxes of the Ghab scheme is that although it is beset by an annual problem of water-logging and flooding its chief failure is that there is insufficient water available to carry out the kind of intensive cultivation based on very small smallholdings that has been the basis of the government's settlement and land tenure policy. The result has been that irrigation is confined to the summer months and winter crops have had to depend entirely on rainfall or run off from streams. However, this rainfall is extremely variable. In 1968/9 for instance one rainfall station received 1427mm, and another 298mm. In 1970/1 one station received 402mm, and another only 93mm[18]. This sort of unpredictability is a serious disincentive to small farmers to invest, improve and innovate in winter crop production.

Even in summer cultivation, however, which depends on the irrigation network, the main problem has been the shortage of water. The storage facilities are inadequate to cater for the needs of intensive small scale production over such a large area. Even with the development of a quarternary canal system, the lining of canals, the levelling of land and better management and cultivation techniques it is estimated that only 50% of the area of the scheme could receive an average level of irrigation. In fact at present only about 40% of the area can be irrigated in the summer[19]. This has resulted in some areas being left fallow, an extremely inefficient use of the land considering the levels of investment made on it, and in other areas farmers have resorted to digging wells or pumping water out of drainage channels.

Although major changes, and many improvements, have been made in the Ghab and Acharne areas with the introduction of the irrigation scheme, the government still has enormous outlays to ensure that the scheme works efficiently from a technical point of view. Other outlays, particularly on housing, social services, education, and extension work, which should accompany the construction of the scheme, have also to be made. The fact that these investments have not been made underlines the weaknesses that have been a feature of successive governments since 1958 in the agricultural sector. These include the over ambitious nature of the large scale agricultural projects, the poor planning that accompanied many of them, the inability or unwillingness to continue investments once the spectacular constructional developments had been undertaken, and the inability to develop the additional services of all kinds necessary when a new scheme is set up in a hitherto poor and underpopulated area.

The problems concerned with the characteristics of the soil which are mentioned above together with the inadequacies of the irrigation and drainage networks suggest that at present at least the Ghab and to some extent Acharne are not suitable for the intensive type of cultivation that was envisaged. Intensive cultivation was considered essential, partly to ensure as rapid a return as possible to capital invested and partly to enable small scale cultivation to support a large number of people.

(b) Settlement in the Ghab scheme

In the area of the Ghab irrigation scheme the government at the beginning of the 1960's was in the ideal position of being able to impose a pre-

planned settlement pattern. Even in those areas round the edge of the swamp that had been drained by individual landowners and claimed as private land few of their properties had tenants as most of this land was worked by farm labourers. As the drainage and irrigation network was set up, a suitable distribution of land could have been carried out as the construction of the scheme was completed. In Acharne the government might also have been able to introduce a settlement pattern that fitted the irrigation network as the distribution of expropriated land in this area was held back because of the problems in land registration.

In fact, in neither the Ghab nor Acharne was the opportunity to co-ordinate land distribution with the irrigation network taken. This was due to a number of factors. In the first place the frequent governmental and project administration changes prevented a long term settlement policy from being decided. In the project area, the mohafazats of Idlib, Hama and Lattakia continued to administer their separate parts of the proposed project area until 1964. A separate mantika was set up in this year (first called Skelbieh and later Ghab) to administer the new area as a unit, but because no houses, offices or other facilities had been built at Skelbieh, the proposed project centre, administration was still carried out piecemeal from Hama, Mehardeh and Massiaf.

The construction side of the project was run in a number of different ways. In 1951 a 'Ghab Management Organisation' was set up, but this was superceeded in 1959 by a 'Major Projects Administration'. This, in theory, has been in control since then, but a special committee ran the United Nations Special Fund work in the area and it was not until 1967

that the construction and administration work carried out separately by the Ministry of Land Reform and Agriculture was also brought under the one organization.

Moreover, the 'Major Projects Administration' has not succeeded in co-ordinating construction and settlement policies since 1967 because of the conflicts between engineering and technical and political considerations that have become more important since the combined Ministry of Agriculture and Agrarian Reform began taking a major role in the project area. The ending of the United Nations' role in the project has meant that suitable settlement and production policies based on an analysis of the physical and technical constraints on agriculture in the project have been subjugated to political considerations still further and are even less likely to be adopted.

The settlement pattern that has emerged has therefore been largely unplanned and piecemeal. The proposed plot sizes that were suggested in the 1961 to 1963 period were based on unrealistic and unresearched ideas of productivity that could be achieved. In 1961 and 1962 it was thought that in the Ghab a minimum holding of 2.5 ha. would be adequate for a family, and in 1963 Decree No. 998 announced that holdings from 2.0 to 3.5 ha. would be distributed, according to the probable productivity of the land. As it was soon realized that plots of this size would only produce about half the proposed incomes of L.S. 3000 to L.S. 4000, it was proposed that plot size was increased to 4 ha.[20].

Although this recommendation was made as early as 1967 and 1968 it proved impossible to alter the plot size in the distribution policy.

This was because as soon as the main drainage operations had been carried out, large numbers of farmers and others from the rest of the project and surrounding areas moved onto the newly reclaimed land as squatters. By 1964/5 there were already an estimated 48,000 inhabitants of the Ghab area[21], and it is worth underlining the fact that many of them came from the Jebel Ansariye and were therefore strong supporters of the Baathist regime.

Although some officials in the project administration advocated the removal of these squatters, from 1962 onwards the government avoided the problem by issuing annual tenancies to these families. From 1968 these tenancies were renewed every two years and until 1972 no final decision was taken about which of these families would eventually be allowed to stay. Over this period the Ghab area was, therefore, settled by small-holders with no guaranteed stake in the future of the project. Furthermore they were not made to pay anything towards the development or running costs of the scheme except through their rents which in non-irrigated areas of the project were as low as L.S. 5 per ha., though were higher at about L.S. 120 per ha. in the best areas of the scheme.

In 1969 the decision to distribute land formally was taken. However, both the opportunity to recover some losses through making recipients pay a realistic price for the land, and to take the last chance to exclude farmers who originated from outside the project area from having land were lost. Land was distributed on the same terms as expropriated land and recipients had to pay only one quarter of the value of the land. Furthermore, the estimated 25% or so farmers who came from outside the

project area[22], and in many cases still had land outside the project area, were allowed to receive smallholdings. As a result the average size of smallholdings has remained very small in the Ghab and now averages about 2.4 ha.[23].

The implications of this decision on the incomes of smallholders will be discussed below. However, while the government was undoubtedly influenced in its decision to distribute smallholdings of this size by the large numbers of its supporters who had moved into the Ghab it was also trying to ensure that some areas at least of the project would be retained for its own agricultural purposes. It has, therefore, retained state farms in each area of the Ghab and has also kept much of the western side of the Ghab valley which is in any case more affected by high winds and flooding. On these areas it has set up research stations, especially for cattle, and large scale livestock farms.

The development of state farms of this sort as opposed to research centres is a new development in Syrian agriculture and suggests that the government hopes to run capital intensive and advanced agricultural projects owned by the state alongside the traditional cultivation in smallholdings. The government may, therefore, be prepared to acquiesce in a slower progress towards full co-operative and then collective cultivation than it had hoped, and even to divert funds that might have been used for the development of co-operative agriculture into its own large scale projects.

In Acharne delays in the distribution of land were caused by three main factors. These were the extremely complicated land tenure arrangements

in the area, the lack of up to date land registers, and the construction of the irrigation network. Some areas of Acharne were still cultivated under the 'musha' system, and in many areas the land registers were lost or out of date. While this was being cleared up by the Ministry of Agrarian Reform the distribution of land went ahead very slowly. However, even when these problems were dealt with and the land was distributed, the areas given out were not integrated with the new irrigation network.

As a result in almost every village within the project area in Acharne where expropriated land was distributed the irrigation and drainage channels cut across the ownership boundaries. Private land, which covers about 13,780 ha., and state and expropriated land which has been distributed covers 10,700 ha. are mixed up, and in the irrigated areas this results in inefficient irrigation and cultivation. However, if the government wishes to continue with this mixed agricultural structure at some time in the future it will have to try to redistribute the land to deal with this problem. One irrigation canal might pass through private and redistributed land several times, with the inevitable result that no one is prepared to help maintain the network and abuses, such as taking too much water out of the canal, are frequent. So far the government has been unwilling to force private owners to give up or exchange their land with the co-operatives, not so much because of the probable reaction of the private owners, but because of the likely opposition from tenants and co-operative members.

(c) Agricultural planning and methods in the Ghab scheme

Since the early 1960's the United Nations agencies and the agricultural engineers working in the Ghab have tried to implement cropping policies and agricultural practices that would improve productivity. Over the period of the projects development research has been done on the micro-climate, soils and various local requirements for cultivation which have been implemented in crop projects in small research stations in different parts of the project. Mention has already been made of the high winds in the western part of the Ghab and it is also important that the rainfall in the south of the project area averages about 80% of the rainfall in the north. Detailed studies of the soils, including their make up and infiltration rates, show major variations between the heavy soils of the southern part of the Ghab, the lacustrine soils in the centre, and the sandy soils in the north. Variations in organic content and salinity are also important[24].

Based on this research the United Nations agencies and the Ministry of Agriculture have tried to introduce suitable new crops and methods of cultivation into the different areas of the scheme. At the same time they tried to introduce extension services, including literacy programmes, to be run through the agricultural co-operatives. In this way it was hoped to diversify the crops grown, improve the employment situation, increase incomes and increase production.

Some progress in the diversification of production has occurred in the Ghab, for instance with the introduction of sugar beet and alfalfa. Attempts to introduce other fodder crops and livestock farming have been

made but have come up against a number of problems. Livestock production on any scale requires capital and quite large amounts of credit, neither of which has been available to most smallholders in the project area. Successful livestock farming depends on skilled management, which is also absent for the most part. As a result livestock production has been largely, though not entirely, confined to the government sector, as has fish farming for the same reasons.

Most smallholders have continued to stick by the traditional crops, cotton and wheat, for their main incomes. In 1971-72 43.7% of the irrigated summer crop was wheat, and 35% cotton[25]. Research has shown that in many areas of the Ghab the climate is too damp for optimum wheat and cotton growing conditions, but the smallholders have been slow to take up new crops even if they have been successful in research stations and government farms. Although cultivators have been persuaded to use new strains of these crops and new fertilizers, they have been unwilling on the whole to try completely new but potentially profitable crops.

The diversification of crop production has also been one way in which it was hoped that the seasonal nature of employment could be reduced. At present the wheat and cotton crops combine to create a severe labour shortage in the middle and late summer and underemployment is a problem for the rest of the year. In the project area there is little real hope of a major development of alternative, non-agricultural employment, and the introduction of new crops and crop rotation would help. Various policies, including the introduction of autumn rather than spring sugar beet, vegetables and other crops, such as sorghum, have been advocated but not taken up on a large scale by the cultivators. If the government

is to deal with the employment problem and ensure a steady supply of raw materials for its processing plants it may have to insist on some crop diversification in the Ghab area.

The introduction of new methods of cultivation and the diversification of production has been handicapped by a number of problems. In the first place, the United Nations Special Fund programme, which laid particular emphasis on this aspect of the development of the Ghab scheme, ended in 1972 and little work has been done to follow up its research and recommendations. Secondly, the setting up of co-operatives in both Acharne and the Ghab has been particularly slow and both state and expropriated land was only distributed recently. In 1967 only one co-operative existed in the Ghab area and 12 in Acharne, and it was only in 1970 that a major programme to set up co-operatives in the area was introduced, as Table 77 shows.

As with the co-operatives, the Agricultural Bank was not established in the Ghab scheme until 1966. Until that time farmers had to obtain credit from the branches at Hama and Massiaf. The Agricultural Bank incurred serious debts from farmers in the project area largely because the assessment of loan requirements and supervision they were able to carry out was minimal. Over the period 1960 to 1968 it has been estimated that 60 to 70% of farmers in the Ghab accumulated debts with the Agricultural Bank[26], and in 1967 it was estimated that the Skelbieh branch of the Agricultural Bank had outstanding short term loans worth L.S. 900,000[27]. These debts, even if rescheduled into medium and long term repayments, undoubtedly discouraged many smallholders from introducing new and perhaps uncertain crops into their crop rotations.

Since the end of the United Nations Special Fund programme the extension services for agricultural purposes have all but disappeared. Agricultural extension is no longer controlled by the Ministry of Agriculture and Agrarian Reform but has been largely taken over by the Peasants' Union and combines technical with political education. The Peasants' Union has also taken over the literacy programme which was started by the United Nations in 1969, and which by 1971/1972 was being run from 52 centres in the project area[28]. Although the Ministry of Agriculture does have an agricultural extension department and carries out some technical training, particularly in the co-operatives, most such work is now carried out by the Peasants' Union. The Peasants' Union has contributed towards decreasing illiteracy and towards technical education, but the fact that extension activities have been taken out of the hands of the Ministry of Agriculture and Agrarian Reform and put under its control indicates that the priorities in extension work are no longer agricultural but political.

(d) The development of production in the province

This section will discuss the changes in the agricultural production in the province from 1962 to 1972. Improvements in agricultural production was seen as essential for a number of reasons. It was important to the government from a political point of view for it to be seen that the institutional changes of the agrarian reform should be accompanied by significant improvements in production. It was also important that production and productivity should increase if the agricultural system was to be based on small-holdings: in the Ghab, for instance, the farm sizes proposed were based on estimates of the likely improvements in production as well as the expectation that each small-holding would be

part of an operational co-operative. Furthermore, it was essential that production should increase to enable the state to recoup its expenditure, not only in carrying out the reforms and setting up co-operatives but in new irrigation projects. In the province of Hama the Ghab scheme and the irrigation network based on Lake Homs were major investments of this kind.

This section will concentrate on the progress made in trying to consolidate and stabilize the area used for cultivation in the province, and in diversifying and intensifying agricultural production. The national scene, studied in Chapter VI, suggests that some progress has been made in reducing the area used for cultivation but that no major progress has been made in either diversifying or intensifying cultivation. As a consequence, incomes in agricultural areas have not increased significantly and the state has not recouped a large part of its agricultural investments. A detailed study of the province of Hama, which includes a cross-section of the different agricultural areas in Syria, may show that in certain areas and under certain conditions agricultural production has been diversified and intensified in conjunction with the institutional changes that have taken place. Developments in each mantika in the province will be analysed as well as the changes in the province as a whole.

The period 1962 to 1972 is not, of course, sufficient to judge conclusively whether or not the agrarian reforms will lead to major improvements in the agricultural production of the province or the country. However, the figures of production in this period give some indication of the effects of the reforms on production. They will also show whether the improvements that governments have expected as a result of the

reforms have occurred, and if the other policies, including investment policies, that successive governments have attempted to implement in conjunction with the reforms have resulted in improved agricultural production. The years 1958 to 1961 have been left out of the analysis, partly because of the inadequacy of the agricultural statistics available for this period and partly because of the severe drought that coincided with the early expropriations and distributions at this time.

As was mentioned in Chapter VI, the methods of collecting data on agricultural production have altered, usually with the result that estimates of crop area and production have increased. This must be borne in mind in the analysis of crop areas at both the provincial and mantika levels which follows. However, unlike Table 44, records of all crops produced in Hama were available from 1962.

One further factor must be considered in the assessment of the changes in crop production within the province is that the boundaries between the mantika have been withdrawn on several occasions, principally at the end of 1964 when the mantika of the Ghab was created out of parts of Hama, Massiaf and the provinces of Idlib and Lattakia. As Table 90 shows, other minor adjustments in the areas of the mantika also took place.

TABLE 90 Areas of the mantikas of Hama, 1959 to 1972, in hectares

Year	Hama	Salemiya	Massiaf	Ghab	Total
1959	280900	451300	100000	-	832200
1960	"	"	"	"	"
1961	"	"	"	"	"
1962	"	"	"	"	"
1963	"	"	"	"	"
1964	270600	"	66800	97400	886100
1965	"	"	"	"	"
1966	268900	"	63800	100400	884400
1967	"	"	"	"	"
1968	"	"	"	"	"
1969	"	"	64800	"	885400
1970	"	"	"	"	"
1971	"	"	"	"	"
1972	"	"	"	"	"

Source: Statistical Abstract, op. cit., various years.

(1) The consolidation and stabilization of the agricultural area

Table 43 shows that in Syria as a whole little reduction of both the cultivated and cropped area occurred from 1962 to 1972/3. Table 91 suggests that this pattern was reflected in the province of Hama.

TABLE 91 Total irrigated and non-irrigated cropped area in Hama 1961/2 to 1971/2

Year	Irrigated Area	%	Non-Irrigated Area	%	Total
1961/2	43185	15	240104	85	283289
1962/3	47520	14	296603	86	344123
1963/4	43821	12	321193	88	365014
1964/5	54320	18	239588	82	293908
1965/6	(1) 46331	30	(1) 106361	70	(1) 152692
1966/7	42731	15	235372	85	278103
1967/8	53765	20	210204	80	263969
1968/9	(1) 53088	25	(1) 155614	75	(1) 208702
1969/70	62678	19	264481	81	327159
1970/1	60859	22	214625	78	275484
1971/2	61419	18	283593	82	345012

Source: Derived from the records of the Ministry of Agriculture and Agrarian Reform, Damascus.

(1) Statistical Abstract of Syria, op. cit., 1966 and 1969.

Table 91 indicates that there has been very slight progress in the consolidation of the cropped areas in the province. Despite attempts made to prevent cultivation in the extreme east of the province (see Figure 7), such cultivation has continued. In view of Table 90, some reduction in cropped area has taken place in the province since the peak year of 1963/4, but the large areas cropped in both 1969/70 and 1971/2 show that much of this land is still in the marginal agricultural areas. The figures of Table 91 are little affected by double cropping, which is almost non-existent outside the irrigated area of the Ghab. Even in the Ghab the opportunity for double cropping has only been taken in a few isolated areas.

The aspect of Table 91 that stands out above any evidence of consolidation of land is the continuing fluctuations in the cropped area, both irrigated and non-irrigated and indicates that the fluctuations in the total cropped area from 1969 to 1972 were higher than in the 1962 to 1965 period. This may be partly due to the fact that the 1970/1 year suffered from poor weather conditions, and the 1971/2 year enjoyed good conditions. Both 1965/6 and 1968/9 also suffered from bad weather conditions and Table 91 reflects the continuing dependence of the cropped area on the weather.

Fluctuations in the irrigated area also reflect the dependence of the irrigated area on the rainfall, as much of the irrigated area of the mantikas of Ghab, Massiaf and Hama is supplied by reservoirs and streams which are very dependent on annual rainfall. As will be shown below the irrigated area under crops in these mantikas has suffered in the years following those with unfavourable weather conditions. The irrigated

cropped area has been more stable in the latter part of this period, from 1969/70 to 1971/2, but in three of the previous five years shown in Table 91, 1963/4, 1966/7 and 1967/8, the percentage change from the previous recorded year has been greater in the figures for the irrigated area than for the non-irrigated area.

The sharpest fall in the non-irrigated cropped area (and in the total cropped area) occurred from 1963/4 to 1964/5 and did not coincide with particularly bad weather conditions but with the increase in the total area of the province shown in Table 90. Table 91 shows that the total cropped area has been recovering since 1963/4.

Table 92 shows the cropped areas for the mantikas of Ghab, Salemiya, Hama and Massiaf. The figures underline certain points made above and also show a number of distinctive features in each of the mantikas. With reference to the figures for Salemiya, the cropped area shows no indication that there has been any attempt to cut back non-irrigated cultivation in this dry area of the province. This area is, of course, more seriously affected by the weather conditions than other mantikas. Although the figures for the disastrous years 1965/6 and 1968/9 are not available, the fall in 1970/1 (another bad year) from 1969/70 of over 50% in the cropped area is indicative of the extent of dependence of a large cropped area in this zone on good weather conditions. The cropped area of the other years underlines the instability of production in the dry land agricultural regions of central Syria, and emphasises that there has been little success in attempts to consolidate or stabilise the cultivated area here. The development of the irrigated area in Salemiya will be discussed below.

TABLE 92 Total irrigated and non-irrigated cropped area in Hama, Salemiya, Ghab and Massiaf, 1961/2 to 1971/2, in hectares

Year	HAMA Total	Irrigated	%	Non-irrigated	%	SALEMIYA Total	Irrigated	%	Non-irrigated	%
1961/2	172089	21096	12	150993	88	71773	6968	10	64805	90
1962/3	211013	23255	11	187758	89	98432	6203	6	92229	94
1963/4	209203	24274	12	184929	88	119563	6858	6	112705	94
1964/5	145680	16509	11	129171	89	84160	6647	8	77513	92
1965/6	NA					NA				
1966/7	155504	12411	8	143093	92	60734	10245	17	50489	83
1967/8	132561	15187	11	117374	89	69360	13836	20	55524	80
1968/9	NA					NA				
1969/70	153553	19960	13	133593	87	101021	12248	12	88773	88
1970/1	108343	14375	13	93968	87	58885	15979	27	42906	73
1971/2	140315	15943	11	124372	89	110344	15718	14	94626	86
	MASSIAF					CHAB				
1961/2	39404	15143	38	24261	62					
1962/3	44661	18037	40	26624	60					
1963/4	35016	12687	36	22329	64					
1964/5	23114	5541	24	17573	76	41271	25924	63	15347	37
1965/6	NA					33595	22371	67	11224	33
1966/7	17964	5723	32	12241	68	44027	14423	32	29604	67
1967/8	19016	5212	27	13804	73	43803	19845	45	23958	55
1968/9	NA					31475	21417	68	10058	32
1969/70	22505	8570	38	13935	62	54806	21859	40	32947	60
1970/1	21403	2009	9	19394	91	88885	28586	32	60299	68
1971/2	15222	2264	15	12958	85	80020	27616	35	52404	65

Source: Derived from the records of the Department of Agriculture, Hama.

TABLE 92 Total irrigated and non-irrigated cropped area in Hama, Salemiya, Ghab and Massiaf, 1961/2 to 1971/2, in hectares

Further west, in the mantika of Hama, there is again little evidence that there has been either consolidation or stabilization of the cropped area. The sharp decrease in the cropped area in 1970/1, particularly in the non-irrigated area, reflects the continued dependence of the cropped area on weather conditions. The fluctuations in the irrigated cropped area have continued to be marked in the mantika, again a reflection of the dependence of irrigation on river sources.

In the west of the province the mantika of Massiaf shows less fluctuation of the cropped area than the mantikas further east. Consolidation of the cropped area is not of such importance in this wetter part of the province, but Table 92 also shows that little progress has been made in stabilizing the irrigated cropped area in the mantika. The figures over the period suggest that many areas are irrigated if water is available. If it is not - as in 1970/1 - crops may be grown unirrigated. This state of affairs reflects the dependence of most irrigated land in Massiaf on small streams from the mountains or on the overextended irrigation scheme based on Lake Homs, the outer limits of which include the mantika of Massiaf.

Further north the consolidation of the cropped area has not been a problem in the Ghab. Two other problems do exist, as is evident from Table 92. In the first place the very large area of non-irrigated cropped land - much of which is in the area of the Ghab irrigation scheme - confirms that a large proportion of the scheme is not yet irrigated. Secondly, the fluctuations of the irrigated cropped area reflects not only inadequate but irregular supplies of water. With bad weather conditions in 1965/6 and 1968/9 the irrigated cropped area of 1964/5

was not exceeded until 1970/1. The slight decrease in 1971/2, a good year for rainfall, indicates that much of the water stored was used in 1970/1. The non-irrigated areas of the mantika also suffered severely during years of bad weather conditions. Much of the land left uncropped during 1965/6 and 1968/9 was within the Ghab scheme, a further reflection of the inadequate provisions made for irrigation. Even so, very large areas of such land were cropped in 1970/1.

(ii) The diversification of agricultural production

The diversification of agricultural production is an important element in the policies of the government to improve rural incomes and the income to the state from agriculture. As Chapter VI shows, Syria has depended excessively on the production of wheat, barley and cotton and the development of other crops for food and as a basis for industrial production has been central to the country's agricultural policies. The balance between the main crop types and the extent to which new crops have been introduced and more profitable and intensive crops developed in Hama will be studied in this section and will indicate the extent to which diversification of production has actually occurred in the province.

Differences in the development of production in mantikas are of interest because Massiaf includes large areas of upland and mountain cultivation, as well as a small area of well-watered lowland along the western side of the main agricultural belt. The Ghab includes the best of the main agricultural belt and irrigated areas based on the River Assi and underground water. Salemiya is principally an area of extensive, dry land cultivation with an irrigated area again along the River Assi.

Although Hama is a province in which cultivation is the basis of agriculture, rather than livestock, the attempts to develop intensive livestock production - which includes the introduction of fodder crops - will also be examined.

Crop production in the province

Table 93 shows the overall balance of the main crop types in the province of Hama since 1961/2.

The figures in Table 93 show that there have been some minor changes in the area divisions of the main crops in both the irrigated and non-irrigated areas of the province. However, in both areas, bearing in mind Table 90 and the alterations in the methods of collecting agricultural data, Table 93 indicates that there have been no major structural changes in agricultural production and that fluctuations in the cropped areas of all crops - with the exception of fruit - have continued to be a major feature of the cultivated area.

In the non-irrigated area cereals have continued to dominate cultivation. Table 93 shows that there has been little, if any, reduction in the non-irrigated area under cereals, although there was a slight decline in the proportion of non-irrigated area under cereals from the 1961 to 1963 to the 1969 to 1972 period. The susceptibility of non-irrigated cereal production to the weather conditions is seen in the figures for 1965/6 and 1968/9. It is also interesting that what appears to be a move away from non-irrigated cereal production in 1964/5, 1966/7 and 1967/8 was reversed after 1969/70.

TABLE 93 Development of the area of the five main categories of crops in the province of Hama, 1961/2 to 1971/2, in hectares

	Cereals	%*	Legumes	%	Industrial Crops	%	Vegetables	%	Fruit	%	Total
1961/2 Ir	18638	43	1681	4	19232	44	2437	6	1436	3	43424
Non-Ir	201713	84	9837	4	11436	5	11103	5	5910	2	239999
1962/3 Ir	18640	39	1693	4	22607	48	2402	5	1945	4	47287
Non-Ir	259171	84	13268	4	15655	5	11605	4	7083	2	306782
1963/4 Ir	11986	29	1075	3	23869	58	2375	6	2101	5	41406
Non-Ir	264072	83	15778	5	15578	5	14939	5	7203	2	317570
1964/5 Ir	3766	7	2270	4	43623	80	2734	5	2228	4	54621
Non-Ir	180713	75	20043	8	15177	6	15600	7	8071	3	239604
1965/6 Ir	330		1712		39586		2855		2342		46825
Non-Ir	6656**		19970		4967		7711		8223		47527
1966/7 Ir	5547	13	1942	5	29271	68	3458	8	2604	6	42822
Non-Ir	172204	73	16135	7	14397	6	23882	10	8809	4	235427
1967/8 Ir	5281	10	1666	3	39076	72	5322	10	2735	5	54080
Non-Ir	143544	68	23875	11	11854	6	22281	11	9106	4	210660
1968/9 Ir	530		1664		44134		4422		3046		54156
Non-Ir	816**		19141		14035		33081		9345		76418
1969/70 Ir	11326	18	1074	2	42409	68	4731	8	3102	5	62642
Non-Ir	211256	78	25791	10	5004	2	17726	7	9618	4	269395
1970/1 Ir	11482	19	1956	3	37960	62	6423	11	3128	5	60949
Non-Ir	169545	78	14110	7	7957	4	14844	7	10129	5	216585
1971/2 Ir	16153	26	1720	3	34586	56	6174	10	3408	5	62041
Non-Ir	144663	71	18281	9	7696	4	22840	11	10027	5	203507

* All percentage figures to nearest 1%.

** Figures for 1965/6 and 1968/9 are unreliable due to the effect of drought conditions on crop areas.

Source: Derived from the records of the Ministry of Agriculture and Agrarian Reform, Damascus.

TABLE 93 Development of the area of the five main categories of crops in the province of Hama, 1961/2 to 1971/2, in hectares

The non-irrigated area cropped with legumes, of which lentils and chick peas form an important part of the country's diet, has increased, with most of the increase coming in the period from 1961/2 to 1964/5 when the area under legumes doubled. Over the period 1961/2 to 1964/5 the area under lentils increased from 4% to 8% of the total non-irrigated cropped area, and it has since fluctuated between 6% and 8%. Like cereals, the area of legumes in non-irrigated areas has fluctuated. The area decreased markedly in 1966/7, and this may have been related to the increased area of industrial crops and vegetables in the same year. The decreases in 1968/9 and 1970/1 and to a slight extent 1965/6 coincided with poor weather conditions.

There has been a slight decrease of the area of industrial crops (principally cotton) in non-irrigated areas, although again the fluctuations of area from year to year almost obscure the trend. The fluctuation of the cropped area of industrial crops is in itself an indictment of the way in which governments have implemented their cropping policies. All the cultivators of industrial crops of any consequence in the province of Hama, on irrigated and non-irrigated land, have to be granted licenses based on land. The government is therefore responsible not only for issuing the licenses but for making sure the designated area can be and is cropped. The figures of Table 93 show that little progress has been made in stabilizing the cropped area of industrial crops.

The cropped area of non-irrigated vegetable production has increased over the period, although, as will be shown later, most of the increase has been due to the development of one particular crop. The area has

increased in both absolute and proportional terms, from about 5% of the non-irrigated cropped area in the province in the 1961/2 to 1963/4 period to 7 to 11% from 1964/5. While there is a discernible increase in the area of vegetables, once again the fluctuations of the cropped area from year to year are particularly noticeable from Table 93. The fluctuations have increased since 1964/5, perhaps because the later period includes the poor years of 1965/6 and 1970/1. The large area in 1968/9 is again due to one main crop, water melon; although large areas were planted in this year the study of yields below will show that average yields were very low and large areas of the crop failed. From 1968/9 Table 93 shows that the area of non-irrigated vegetables fell by 41% in the next two years, then doubled from 1970/1 to 1971/2.

In contrast to the development of other crops the non-irrigated area of fruit production increased slowly over the period. This is due to the fact that almost all the fruit comes from tree crops or vines. The area of fruit increased so slowly that the changes have made little difference to the overall balance in the non-irrigated part of the cropped area. The area of fruit increased from 2 to 3% in the 1961/2 to 1964/5 period and to 4 to 5% in the 1966/7 to 1971/2 period.

Turning to the irrigated cropped area, the area of irrigated cereal production shows fluctuations as marked as those in the non-irrigated area. Although the largest areas were in 1961/2 and 1962/3, the figure for 1971/2 is nearly as high. After a rapid decline in the irrigated cereal area in the 1964/5 to 1967/8 period, when other crops were grown in the irrigated area, the area under cereals began to increase again from 1969/70. Table 93 shows that this increase was largely at the expense of the industrial crops.

The area of irrigated legume crops shows almost no change over the period although it has declined from about 4% to about 3% of the irrigated cropped area.

The area of industrial crops, on the other hand, has fluctuated a great deal over the period. While there has been a decline of nearly 20% in the 1969/70 to 1971/2 period, the area of industrial crops in 1971/2 was still greater than for 1961/2 to 1963/4. The area increased rapidly from 1961/2 to a peak in 1964/5 when about 80% of the irrigated area was used for industrial crops. However, the area subsequently fell by 32 to 33% in 1966/7 before rising again in 1968/9. Table 93 also indicates that the proportion of the irrigated area used for industrial crops has declined since 1964/5. This has been due to the increased area of cereals and vegetables.

The area of irrigated vegetable production has also been subjected to fluctuations but over the period as a whole has more than doubled, largely at the expense of industrial crops. The increases began in 1964/5 and were particularly marked in 1970/1 and 1971/2. While greater attention has been paid to the collection of information of area and production of crops, particularly of fruit and vegetables, since 1970, the increase of the vegetable area following that year is perhaps the most significant change of all in Table 93.

The area of irrigated fruit production, like fruit production in non-irrigated areas, has risen slowly and without the fluctuations in area that characterise the other main crop divisions. By the 1969/70 to 1971/2 period fruit was produced in about 5% of the irrigated area.

The other crop classification, which is not included as a separate entity in Table 93, is that of fodder crops. The traditional fodder crops are mostly of the vetch species and they still make up almost all the small area of fodder crop production. Rambling vetch is included in the legume crops in Table 93, and in 1971/2 contributed about 27% to the total area of non-irrigated legumes. In 1961/2 this figure had been 55%, and the area fluctuated between 3600 ha. and 6100 ha. during the period. Other vetch crops amounted to a maximum total area of 1867 ha. in non-irrigated areas in 1967/8, a figure which in 1971/2 had declined to 1264 ha.. Vetch crops have almost never been grown on irrigated land and there has been little development of fodder crops in the irrigated area - the only crop that has been developed is alfalfa which in 1971/2 covered only 100 ha.

The very slow development of fodder crops, particularly intensive fodder crops in irrigated areas, is indicative of the comparatively slight changes that have taken place in the 1961/2 to 1971/2 period in the main crop types that are produced in the province. In irrigated and non-irrigated areas cereals and industrial crop production have consistently accounted for 79% or more of the cropped area. The fluctuations of the areas of each crop type, with the exception of the area under fruit, have overshadowed the significant changes that have occurred. Of these the increase in the area of irrigated production of vegetables is the most important, although it must be kept in prospective for in 1971/2 the area of irrigated vegetable production still only amounted to 13% of the total irrigated cropped area.

Changes in crop production within the main crop types in the province

In this section the changes within the main crop types, cereals, legumes, industrial crops, vegetables and fruit, will be studied to see if diversification has occurred or greater areas have been given over to the cultivation of more intensive or profitable crops.

In the area of cereal crops, wheat and barley have continued to dominate production on both irrigated and non-irrigated land. In the irrigated areas two other crops, maize and Indian millet are also grown, but, as Table 94 shows, the development of both has been very slow. The potential for maize as both a food crop and for livestock, particularly in the Ghab, had not been exploited up to 1971/2.

TABLE 94 Development of irrigated cereal crops, 1961/2 to 1971/2, in hectares

Year	Wheat	Barley	Indian Millet	Millet	Maize	Oats
1961/2	15316	2821	-	55	356	-
1962/3	15127	3139	-	25	260	-
1963/4	10005	1706	-	15	260	-
1964/5	2815	668	-	20	263	-
1965/6	NA	NA	-	30	495	-
1966/7	3595	465	30	45	1411	-
1967/8	3430	825	30	50	904	40
1968/9	NA	NA	9	118	920	35
1969/70	9447	1082	6	51	758	-
1970/1	7941	2014	143	126	1158	-
1971/2	13500	1365	172	41	1075	-

Source: Derived from the records of the Ministry of Agriculture and Agrarian Reform, Damascus.

Table 94 shows that, with the exception of maize, other cereal crops have not been developed to any significant extent, and even maize has been developed very slowly. One other crop which is noticeably absent from Table 94 is rice, for which there were such hopes in the irrigated western part of the province, particularly in the Ghab. Another feature of Table 94 is the revival of barley and wheat as irrigated crops after 1968/9 following their decline from the 1961/2 to 1963/4 period. This is almost certainly a reaction to the 1965/6 and 1968/9 seasons when production of these crops in non-irrigated areas fell so sharply.

In the non-irrigated area wheat and barley have continued to dominate cereal production. The only other crop of any significance has been millet which in 1966/7 and 1967/8 accounted for 7.5% of non-irrigated cereals area. The area subsequently declined to 2.5% in 1971/2. The area under wheat has increased slightly whereas that for barley has decreased. From 1961/2 to 1964/5 barley covered between 43% and 46% of the non-irrigated cereals area but from 1966/7 never exceeded 39%. This reflects the greater demand for wheat in the country.

Turning to legumes, there has, again, been little alteration in the composition of either the irrigated or non-irrigated legume crops. No new crops have been introduced over the period, although in the irrigated area there has been an increase in the area of haricot beans and broad beans and a decline of the area of lentils. In 1961/2 lentils covered 74% of the irrigated area of legumes, haricot beans 8% and broad beans 10%. By 1971/2 the figures were 38%, 27% and 29% respectively. In the non-irrigated area, where by far the most legumes are produced,

there has been little alteration in the areas of the various legume crops. The area has continued to be dominated by lentils and chick peas which together made up 64% of the area in 1961/2 and 59% in 1971/2. Of the other crops, vetch and rambling vetch made up between 28% and 39% over the period, with the only other crop of importance being broad beans which in 1971/2 covered 6% of the area.

The area of industrial crops, in both irrigated and non-irrigated areas, has continued to be dominated by cotton production. Table 95 shows the extent to which this domination has continued.

In the irrigated area the development of sugar beet is the only change of note that has occurred over the period. By 1971/2 3544 ha. of sugar beet was planted in the province to help supply refineries at Homs and Jisr esh Shughur. The 1970/1 figure shows a lower figure for sugar beet and in that year large areas of the crop were grown on non-irrigated land due to the shortage of water.

In the non-irrigated area the dominance of the cotton crop continued from 1961/2 to 1971/2 although with fluctuations, as Table 95 shows. There is some indication that the non-irrigated cotton area has been declining - the area was low in 1965/6, due to the weather, and in 1969/70, due to disease. Although the total areas were higher in the 1967 to 1969 period, they did not reach the high figures of 1962/3 to 1964/5. However, these fluctuating and still high figures do not suggest that the government is trying to stabilize the area of cotton cultivation through the cotton licenses it issues but are continuing to issue licenses for areas which, if affected by poor weather conditions, are unsuitable for cotton production.

TABLE 95 The area of irrigated and non-irrigated industrial crops, by percentage, 1961/2 to 1971/2

	Irrigated						Non-irrigated					
Year	Cotton	Sugar Beet	Tobacco	Sunflower	Sesame	Cumen	Cotton	Sugar Beet	Tobacco	Sunflower	Sesame	Cumen
1961/2	97.2	-	.7	-	-	NA	73.0	-	-	-	-	NA
1962/3	98.5	-	-	-	*t	1.4	78.1	-	1.1	-	-	20.7
1963/4	98.8	.8	-	-	t	.3	78.5	-	.9	-	-	20.5
1964/5	99.0	.9	-	-	t	t	75.3	-	1.1	-	-	23.6
1965/6	97.5	2.0	-	-	t	.1	11.0	-	(3.2)	-	-	(89.0)
1966/7	97.1	2.3	.5	.2	t	-	45.0	-	-	-	-	54.9
1967/8	94.6	4.1	NA	.9	t	-	64.7	-	NA	1.0	-	34.2
1968/9	95.7	2.8	t	1.4	t	-	83.3	-	1.0	.7	-	15.8
1969/70	94.0	5.9	-	t	t	-	47.5	-	3.0	25.0	-	24.2
1970/1	96.9	1.7	-	1.0	t	.5	82.8	2.7	2.7	6.4	-	9.9
1971/2	88.9	10.2	-	t	t	-	59.7	-	2.2	24.6	6.3	9.3

*t = Very small areas of the crop exist.

Source: Derived from the records of the Ministry of Agriculture and Agrarian Reform, Damascus.

TABLE 95 The area of irrigated and non-irrigated industrial crops, by percentage, 1961/2 to 1971/2

Of the other industrial crops that exist in the non-irrigated area, tobacco and cumen are traditional crops and sunflower, sesame and sugar beet are comparatively new. A small and steady tobacco production has taken place on about 150 to 200 ha. each year in the west of the province near the principal tobacco growing areas in the province of Lattakia. Like cotton, tobacco cultivation is licensed, but unlike cotton its area has hardly fluctuated at all over the period. Cumen, a spice crop, has declined since 1966/7 when it covered nearly 8,000 ha. of non-irrigated land. In 1971/2 it covered just over 700 ha. Of the other crops, the development of sunflowers and sesame, which together in 1971/2 covered 2,382 ha. of non-irrigated land, mostly in the west of the province, represents a response to rising prices of vegetable oils. In 1971/2 the marketing of both crops was still not subject to a government monopoly, possibly a factor in the rapid development in their cultivation.

Turning to the area of vegetable production, the irrigated area has seen little alteration in the relative areas of the main vegetables produced, although there has been an increase of the total area of vegetable production. The area of two crops, potatoes and onions, has increased more rapidly than the others. In the 1961/2 to 1964/5 period onions covered from 12-19% of the irrigated area, and from 1969/70 to 1971/2 20 to 23%. In 1961/2 potatoes covered 7% of the area and in 1971/2 12%. The development of onions has probably been due to the setting up of an onion processing plant in the province, and the development of potatoes has been the result of a determined attempt by the government to introduce the crops, with some success as the figures show.

In the non-irrigated area of vegetable cultivation the fluctuations almost obscure the trends in the cropped area. This is dominated by water melon cultivation which throughout the period from 1961/2 to 1971/2 accounted for over 2/3 of the area. The next most important crops were melon and cucumbers, the second of which increased rapidly over the period. In years with good weather conditions, 1966/7, 1967/8, 1969/70 and 1971/2, potatoes were also grown.

The area of fruit production, which has increased steadily over the period, shows almost no fluctuations. However, the estimates of the actual production of fruit give a less certain idea of the relative importance of fruit as a crop as it is impossible to show how many trees there are per acre. The estimates of productivity below are therefore based on weight per number of trees rather than area. The area of irrigated fruit, which has increased over the period relative to the area of non-irrigated fruit from 24-29% in the 1961/2 to 1966/7 period to 30 to 33% in the 1967/8 to 1971/2 period, has shown little alteration in composition. While the area has doubled over the period 1961/2 to 1971/2, only the areas of figs, peaches, pomegranites and citrus fruit (which started from a very low base) have more than doubled. The areas of olives, almonds, quinces, apples, pears and nuts have less than doubled.

In the non-irrigated area of fruit, which has increased by about 40% from 1963/4 to 1971/2, only seven main crops have been produced. The three most important of these are grapes, figs and pistacchio nuts, and little alteration has taken place in their relative importance over the period. In 1970/1 and 1971/2 crops that were grown only in irrigated

areas, apricots, apples, plums, peaches, pears and cherries, have been grown in non-irrigated areas in the west of the province. As yet this development has been small but in the Ghab and Massiaf there may be further opportunities to grow these crops.

The analysis of the five main crop divisions and of fodder crops above indicates that, with some exceptions, little alteration has taken place in the relative areas of the various crops. In cereals production wheat and barley still dominate, as cotton does in the area of industrial crops. New crops such as maize, sugar beet and sunflowers have made a significant but small impact in the period under study. Among the other crops, legumes, vegetables and fruit, minor changes have taken place but traditional crops continue to dominate each crop type. However, a study of the different mantikas in Hama, all of which have different climatic and agricultural conditions, may suggest that the detailed plans for the diversification of crop production that were to accompany the agrarian reforms were more successful in some areas than in others.

Salemiya

As Table 92 shows, the total cropped area has not been reduced in the mantika and there is no other evidence to suggest that an attempt to consolidate the cultivated area has been made. As a result, the cropped area in Salemiya has continued to fluctuate widely from one year to the next. This has been made worse by the cultivation of land outside the proposed limit of the agricultural zone, shown in Figure 7.

One particular point of interest about the cropped area in this mantika is the increase of the irrigated area under crops. As Table 92 shows,

this area does fluctuate from year to year but the increase in irrigated area from 1961 to 1962 until 1971 to 1972 has been more marked than elsewhere in the province and accounts for 47% of its total increase of cropped irrigated land. From 1969/70 until 1971/2, 20 to 26% of the cropped irrigated area of the province was in Salemiya, whereas from 1961/2 until 1964/5 it was only 12 to 16%. This reflects the slow development of the irrigated area elsewhere in the province where much of the proposed increase of irrigated land was to be through large scale irrigation schemes. In Salemiya no such large scale schemes were planned and developments in irrigation have been on a small scale, often just through the introduction of wells and pumps. Most developments of this sort have been the result of private investment but some co-operatives have also participated in this way.

Turning to the composition of the cropped area in the mantika, Table 96 shows how the area has been divided since 1961/2.

Table 96 shows the production of cereal crops in Salemiya continues to dominate the non-irrigated cropped area of the mantika to an even greater extent than the province as a whole. Furthermore, the two main crops, wheat and barley, dominate to a greater extent than elsewhere. The only other crop grown is Indian millet, which in 1971/2 covered only 211 ha., or .2% of the area under cereals. In 1966/7 the area of millet was 709 ha. but it has declined steadily since.

In the irrigated areas the increased area of cereals production over the period reflects the growth in irrigated area in the mantika. Although the area of irrigated cereals production remained more or less static from 1961/2 until 1969/70, and even declined in relation to other

TABLE 96 Development of the area of the five main categories of crops in the mantika of Salemiya, 1961/2 to 1971/2, in hectares

	Cereals	% (1)	% Tot. (2)	Legumes	%	% Tot.	Industrial Crops	%	% Tot.	Vegetables	%	% Tot.	Fruit	%	% Tot.	Total (3)
1961/2 Ir	3333	48	18	865	12	35	1820	26	10	766	11	31	184	3	13	6968
Non-Ir	62620	97	31	980	2	10	780	1	7	361	1	3	4	-	T	64805
1962/3 Ir	2481	40	13	660	11	39	2018	33	9	672	11	30	372	6	19	6203
Non-Ir	87001	94	35	2889	3	22	1825	2	12	508	1	4	6	-	T	92229
1963/4 Ir	2982	43	25	421	6	39	2413	35	9	606	9	25	436	6	21	6858
Non-Ir	104913	93	40	4494	4	25	2799	2	18	493	-	3	6	-	T	112705
1964/5 Ir	2244	34	60	721	11	32	2711	41	6	491	7	18	480	7	22	6647
Non-Ir	68884	89	38	4736	6	24	3301	4	22	585	1	4	7	-	T	77513
1965/6 Ir*	NA			1154		67	2875		7	536		19	507		22	
Non-Ir	NA			3961		20	2660		54	-		-	7		-	
1966/7 Ir	3793	37	69	1249	12	65	3651	36	12	937	9	27	615	6	24	10245
Non-Ir	43075	85	25	1603	3	10	4476	9	31	1326	3	6	9	-	T	50489
1967/8 Ir	4298	31	81	1089	8	66	6364	46	16	1503	11	30	582	4	21	13836
Non-Ir	43690	79	30	6628	12	28	4784	9	40	415	1	2	7	-	T	55524
1968/9 Ir*	NA			1167		70	8231		19	1389		31	678		22	
Non-Ir	NA			4530		24	4210		30	8994		1	25		T	
1969/70 Ir	3116	25	27	499	4	48	6499	53	15	1451	12	31	683	6	22	12248
Non-Ir	81858	92	39	5959	7	28	900	1	19	25	-	T	31	-	T	88773
1970/1 Ir	7384	46	65	1059	7	54	5460	34	14	1432	9	22	644	4	21	15979
Non-Ir	39123	91	23	1808	4	13	1707	4	29	150	-	1	118	-	1	42906
1971/2 Ir	8559	54	53	789	5	46	3832	24	11	1827	12	30	711	5	21	15718
Non-Ir	88981	94	40	3015	3	16	1753	2	23	759	3	2	118	-	1	94626

* Figures for 1965/6 and 1968/9 are unreliable due to the effect of drought conditions on crop areas.

(1) Percentage of total crops grown (see (3)).

(2) Percentage of total crops grown in province (see Table 93).

Source: Derived from the records of the Ministry of Agriculture and Agrarian Reform, Damascus.

TABLE 96 Development of the area of the five main categories of crops in the mantika of Salemiya, 1961/2 to 1971/2, in hectares

irrigated crops, the area increased rapidly in 1970/1 and 1971/2. In these years more than half of the area producing irrigated cereals was in the mantika and within the mantika itself more than half the irrigated area was taken up with cereals in 1971/2. However, as in the non-irrigated area, wheat and barley dominated the irrigated area of cereals to a greater extent than in the rest of the province. In 1971/2 the only other cereal crops grown in the irrigated area were Indian millet, which covered 27 ha., and maize which covered 267 ha., or 3.1% of the total. In 1966/7 some 794 ha. of maize had been grown but this declined steadily until 1971/2.

The area of legumes in the mantika is also characterised by wide fluctuations in both the irrigated and non-irrigated areas. In the non-irrigated areas the only two crops of importance were lentils and rambling vetch which made up 90% or more of the area over the period. A large proportion of the irrigated area of legumes in the province was, as Table 96 shows, in Salemiya but no major changes took place in the composition of crops in the area.

Turning to the industrial crops, the non-irrigated area of these crops increased in the mantika from 1961/2 until 1967/8 and then declined. While unimportant compared to the area of cereal crops in the mantika, the 1967/8 area of non-irrigated industrial crops in the mantika did represent 40% of the area of non-irrigated industrial crops in the province although this figure subsequently declined. In the non-irrigated area only two crops have been of importance over the period, cotton and cumen. Over most of the period between 50 and 75% of the cumen grown in the province has been grown in Salemiya, although the total area of the

crop, which reached 2864 ha. in 1966/7, fell to 531 ha. in 1971/2. Cotton, which took over from cumen as the main industrial crop in the non-irrigated area in 1968/9, has also declined in area since that date. In 1971/2 a small area of sunflowers was grown but otherwise the mantika has seen even fewer new industrial crops than the province as a whole.

While the irrigated area of industrial crops has increased over the period, in the year with the largest area, 1968/9, it was still only 19% of the total irrigated industrial crop area for the province. At this time, and in 1969/70, just over half the irrigated land in the mantika was given over to industrial crops, showing that industrial crops played a much less important part in Salemiya than elsewhere in the province. The dominance of cotton production, which is even more marked in Salemiya than elsewhere in the province is emphasised by the fact that almost no other industrial crops are or have been grown in irrigated areas in the mantika.

The area of fruit and vegetables is almost entirely confined to the irrigated area in the mantika. In the non-irrigated area there is little scope for the production, let alone diversification, of either crop type. An attempt in 1968/9 to plant water melons resulted in the crop failing and the experiment was not repeated. In the irrigated area, however, some development and diversification of both vegetables and fruit production has occurred. The area of vegetables has doubled from 1961/2 to 1971/2 but still only represents 12% of the irrigated cropped area - in 1961/2 this figure was 11%. This increase has been almost entirely due to the development of two crops, onions and potatoes, although the

area under tomatoes has also increased. The development of potato cultivation does represent the introduction of a new crop into the area by the Ministry of Agriculture which has helped farmers new to the crop with advice and the distribution of seed potatoes. The increase in the area of onion cultivation has occurred since 1966/7, when the onion processing factory was built at Salemiya. The setting up of this factory, and the development of potato production has shown that, given government support other than just the distribution of small holdings, the diversification of crop production is possible.

The area of fruit under cultivation in Salemiya is of relatively little importance, as Table 96 shows. Since 1961/2 the irrigated area of fruit has been dominated by the production of grapes and apricots and few new crops have been introduced into the area.

Hama

The agricultural land of the mantika of Hama is mostly in the traditional agricultural belt between the desert and the mountains in the west. In the eastern part of the mantika, which is generally considered to be east of the main north-south road, there are also marginal agricultural lands. The mantika includes cultivated areas based on wells, the Assi river and the irrigation scheme based on Lake Homs.

Assessment of the consolidation of the agricultural area and the diversification of crop production is complicated in this mantika by the alterations made in the total area of the province shown in Table 90. In 1964 a large area from the north-west corner of the mantika was allotted to the Ghab, and further alterations were made in 1966/7. This only resulted in a 4% reduction in the area of the mantika, but almost all of the 10,000 ha. involved was cropped land.

Table 92 does suggest nonetheless that there has been some reduction and consolidation of cropped area in the mantika. The reduction in the non-irrigated cropped area after 1963/4 is particularly marked. However, the fluctuation in both the irrigated and non-irrigated cropped areas is, as in Salemiya, a dominant feature. Although the non-irrigated area has been reduced since the 1961/2 to 1963/4 period fluctuations in the cropped area persist. The non-irrigated cropped area in 1970/1 was only 70% of the area of 1969/70, and the area in 1971/2 was 32% above that of 1970/1. Much of the marginal land where the cropped area is so variable is in the north-eastern nahiya of the mantika (see Figure 7) and it is also in this area that much of the reduction in the cropped area has taken place.

The fall in the total irrigated cropped area for the mantika in 1964/5 shows that much of the land taken for the Ghab was irrigated land. The irrigated area has continued to fluctuate as irrigation is dependent on there being sufficient rainfall to fill rivers and reservoirs. In percentage terms, the irrigated cropped area dropped 25% from 1964/5 to 1966/7, rose 22% from 1966/7 to 1967/8, increased by 31% from 1967/8 to 1969/70, fell by 28% from 1969/70 to 1970/1 and rose again by 11% from 1970/1 to 1971/2. Overall there has been no significant increase in the irrigated cropped area of the mantika.

Turning to the composition of the cropped area in the mantika, Table 97 shows how the area has been divided since 1961/2.

In Hama the production of cereal crops dominates cultivation in the non-irrigated areas, although to a lesser extent than in Salemiya. Since 1964/5 the area under cereals has remained at about 70% but while the

TABLE 97 Development of the area of the five main categories of crops in the mantika of Hama, 1961/2 to 1971/2, in hectares

	Cereals	(1) %	(2) % Tot.	Legumes	%	% Tot.	Industrial Crops	%	% Tot.	Vegetables	%	% Tot.	Fruit	%	% Tot.	(3) Total
1961/2 Ir	7897	37	43	589	3	35	10236	49	54	1339	6	55	1035	5	73	21096
Non-Ir	120993	80	60	7545	5	77	10121	7	88	10282	7	93	2052	1	35	150993
1962/3 Ir	7984	34	43	685	3	40	11931	51	52	1366	6	57	1289	6	66	23255
Non-Ir	153470	81	62	8002	4	60	12440	7	80	10732	6	92	3114	2	44	187758
1963/4 Ir	5088	21	42	449	2	42	15995	66	61	1369	6	58	1373	6	65	24274
Non-Ir	143994	78	54	11284	6	62	12407	7	80	14029	8	94	3215	2	45	184929
1964/5 Ir	621	4	16	1288	8	57	11685	71	27	1519	9	56	1396	8	63	16509
Non-Ir	90602	70	50	11498	9	57	10451	8	69	13181	10	84	3439	3	43	129171
1965/6 Ir*	NA			191		1	10767		27	1357		48	1442		62	
Non-Ir	NA			12811		64	1508		30	4003		52	3622		44	
1966/7 Ir	376	3	7	275	2	14	8682	70	30	1513	12	44	1565	13	61	12411
Non-Ir	100825	70	59	9520	7	59	8866	6	62	19760	14	83	4122	3	47	143093
1967/8 Ir	322	2	6	390	3	24	11050	73	28	1814	12	36	1611	11	59	15187
Non-Ir	74315	63	52	12579	11	53	6174	5	52	19987	17	90	4319	4	48	117374
1968/9 Ir*	NA			302		18	11617		26	1757		40	1654		55	
Non-Ir	NA			12295		64	5154		37	20983		83	4510		48	
1969/70 Ir	4652	23	41	342	2	33	11464	57	27	1862	9	39	1640	8	52	19960
Non-Ir	94963	71	45	18349	14	88	1367	1	36	14170	11	80	4744	4	49	133593
1970/1 Ir	2907	20	26	352	2	18	7156	50	19	2283	16	36	1677	12	54	14375
Non-Ir	69255	74	41	9619	10	68	2901	3	49	7176	7	48	5035	5	50	93968
1971/2 Ir	5054	32	31	664	4	39	6517	41	19	1964	12	32	1744	11	53	15943
Non-Ir	86737	70	39	12178	10	67	3701	3	48	16285	13	71	5471	4	55	124372

* Figures for 1965/6 and 1968/9 are unreliable due to the effect of drought conditions on crop areas.

(1) Percentage of total crops grown (see (3)).

(2) Percentage of total crops grown in province (see Table 93).

Source: Derived from the records of the Ministry of Agriculture and Agrarian Reform, Damascus.

TABLE 97 Development of the area of the five main categories of crops in the mantika of Hama, 1961/2 to 1971/2, in hectares

percentage of the non-irrigated area under cereals has remained steady, the actual area under cereals has continued to fluctuate, varying from 100,825 ha. in 1966/7 to 69,255 ha. in 1970/1. As in Salemiya, there has been no diversification of cereal crops. The only other cereal crop produced in the non-irrigated area is millet and while the area cropped each year fluctuated greatly there was a decline over the period. The devastating effect of poor weather conditions is again noticeable from Table 97 which shows the effect of drought in the 1965/6 and 1968/9 years. Though some cereals were produced in both years the figures for the successful cropped area were so low they were not published.

Table 97 shows that the mantika has been the most important area for the production of non-irrigated legume crops, in particular lentils and chick peas. Almost all the rambling vetch, of which some 4,954 ha. was cropped in 1971/2, was also grown in Hama. With legume crops, however, the fluctuations from year to year are very marked and there is no evidence that they are being reduced. From 1965/6 to 1966/7 the area decreased by 26% and then increased by 32% from 1966/7 to 1967/8 and again by 49% from 1968/9 to 1969/70. It declined from 1969/70 to 1970/1 to 1971/2.

The area of non-irrigated industrial crops has also fluctuated and since 1964/5 some 1/3 to 2/3 of the total area of such crops in the province have been in Hama. However, by 1969/70 non-irrigated industrial crops were the least important crop group in terms of area, and Table 97 indicates that, despite the fluctuations, it had actually declined since 1964/5. This reduction has been due to the decline of cotton production. In 1963/4, of the 12,407 ha. of non-irrigated industrial cropped area

11,684 ha. was cotton. In 1964/5 the figures were 10,451 ha. with 9,273 ha. of cotton and in 1968/9 the figures were 5,154 ha. with 4,830 ha. of cotton. By the end of the period, 1971/2, the area under cotton was 2,575 ha. out of a total of 3,701 ha. of industrial crops.

Apart from cotton there has been some development of other industrial crops although even by 1971/2 the non-irrigated area of these crops amounted to only 1,126 ha. In 1970/1 and 1971/2 sunflowers and sesame were introduced and by 1971/2 covered 941 ha. in Hama. The development of these two crops, which were not controlled by government marketing organizations, reflect the response to the demand for vegetable oils in the country and show that diversification of crops can be stimulated even in non-irrigated areas which are more risky for crop production, if the government allows profits to be made out of the new crops. The other main crop, a traditional one in the area, cumen, declined over the period and in 1971/2 accounted for only 185 ha.

The area of non-irrigated vegetable production in Hama has also fluctuated very strongly, although a comparison of Table 97 with Table 93 shows that the mantika of Hama has dominated non-irrigated crop production over the whole period. This has been due to the production of water melon which, with the exception of the poor rainfall years of 1965/6, 1968/9 and to some extent 1970/1, have covered between 68% and 77% of the non-irrigated cropped area under vegetables. The increases in the area after 1965/6 were also due almost entirely to the increased area under water melon.

Turning to the non-irrigated area under fruit, Table 97 shows a slight but steady increase in its area after 1961/2. However, there has been little change in the structure of fruit production over the period, with pistacchio nuts, olives, grapes and figs accounting for almost the whole area. The area of pistacchio nuts and to a lesser extent figs has increased more rapidly than the other two and in 1971/2 pistacchio nuts covered 58% of the non-irrigated fruit area in the mantika. As Table 97 shows, however, the non-irrigated area under fruit is of minor importance in Hama.

As has already been mentioned, there has been little increase in the irrigated cropped area of the mantika since 1964/5. As far as cereal production goes most of the irrigated area was in the north-west of the mantika, the area which was transferred to the Ghab in 1964, and this is borne out by Table 97. The increases after 1968/9 are a response to the drought of that season rather than to the introduction of new crops. By 1971/2 32% of the irrigated land of the mantika was therefore being used for cereal crops, and of the 5,471 ha. 4,760 ha. was cropped with wheat. The rest consisted of barley and, in 1971/2, 180 ha. of maize. However, the production of maize, which also has potential as a fodder crop, did not increase over the period, 1961/2 showing the greatest area of maize production - 200 ha.

As Table 97 shows, the irrigated area under legumes has remained very small over the period although the 1971/2 area was the largest since 1964/5. There has been some alteration in the legume crops produced, with haricot and broad beans increasing at the expense of lentils and the fodder crop, rambling vetch, which is no longer grown in the mantika.

Industrial crops have covered the largest proportion of irrigated land in the mantika over the whole period and this has been due almost entirely to the dominance of cotton production. This remained steady until 1969/70, since when, as Table 97 shows, it has declined as it has done elsewhere in the province, even in the Ghab. This decline has been due to the decline of cotton production which accounted for 10,950 ha. irrigated land in 1969/70, but only 6,576 ha. in 1970/1 and 5,803 ha. in 1971/2.

A principal factor in this fall has been that such poor prices have been offered to cultivators for cotton that they have been prepared to risk the loss of their licenses to produce cotton by cutting down on the area they cultivate. The increased area of sugar beet, which represents the only diversification of importance in irrigated industrial crops, has not compensated for the decline in cotton production, even though the irrigated area under sugar increased from 66 ha. in 1965/6 to 142 ha. in 1966/7, 200 ha. in 1967/8 and, following a decline in 1968/9, 500 ha. in 1970/1 and 672 ha. in 1971/2. Only very small areas of sunflowers and sesame have been grown in irrigated areas in Hama.

In contrast, the area of irrigated vegetable production increased slightly over the period, at least until 1970/1. The decline in this year was due to the reduction in the area producing onions from 850 ha. in 1970/1 to 550 ha. in 1971/2, but despite this decline the growth of a crop that can be stimulated by a new outlet, in this case the onion factory, can be very marked. From 1961/2 to 1971/2 the proportion of the irrigated area under vegetables that was cultivated with onions increased from 12.7% to 28%, with the figure being 37% in 1970/1. There has been little other diversification in the production of vegetables over the period.

As with vegetables, the irrigated area of fruit production has increased slowly since 1961/2. As Table 97 shows more than 50% of the area of irrigated fruit in the province has been grown in the mantika of Hama, although in 1971/2 fruit covered only 11% of the irrigated cropped area of the mantika. This puts fruit production in the province in perspective as being of minor importance, though there have been some increases in the area of figs, apricots and peaches.

Massiaf

The agricultural land of the mantika of Massiaf, in the south-west of the province, includes part of the low lying agricultural land of Acharne but also large areas of higher, rockier land south of the River Assi and of mountainous land in the west of the mantika. Like Hama part of the area of Massiaf was transferred to the Ghab in 1964 and further slight adjustments were made in the area of the mantika in 1966 and 1969 as Table 90 shows. Most of the land allocated to the Ghab was from the best agricultural land in Massiaf, but it did also include some of the mountainous land in the west of the mantika.

One of the features of Massiaf is that despite the higher rainfall in the area, both the irrigated and non-irrigated cropped area has continued to fluctuate greatly since 1961/2 as Table 92 shows. The total cropped area declined by 22% from 1964/5 to 1966/7, rose by 25% from 1966/7 to 1969/70 and fell again by 29% from 1969/70 to 1971/2. However, the fluctuation of the whole area was less marked than the fluctuation in the separate areas of cropped irrigated and non-irrigated land. In Massiaf in particular the cropped irrigated area depends on the rainfall, especially in the mountains, which feeds the streams which irrigate the agricultural areas along the edge of the mountain range. If the rainfall

is inadequate some of the irrigated land is cultivated as non-irrigated land, and a part of the non-irrigated land may not be cultivated at all. There is no evidence, from Table 92, that consolidation or stabilization of the area of either irrigated or non-irrigated land in the mantika has occurred.

As elsewhere in the province, the cultivation of cereals, in particular wheat and barley, has dominated crop production in the non-irrigated area, although perhaps to a slightly lesser extent than in the other mantikas. Table 9 8shows that after 1964/5 the fluctuations in the non-irrigated area of cereals was very strong with, if anything, an increase in the area, 1970/1 having the largest area of cereals since 1964/5 and covering 70% of the total non-irrigated cropped area in the mantika. There has been almost no diversification of crop type, with only small areas of millet and maize being planted. The area under millet has declined since 1964/5 from 900 ha. in that year and 1,100 ha. in 1966/7 to 14 ha. and 191 ha. in 1970/1 and 1971/2 respectively. The area under maize has increased but only from 20 ha. in 1964/5 to 480 ha. in 1970/1 and 298 ha. in 1971/2.

Turning to the production of legume crops in non-irrigated areas, this has shown a decline over the period in Massiaf, particularly after the poor rainfall year of 1968/9 when the area under cereals expanded at the expense of the area under legumes. There has been little alteration in the composition of the legume crops, although the area under lentils has declined more quickly than that of other crops.

The area of non-irrigated industrial crops is very small in Massiaf, with small areas of tobacco production the only crop of importance after 1963/4.

The area of non-irrigated vegetables is also very small and has declined since 1964/5. Given the higher rainfall in this area than in the mantika of Hama this is perhaps surprising but there has been very little development of water melon cultivation in Massiaf, mainly because most of the mantika is considered too damp.

Most of the non-irrigated area other than cereals is taken up by fruit. There was a steady increase of the area under fruit production until 1970/1 and 1971/2 when it declined slightly due to the cutting down of more than 600 ha. of old olive and nut trees. The division of land into Massiaf and the Ghab in 1963/4 did not affect the area under fruit in Massiaf greatly as most of it was in the uplands and mountains in the south and south-west of the mantika. Almost all the non-irrigated area of fruit is made up of grapes and figs and until 1970/1 these two crops, with olives and nuts, made up virtually the whole area of fruit. Since 1970/1, however, there has been an attempt to diversify fruit production by introducing apples, pears, plums, peaches and cherries in the non-irrigated area.

Even in 1971/2 cereals covered a relatively large proportion of irrigated area compared to the province as a whole. This indicates that in general diversification of crops has been slow in Massiaf where cereals could be grown more easily in non-irrigated areas than in either Hama or Salemiya. Table 98 indicates that a large part of the area of irrigated cereals, most of which was covered by wheat until 1969/70, was transferred to the Ghab in 1964. It also shows that there were great fluctuations in the area of irrigated cereals after 1963/4, with particularly large areas of cereals in 1966/7 and 1969/70, both seasons which followed drought years, reflecting the insecure conditions for agriculture even in areas of higher rainfall like Massiaf.

While the production of wheat has fluctuated greatly since 1964/5 and has been responsible for most of the variation in the area under cereals from year to year, maize, and to a lesser extent millet, have also been produced. The area under maize has increased, although with fluctuations, from 200 ha. in 1965/6 and 1967/8 to 268 ha. in 1968/9, 467 ha. in 1970/1 and 368 ha. in 1971/2. Since 1961/2 the area of millet has fluctuated between 15 ha. and 118 ha. each year with no marked increase over the period. Apart from 1969/70 and 1968/9 (when figures were not available) no barley has been grown on irrigated land but has been kept to non-irrigated areas.

Throughout the period from 1961/2 the area of legume crops in the irrigated area has been relatively smaller than in either Hama or Salemiya, but since 1967/8 has remained at between 170 ha. and 208 ha.. Broad beans, lentils and rambling vetch have given way to haricot and kidney beans.

While the area of irrigated industrial crops remained fairly constant from 1964/5 to 1969/70, as Table 98 shows, this was cut back in 1970/1 because of the shortages of water following two low rainfall years (1968/9 and 1970/1) out of three. Almost the whole of the area under irrigation was given over to cotton until 1969/70, and this was all cut back. In 1971/2 the only industrial crop grown under irrigation in the area was tobacco.

The reduction in the irrigated area did not, however, apply to the areas under vegetable production which have remained fairly stable, although the area in 1966/7 and 1967/8 was slightly larger as Table 98 shows.

Table 98 also indicates that irrigated vegetable area elsewhere in the province has increased more rapidly than in Massiaf. In 1965/6 22% of the irrigated area under vegetables was in Massiaf but by 1971/2 the figure had declined to 7%. Throughout the period tomatoes and potatoes were the main products, although the area of onions increased as it did in Hama.

Turning to the area of irrigated fruit in Massiaf, Table 98 shows that by 1971/2 it was larger even than the area of cereals. This reflects the diversification that has occurred into fruit production in the mantika, with the area of irrigated fruit having risen steadily over the whole period from 1961/2. This has been due to the irrigation of grapes and figs, which before had been non-irrigated, and the development of citrus fruits and pomegranites. However, the increase of the irrigated area of fruit production has not compensated for the decline in the irrigated area of industrial crops, with the result that in 1970/1 and 1971/2 the irrigated cropped area in Massiaf amounted only to 3% and 4% respectively of the total cropped area of the mantika.

The Ghab

The section at the beginning of this chapter on the development of the Ghab project outlines the agricultural and land tenure conditions of the Ghab area, which was created a separate mantika in 1964. The area, which is dominated by the irrigation scheme of the Ghab/Acharne project, is one in which the government intended that the cultivated area could be stabilised and modern agricultural methods introduced at an early stage of the development of the scheme. As Table 90 shows, a minor

adjustment was made to the area of the mantika of the Ghab in 1966 but otherwise the figures of area and production of crops are subject only to the other uncertainties which have been mentioned.

Attempts to consolidate and stabilize the cropped area in the Ghab, most of which it was hoped would be irrigated, have been unsuccessful as Table 99 shows.

The fluctuations of the cropped area in the Ghab from 1964/5 have been due almost entirely to the fluctuations in rainfall over the period. Table 92 shows that since 1964/5 the non-irrigated cropped area has continued to exceed the irrigated area in the scheme. Fluctuations in the area have been largely, although not entirely, due to fluctuations in the area of cropped non-irrigated land.

The development of the irrigated cropped area has also been influenced by rainfall, which is expected to help fill the reservoirs and rivers in the scheme but due to annual fluctuations has not always done so. The drought years of 1965/6 and 1968/9 also affected the irrigated area of subsequent years, when the reservoirs had to be replenished. It is interesting that it took until 1970/1, two years after the drought years of 1965/6 and 1968/9, to reach irrigated cropped area of 1964/5 again.

In the non-irrigated area, as Table 99 shows, cereal production has dominated the cropped area and there is no evidence that the area under cereals has been reduced. A comparison with Table 93 shows that the proportion of the Ghab under non-irrigated cereals is almost exactly the same as it is in the province as a whole. As elsewhere in the province

TABLE 99 Development of the area of the five main categories of crops in the mantika of the Ghab, 1964/5 to 1971/2, in hectares

	Cereals	(1) %	(2) % Tot.	Legumes	%	% Tot.	Industrial Crops	%	% Tot.	Vegetables	%	% Tot.	Fruit	%	% Tot.	(3) Total
1964/5 Ir	-	-		2	-		25693	99	59	193	1	7	36	-	2	25924
Non-Ir	11272	73	6	995	6	5	1181	8	8	1290	8	8	609	4	8	15347
1965/6 Ir*	100	-		5	-		21897	98	56	327	1	11	42	-	2	22371
Non-Ir	5976	53		1006	9	5	514	5	10	3158	28	41	570	5	7	11224
1966/7 Ir	147	1	3	5	-		13888	96	47	326	2	9	57	-	2	14423
Non-Ir	23716	80	14	2285	8	14	980	3	7	2015	7	8	608	2	7	29604
1967/8 Ir	171	1	3	5	-		18284	92	47	1324	7	26	61	-	2	19845
Non-Ir	18419	77	13	2506	10	10	875	4	7	1554	6	7	604	3	7	23958
1968/9 Ir*	109	1		16	-	1	20354	95	46	745	3	17	193	1	6	21417
Non-Ir	438	4		1316	13	7	4671	46	33	3021	30	12	612	6	7	10058
1969/70 Ir	210	1	2	25	-	2	20527	94	48	889	4	19	208	1	7	21859
Non-Ir	25713	78	12	865	3	4	2443	7	50	3317	10	19	609	2	6	32947
1970/1 Ir	682	2	6	338	1	17	25289	89	67	2137	8	33	140	-	4	28586
Non-Ir	47595	79	28	1412	2	10	3190	5	54	7318	12	49	784	1	8	60299
1971/2 Ir	1831	7	11	97	-	6	24040	87	69	1921	7	23	227	1	7	27616
Non-Ir	40664	78	18	2191	4	12	2242	4	29	5653	11	27	884	2	9	52404

* Figures for 1965/6 and 1968/9 are unreliable due to the effect of drought conditions on crop areas.

(1) Percentage of total crops grown (see (3)).

(2) Percentage of total crops grown in province (see Table 93).

Source: Derived from the records of the Ministry of Agriculture and Agrarian Reform, Damascus.

TABLE 99 Development of the area of the five main categories of crops in the mantika of the Ghab, 1964/5 to 1971/2, in hectares

the production of wheat and barley dominates non-irrigated cereal production, the only other crop being millet. Since 1964/5 the area of millet has varied between 2,800 ha. in 1971/2 and 7,000 ha. in 1967/8. Thus a large proportion of the increased cropped area in the Chab in 1970/1 and 1971/2 has been of non-irrigated cereals rather than new crops or crops requiring intensive production methods. In 1970/1 and 1971/2 non-irrigated cereals covered 54% and 51% of the total cropped area of the mantika. In 1966/7 the figure was also 54%, but in 1964/5 it had only been 27%.

The production of leguminous crops in the non-irrigated areas of the Chab has been of relatively small importance, although lentils, chick peas and broad beans are the main crops here as elsewhere in the province. There is no evidence from Table 99 that the cropped area of legumes fluctuates less in the Chab than elsewhere.

Turning to the area of industrial crops in the non-irrigated area, Table 99 shows that this has also been marked by fluctuations through the period, although it is evident that there has been more planting of industrial crops in the non-irrigated area since 1968/9 than before. An analysis of the crops grown shows that in 1968/9 all but 2 ha. of the area was under cotton. However, by 1971/2 only 1,001 ha. was under cotton, the rest being under sunflowers. The introduction of sunflowers by farmers in the Chab reflects the ability of some farmers at least to react to a demand - in this case for vegetable oil - with a good financial return. In contrast to sugar beet and other crops of which the prices are controlled by the government, sunflower seed oil was not, in 1972, subject to such controls and sunflowers were therefore an attractive new crop to cultivate.

The production of vegetables in the non-irrigated area has, as Table 99 shows, increased over the period, although it also shows that the area has continued to fluctuate markedly from year to year. In 1965/6 and 1968/9, two drought years, much of the area of vegetables was under water melons, and other crops covered less of the area than in wetter years. The area under potatoes has increased in the Ghab since 1966/7, even in the non-irrigated area, although in years of poor rainfall the crop is not grown in the non-irrigated area. Apart from potatoes there have been few other new vegetable crops introduced into the area and with the exception of water melons, vegetables were still of relatively minor importance.

Fruit production in the non-irrigated area has shown little change over the period, although Table 99 indicates that there has been a small increase of the area in 1970/1 and 1971/2. However, the valley of the Ghab is not considered suitable for fruit production because of the high winds that occur there. The main crops are grapes and figs and these are mostly grown on the fringes of the scheme. As in Massiaf, there has been a small increase in the area under apples, peaches, cherries and plums.

Turning to the irrigated area in the Ghab, the problems in completing the scheme and bringing the irrigated area under production have already been outlined. Table 99 re-emphasises the continuing lack of stability in the irrigated area. In fact, the development of the cropped irrigated area in the Ghab since 1964/5 has not been faster than elsewhere in the province. In 1964/5 48% of the cropped irrigated land in the province was in the Ghab and in 1971/2 this figure was 47%.

Both cereals and legume crops are of relatively little importance in the irrigated area. Table 99 shows that an increase in the area of cereals took place in 1970/1 and 1971/2 but this was largely due to the introduction of wheat rather than, as might have been expected, maize, into the irrigated area. In 1970/1 maize was grown on 455 ha. of the irrigated land but in 1971/2 the figure was only 260 ha. Although it was first grown in the Ghab in 1967 it has not been developed despite attempts to develop a livestock industry in the scheme. Other fodder crops have not been developed in the scheme either. In 1971/2 alfalfa, which was not introduced into the area until 1970/1, covered only 100 ha. of irrigated land. Almost all the maize and alfalfa is grown by the government owned livestock centres in the scheme with livestock elsewhere feeding on traditional foodstuffs, straw and rough pasture on fallow land and roadsides.

Industrial crops, on the other hand, take up a large proportion of the irrigated land that is cropped in the area. Although Table 99 indicates that the dominance of industrial crops decreased in 1971/2, it still accounted for 87% of the irrigated cropped land of the mantika, and industrial crops in the Ghab covered 69% of all cropped irrigated land given over to industrial crops in the province. However there has been little diversification of industrial crops in the area as cotton continues to cover a very large proportion of it. From 1966/7 to 1970/1 cotton covered 90% or more of the irrigated cropped area in the Ghab and in 1971/2 the figure was 88%. The only other crops have been sugar beet, the area of which has fluctuated greatly but covered only 2,873 ha. or 12% of the area in 1971/2, the peak year of its production. In 1967/8, 1968/9 and 1970/1 a small area of sunflowers was also grown on the irrigated land but in 1971/2 all sunflowers were on non-irrigated soil.

The fluctuations in the areas of sugar beet and sunflowers reflect the problem of inadequate and uncertain water supplies in the scheme. As a result some areas may be irrigated one year but not the next irrespective of the decision to plant or not plant the crops in irrigated or non-irrigated areas. The production of sugar beet in particular has therefore fluctuated from year to year. In any case the low prices offered for sugar beet have made the crop unpopular with farmers and as a result the processing factories at Homs and Jisr esh Shughur have been under-utilized. At the same time little has been done to replace cotton production in the area. Although cotton was grown in the Ghab before the scheme it is not a particularly suitable area for the crop, largely because much of it is prone to flooding and the water table is very high in many areas.

Table 99 also shows that the irrigated area under vegetables has increased over the period, although fluctuations in the area have been even more marked. The increase from 1966/7 to 1967/8 was by more than four times, but from 1967/8 to 1968/9 it decreased by 44%. Up to 1971/2 the area under vegetables was, if anything, slightly below the proportion of irrigated land under vegetables in the province as a whole. There have been some changes in the type of vegetables produced, with the increase of the area under tomatoes being the most important. By 1971/2 tomatoes covered 34% of the cropped irrigated area, with egg plants, potatoes and onions being the next most important. From 1964/5 to 1971/2 few new vegetable crops were introduced into the area and only nine vegetables were grown in sufficient quantities to be included in the statistical returns.

The irrigated area under fruit covers a very small area in the mantika and is of almost no importance. Some planting of fig trees was carried out in 1970/1 and 1971/2 so that in those years 69% and 50% of the area respectively was under figs. Small areas of other crops, though not citrus trees, have also been planted since 1968/9, but fruit, like vegetables, legumes and cereals in the irrigated area is of minor importance compared to the traditional irrigated crop of cotton - just as in the non-irrigated areas wheat, and to some extent barley, both traditional crops, still dominate the cropped area.

Livestock production in the province of Hama

Attempts to develop livestock production in the province since 1958, which have been concentrated in the Ghab, have been on a very small scale and so far of little importance compared to the efforts in developing cultivation. In the cultivated areas of the province livestock production still plays a small part in the agriculture. In the eastern parts of the province the herding of sheep and goats has, of course, been a traditional way of life for centuries. This is still so although many farmers in the western part of the province now keep a few cows and sheep much of the livestock belongs to owners from the east who rent rough grazing land in the west, especially in the summer. Such owners usually keep sheep and goats, and as Table 100 shows they keep them in very large numbers.

Table 100 indicates the precarious nature of keeping sheep and goats in particular. The period 1961 to 1963, for instance, and the year 1970 show the effect of drought on livestock numbers. Large numbers of animals were slaughtered or died in the drought years of 1959 to 1961 and 1968/9.

TABLE 100 The numbers of livestock kept in the province of Hama, 1961 to 1972, in thousands

Year	Calves	Cows	Sheep	Goats
1961	NA	22	237	16
1962	NA	19	312	19
1963	NA	20	432	25
1964	NA	19	492	29
1965	8	22	NA	NA
1966	7	24	NA	NA
1967	9	27	NA	NA
1968	27	33	683	27
1969	27	28	647	31
1970	23	41	595	28
1971	15	37	654	28
1972	27	25	524	28

Source: Derived from the records of the Ministry of Agriculture and Agrarian Reform, Damascus.

Attempts to build up herds of cows in the western part of the province, especially in the Ghab, have not been successful except in the government owned farms. This has been due to the high cost of good stock, problems of disease control, lack of suitable fodder and poor animal husbandry. The fluctuations in the number of cows shown in Table 100 indicate that there is no firm build up of herds and this is true even of the Ghab where in successive years from 1968 there were 12,900, 7,400, 19,500, 14,300 and in 1972, 20,500 cows in the mantika.

So far the problems associated with animal husbandry in the region have discouraged most farmers in the western part of the province from having more than one or two cows and a few sheep, and it seems unlikely that conditions outside the government farms, from either a market or an

animal husbandry point of view, will improve as educational and veterinary facilities are very limited. One last problem, that of the keeping of goats, with all the attendant problems of pasture conservation and improvement, has not been resolved despite attempts to restrict the areas in which goats can be kept. The increased number of goats kept in the Ghab, which numbered 1,000 in 1968 and 4,500 in 1972, suggests that even in this area they are being kept instead of cows and will become more and more difficult to restrict.

(iii) The development of crop yields in the province

The development of the yeilds of the main crops in both irrigated and non-irrigated areas since 1958 has been of crucial importance for a number of reasons. In the first place it indicates the extent to which plans to stabilize the agricultural area, introduce new methods and invest in irrigation, marketing organizations and so on have been successful. It also indicates the extent to which farmers in the province, particularly the beneficiaries of the reforms - the tenants and those who received land - took advantage of the redistribution of land, setting up of co-operatives and other government organised improvements, to intensify production and increase their incomes. At the same time the government has also been vitally interested in the increase in the size and value of agricultural production a general increase in crop yields would bring.

This section will investigate the developments in crop yields in the province as a whole and also in the four mantikas where agricultural conditions are different. While the progress in all areas is of interest to the government, developments in the Ghab are particularly instructive as it is in this area that the government has had most control over the

crops grown, the size of holdings and construction and management of the irrigation system, and where the Peasants' Union and other bodies have concentrated on education in agricultural methods and the introduction of new crops.

It must be re-emphasized at this point that the agricultural statistics on which figures of yields have been based must be treated with caution for the reasons outlined above. Even so, some indication of the influence of the agrarian reforms and new agricultural policies can be gained from a study of the crop yields over the period 1958 to 1972. In view of the drought from 1959 to 1961 the figures from 1962 to 1972 are a more accurate representation of the progress of crop yields over the period of the land reforms.

Dealing first with yields of cereal crops, there is little evidence of improvement in yields in either irrigated or non-irrigated areas until 1971/2. Table 101, which gives the yields for the main cereal crops, retains the same characteristics as the figures on crop production, in particular the fluctuations of yields and the lack of progress in increasing yields for most crops.

The improvements in the yield of wheat in 1970/1 and, in particular, 1971/2 is almost entirely due to the introduction of new species of high yielding wheat. It is interesting that in the Ghab in 1971/2 the yield of wheat in the irrigated area was 4.0 and this was due to a high proportion of wheat planted being of a newly introduced high yield variety. In the mantika of Hama the wheat yield in irrigated areas was 2.47 tons per ha., whereas in Massiaf and Salemiya, where less high yield wheat has

been introduced, the yields were 1.03 and 2.09 tons per ha. respectively. In 1964/5 and in other years before this, yields in Massiaf and Salemiya had been higher than in Hama.

TABLE 101 Yields of main irrigated and non-irrigated cereal crops in the province of Hama, 1961/2 to 1971/2, in tons per hectares

	Irrigated				Non-irrigated			
Year	Wheat	Barley	Millet	Maize	Wheat	Barley	Millet	Maize
1961/2	1.52	2.12	-	1.6	.97	1.23	.7	-
1962/3	1.36	NA	-	1.7	1.04	NA	.7	-
1963/4	1.06	1.14	-	1.7	.47	.68	.8	-
1964/5	2.16	1.43	-	1.6	.72	.78	.8	-
1965/6	NA	NA	-	1.8	.7	NA	.2	-
1966/7	NA	1.33	-	1.7	.8	1.16	.7	-
1967/8	NA	1.33	-	1.9	.55	.7	NA	-
1968/9	NA	NA	-	1.7	NA	NA	NA	-
1969/70	1.29	1.38	-	1.4	.44	.26	.4	-
1970/1	1.34	1.64	-	1.5	1.12	.47	1.1	-
1971/2	2.40	1.70	-	1.2	1.56	.99	.7	-

Source: Derived from figures obtained from the Ministry of Agriculture and Agrarian Reform, Damascus.

Dealing next with the irrigated area, neither lentils nor haricot beans, the main crops, have shown an increase in yields even though in the case of lentils the total area cultivated has been greatly reduced. In the mantika of Hama yields of lentils have been higher than in both Salemiya and Massiaf, suggesting that conditions of methods of cultivation may be better in Hama than in the other two mantikas. However, as yields in Hama have been consistently higher since 1961/2 there is no reason to think this is due to any innovation of the agrarian reform.

TABLE 102 Yields of main irrigated and non-irrigated leguminous crops in the province of Hama, 1961/2 to 1971/2, in tons per hectare

	Irrigated			Non-Irrigated		
Year	Lentils	Rambling Vetch	Chick Peas	Lentils	Rambling Vetch	Chick Peas
1961/2	1.09	1.36	3.6	.89	.97	.90
1962/3	1.00	1.39	3.5	.85	1.09	.50
1963/4	1.05	1.46	NA	.73	.94	.50
1964/5	.71	.99	4.2	.48	.72	.40
1965/6	.70	NA	4.0	NA	.22	.20
1966/7	1.72	1.20	4.3	.78	.97	.60
1967/8	.43	1.65	3.4	.25	.59	.80
1968/9	.97	-	2.2	.43	.58	.60
1969/70	.74	-	3.6	.27	NA	.30
1970/1	.76	-	6.3	.67	1.10	NA
1971/2	.79	-	3.4	.66	1.12	1.00

Source: Derived from figures obtained from the Ministry of Agriculture and Agrarian Reform, Damascus.

In the non-irrigated area there is also no evidence from Table 102 that crop yields have been improved over the province as a whole. However, in the case of lentils yields have been consistently higher in the Ghab than in Hama and higher in Hama than in Massiaf or Calemiya. While this is largely due to the higher rainfall in the west of the province the lower yields in Massiaf compared to Hama and, in particular, the Ghab may be due to several factors including flatter terrain and better soil conditions, but may also be due to better methods of cultivation. The area of non-irrigated rambling vetch in the Ghab is so small that a comparison between the Ghab and elsewhere with this crop cannot be made, but in the case of chick peas yields in the Ghab and Hama have been much the same, although higher than Massiaf.

Turning to the industrial crops, cotton, sugar beet and sunflowers, Table 103 shows how the yields have developed since 1961/2.

TABLE 103 Yields of main irrigated and non-irrigated industrial crops in the province of Hama, 1961/2 to 1971/2, in tons per hectare

	Irrigated			Non-Irrigated		
Year	Cotton	Sugar Beet	Sunflower	Cotton	Sugar Beet	Sunflower
1961/2	1.7	-	-	.3	-	-
1962/3	1.7	-	-	.4	-	-
1963/4	1.7	NA	-	.3	-	-
1964/5	1.8	NA	-	.2	-	-
1965/6	1.3	16.5	-	.2	-	-
1966/7	1.4	13.1	1.5	.3	-	-
1967/8	2.0	NA	2.2	.3	-	-
1968/9	1.6	19.7	2.4	.3	-	.8
1969/70	1.6	24.7	1.2	NA	-	1.6
1970/1	1.6	22.9	1.9	.3	18.3	1.3
1971/2	2.1	26.8	-	.3	NA	1.0

Source: Derived from figures obtained from the Ministry of Agriculture and Agrarian Reform, Damascus.

In the irrigated area the yields of cotton, by far the most important industrial crop in the province, show no indication of improvement in Table 103. Perhaps the most interesting aspect of the cotton yields in the province is found in the figures for the Ghab which have been below the average for the province in each year since 1964/5. The highest yields have been obtained in the mantika of Hama, but both Salemiya and Massiaf have had better yields than the Ghab in most years as well. This provides further evidence that cotton, which is grown on a very

high proportion of the cropped irrigated area of the Ghab, is not particularly suitable for it or is being cultivated inefficiently. Even though cotton yields are higher elsewhere in the province there is no evidence that yields have increased since 1961/2, although yields in 1971/2 were higher in Hama and the Ghab than in previous years.

Table 103 shows that yields of sugar beet have improved since 1965/6, when the first figures were available. This is to be expected with the introduction of a new crop. However, yields of sunflower seeds have not shown such an improvement and this is almost certainly because the area under sunflowers has been mostly irrigated in some years (1966/7, 1967/8, 1968/9, 1970/1) and mostly non-irrigated in others (1969/70, 1971/2), depending on the weather and the amount of water available for irrigation.

Yields of cotton in the non-irrigated area have also shown no improvement in the province as a whole, with 1969/70 being a particularly bad year when the crop failed. In the Ghab yields of non-irrigated cotton are only marginally better than the average for the province as a whole, despite the better rainfall conditions, providing a further indication that this area is not particularly suited to the cultivation of cotton.

Developments in the yields of the main vegetable crops in the province are summarised in Table 104.

Of the irrigated crops in Table 104 only the yields in tomatoes show any marked increase with an improvement every year since 1966/7. This almost certainly represents improvements in the methods of cultivation of tomatoes, which in 1971/2 could still be sold by the producers privately, as could most other vegetables. The improvements of the yields

of other irrigated crops appear to have taken place in 1969/70 or later and while the increases may have been due to improved cultivation it must be remembered that the methods of collecting information on production were altered in 1970.

TABLE 104 Yields of main irrigated and non-irrigated vegetable crops in the province of Hama, 1961/2 to 1971/2, in tons per hectare

	Irrigated					Non-irrigated	
Year	Tomatoes	Potatoes	Green Peppers	Dry Onions	Egg Plant	Tomatoes	Water Melon
1961/2	8.7	11.1	6.7	14.5	8.3	1.0	3.0
1962/3	4.4	10.5	7.3	13.8	9.0	1.0	3.5
1963/4	8.9	9.1	6.8	14.3	9.3	1.0	4.0
1964/5	7.0	10.1	5.5	12.9	7.6	1.1	4.0
1965/6	7.5	8.6	5.6	13.3	7.9	3.2	.6
1966/7	9.1	8.8	5.6	13.5	8.6	.8	9.4
1967/8	10.9	11.2	6.0	12.6	7.9	.3	4.1
1968/9	11.2	7.3	NA	12.7	8.2	1.5	3.6
1969/70	13.4	9.7	6.9	16.2	7.8	.8	2.9
1970/1	16.9	9.4	4.1	19.7	20.4	4.8	5.6
1971/2	16.6	NA	9.0	21.1	18.1	4.4	11.7

Source: Derived from figures obtained from the Ministry of Agriculture and Agrarian Reform, Damascus.

Comparing yields in the different mantikas, the figures show that in tomato production yields in the Ghab were below the average for the province until 1969/70 and 1970/1, but again below it in 1971/2. In the other areas, yields in Hama and Massiaf have generally been above those in Salemiya. The same is true of the yields of potatoes. Yields in the Ghab were below those of other mantikas until 1970/1 and those in Hama and Massiaf were higher than in Salemiya. This suggests that in the Ghab some time was needed for vegetable cultivation to be brought up to the

standards of other areas of the province. It also suggests that the extra requirements of irrigation in Salemiya for vegetable crops, together with the more difficult conditions of cultivation have resulted in consistently poorer yields in the drier, eastern part of the province. However, yields of dry onions have been higher in Salemiya than elsewhere since 1967/8, almost certainly as a result of the assistance given by the onion processing factory in Salemiya. Again, in the Ghab the yields of onions did not reach the levels of those in Salemiya or Hama until 1970/1.

Turning to the yields in non-irrigated vegetable crops, the fluctuations in the production of crops makes it impossible to detect any trend in the yields except for the two most important crops, water melons and tomatoes. For tomatoes the figures for 1970/1 and 1971/2 show improvements over previous years and while weather conditions in 1971/2 were good those in 1970/1 were not particularly helpful. In 1970/1 some non-irrigated tomatoes were grown in the Ghab, probably on land which had been irrigated in 1969/70 and was again in 1971/2, and yields in the Ghab were high for non-irrigated production, accounting to some extent for the improvement in 1970/1. This was the only year in the period 1961/2 to 1971/2 that non-irrigated tomatoes were grown in the Ghab. However, figures in Hama, Massiaf and Salemiya also show increases in yields from 1970/1.

The yields of water melons, by far the most important vegetable crop in terms of area, show great fluctuations from year to year, though again with increases in 1970/1 and 1971/2. These do not appear to have been the result of the introduction of new types of melon or any marked improvement in cultivation, although in the Ghab, which by 1971/2

accounted for 17% of the area under water melon, yields were higher than in Hama but about the same as in Massiaf. A large proportion of the increase in yields is, therefore, most likely to be due to the alterations in the methods of collecting statistics about production.

Turning to the development of yields in fruit production, the most serious problem of assessing changes that may have taken place again lies in the way in which statistics have been collected. The assessment of yields has not been done on the basis of production by area but of production by number of producing trees. The figures in Table 105 are, therefore, based on tons per thousand producing trees. This may reflect the problems of collecting data on fruit as much is produced from scattered trees, so basing yields on area would not be valid. The The figures for the area of fruit production can only give an estimate of the importance of various fruit crops. However, collection of data on the basis of yield per tree can only offer a rough indication of yields as such a method is open to inaccuracies of all sorts.

Perhaps the most important feature of Table 105 is again the fluctuations in the estimated yields, even in the irrigated areas. There is no evidence from the figures that these fluctuations are decreasing. However, the figures indicate that in years of high production yields are higher in later years of the period than in earlier years. In view of the susceptibility of fruit production to poor weather conditions and pests, this suggests that the methods of production of some crops have improved. On the other hand, the figures for the total number of producing trees and for production have increased out of all proportion to the increase of the area under fruit in Table 93.

TABLE 105 Yields of main irrigated and non-irrigated fruit crops in the province of Hama, 1961/2 to 1971/2, in tons per thousand trees

	Irrigated									Non-Irrigated							
Year	Olives	Grapes	Figs	Apricots	Nuts	Apples	Plums	Almonds	Pomegranites	Peaches	Olives	Grapes	Figs	Nuts	Almonds	Pomegranites	Pistacchio
1961/2	NA	2.9	NA	4.8	23.0	4.1	5.4	6.3	7.5	4.8	4.6	1.8	3.2	25.0	1.4	9.4	1.0
1962/3	5.0	3.0	NA	8.2	38.0	4.9	3.3	6.9	11.3	7.7	NA	NA	5.0	NA	5.3	12.0	1.0
1963/4	4.0	5.5	8.4	NA	27.0	6.6	6.0	6.9	11.8	7.7	5.0	1.9	6.1	29.0	5.3	11.4	1.0
1964/5	10.0	6.9	8.1	3.5	14.0	5.9	5.8	NA	NA	5.3	5.3	2.5	5.9	NA	1.4	6.5	1.0
1965/6	11.9	2.3	11.4	12.5	30.0	14.2	9.0	1.8	13.0	14.9	2.8	2.5	NA	NA	4.7	5.9	6.3
1966/7	11.7	8.2	11.3	17.3	40.0	17.0	10.6	2.4	31.4	17.6	5.2	3.8	9.4	29.0	6.0	14.8	3.9
1967/8	11.2	6.9	15.1	13.3	30.0	19.2	14.6	2.1	NA	21.0	7.2	4.0	7.8	35.0	2.4	10.1	3.6
1968/9	9.0	6.5	19.8	8.8	29.0	14.9	9.8	3.8	24.7	16.7	8.3	2.7	7.6	40.0	4.6	6.0	1.0
1969/70	NA	NA	20.1	NA	NA	NA	14.5	NA	NA	NA	6.2	3.5	NA	NA	NA	NA	NA
1970/1	16.5	7.3	14.5	14.2	30.0	22.2	10.5	14.2	25.3	NA	11.2	2.0	6.6	16.0	3.3	NA	NA
1971/2	7.5	3.9	9.3	27.3	19.0	25.3	26.5	30.0	18.0	NA	31.6	3.4	7.2	NA	8.3	7.4	19.8

Source: Derived from figures obtained from the Ministry of Agriculture and Agrarian Reform, Damascus.

TABLE 105 Yields of main irrigated and non-irrigated fruit crops in the province of Hama, 1961/2 to 1971/2, in tons per thousand trees

This indicates that the collection of data producing trees and total production has been inadequate, at least in the early part of the period. The figures for the area and production of olives, for instance, are an example of this. In 1962/3 the irrigated area of olives was 31 ha. and the non-irrigated area 818 ha.. Figures for 1961/2 for the number of producing trees were 100 in the irrigated area and 20,500 in the non-irrigated area. In 1971/2 the irrigated area for olives was 36 ha. and the non-irrigated area 540 ha. The number of trees producing fruit were estimated as 4,500 and 41,800 respectively. Such large increases in the estimates of the number of trees that are producing, particularly for a traditional crop such as olives, almost certainly reflects the improved efficiency in collecting data rather than the maturing of large numbers of trees or any intensification or improvement in production.

The increases in the number of trees and of production are also marked for the other fruit crops tend to be higher in Hama than in the other mantikas, even the Ghab. The yields of grapes, both irrigated and non-irrigated, in particular are higher in Hama than in Massiaf and Salemiya, almost certainly due to the expertise with which grapes are cultivated in the area of Mehardeh. The Ghab includes part of this area, which accounts for the high yields of non-irrigated grapes in the mantika.

The mantika of Hama accounted for 51% of irrigated and 55% of non-irrigated area of fruit production in the province in 1971/2. Most of the fruit production takes place in the western part of the mantika where experience of fruit production and comparatively suitable agricultural conditions have meant that yields have tended to be higher in Hama than elsewhere.

While yields have varied greatly between one mantika and another, and yields have fluctuated from one year to another, the possible increases in yields have also, in general, been obscured by the way statistical information has been collected.. Figures for several of the crops suggest that yields have increased in 1970/1 and 1971/2, particularly for apricots, plums and peaches, but there is little evidence to suggest that the most important crops in terms of area, olives, figs and grapes, have shown similar developments.

The detailed analysis of agricultural production in the province, which shows that little progress was made in the diversification or intensification of production, indicates that little improvement took place in incomes amongst the rural population over the period of the agrarian reforms. The increasing control of the prices of agricultural products by the government has helped depress rural incomes and there is no indication that these have increased significantly since the introduction of laws regulating tenancy agreements and agricultural wages in 1958 and 1963.

NOTES

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CONCLUSION

In the period from 1945 to 1958 the rapid development of the agricultural sector was the basis of the expansion of the Syrian economy. In the decade after the second world war land, labour and capital were available for the expansion of the agricultural sector. High world prices for agricultural products, and the comparatively low cost of opening up the marginal agricultural lands for cultivation, together with the availability of labour, encouraged private investment from landowners and businessmen in agriculture. Their investments in and exploitation of the agricultural sector was protected and encouraged by successive governments that were controlled or strongly influenced by the political Right.

Towards the middle of the 1950's political and economic factors, which had so encouraged the development of agriculture by the private sector, began to be less favourable towards it. On the economic front world prices in Syria's main products, cotton, wheat and barley, fell back and, as a relatively inefficient producer, Syria was hard hit by the new circumstances. By this time there were also fewer opportunities for introducing low cost improvements to Syrian agriculture and much of the marginal land that was of possible use for cultivation had been taken up. This resulted in declining investment by the private sector in agriculture, as fewer profits were to be made, stagnating agricultural production and deteriorating conditions for the mass of the rural population which had depended on investment and expansion to maintain their incomes.

On the political front, the agricultural sector was affected by a number of issues. The most important of these was the growth of radical groups

whose aim was to break the economic and political control of the landowners and businessmen in Syria. They realized the landowners and businessmen exercised their control through the ownership of land and control of capital and other means of production in the agricultural sector which dominated the Syrian economy. These groups therefore sought their support amongst the rural population, where they found it increasingly as economic conditions deteriorated. At the same time they gained a voice in the Chamber of Deputies, but more significant than that infiltrated the armed forces. The other most important political factor was the war against Israel in 1956 which brought disgrace on the existing rulers of Syria, the political Right, and gave impetus to their leftist opponents.

While the ruling group in Syria was therefore under increasing economic and political pressure from the mid 1950's onwards, the fact that it controlled the land, and therefore the economic and political structure of the country, enabled it to retain power without making any significant changes. Throughout Syria the great oligarchies owned the land and through it exercised their control over the country's political and economic life, supported by the business community. This pattern of ownership, which had emerged during the Ottoman Empire, was challenged before 1958 but by and large all calls for the redistribution of land were ignored and only minor alterations to land tenure arrangements, which did not affect the existing structure, were accepted. It was not until the Baath-inspired union with Egypt in the U.A.R. that power was taken out of the hands of those who fought against change in Syria, particularly against agrarian reform, and revolutionary changes in the ownership of land and the agrarian structure as a whole could be made.

Having outlined the existing political and economic conditions in Syria, particularly with regard to the agricultural sector, this thesis has attempted to describe the main agrarian reforms in the country after 1958 and analyse their progress. It has also included an assessment of which reforms have been successful or unsuccessful and why, and indicated what areas within the agricultural sector need further changes and reforms. Apart from the crucial issue of the ownership and redistribution of land other aspects of land reform, changes in tenurial arrangements, state planning and investment in the agricultural sector, the development of co-operatives and agricultural credit and the development of agricultural markets and pricing policies have also been studied as an integral part of the agrarian reform.

The thesis then goes on to deal with the provisions of the main agrarian reform laws of 1958, 1961, 1962, 1963 and later. Apart from an analysis of the laws themselves the actual implementation of the laws is examined in detail and the factors affecting the alterations, delays, successes and failures of the laws investigated.

The laws of 1958 introduced into Syria for the first time the full weight of a radical agrarian reform. Law No. 161 and Law No. 134, dealing with land ownership and tenancy and working agreements respectively, aimed to completely alter land ownership patterns and relations between landlord and tenant and labourer in Syria. The first and most important aim, however, was to strike at the landowners who held political and economic control over the country. At the same time, the prospect of land ownership and immediate and pronounced rises in incomes as a result of Law No. 134 was to cement the support of the rural population for the U.A.R. government.

Other land, owned by the state, was to be distributed and co-operatives were to be set up and the Agricultural Bank re-organised to support them.

There is no doubt that rapid progress was made with the expropriation of land and by 1961, when Syria withdrew from the U.A.R., nearly half the land that was to be expropriated had been taken. At the same time, where it could be enforced, Law No. 134 had made a significant difference to the incomes of tenants and labourers. However, the distribution of expropriated and state owned land, the setting up of co-operatives and the development of the Agricultural Bank fell behind schedule almost immediately. As a result the take over of land ownership and production by the beneficiaries, which was planned to be immediate and self-financing, did not take place and political uncertainty and economic dislocation was the consequence.

A number of political and economic factors were responsible for the failure of the first agrarian reforms. The state showed itself unable to take on the responsibilities of building up a new agrarian structure after largely dismantling the old one. It lacked the trained manpower, finance and political and economic infrastructure to carry out so radical and rapid a transformation. At the same time attempts to implement the reforms coincided with disastrous weather conditions in 1959 and 1960 which seriously hampered the distribution of land and the organization and financing of agricultural production.

Although this drought was particularly severe it served to underline the contrast in agricultural conditions between the partners in the U.A.R., Egypt and Syria. The agrarian reforms in Syria were copies of those recently executed in Egypt in almost every respect with provisions for land holdings,

tenurial conditions and the setting up of co-operatives being borrowed by Syria. However, the implications for Syria, where agricultural conditions are different from Egypt in every respect, were more far reaching and involved a much more drastic upheaval of the agricultural sector than in Egypt. This was particularly true of Law No. 161 which affected large numbers of medium as well as large landowners and eroded much of the support from landowners of medium sized properties who would otherwise have acquiesced in the expropriations. Attempts to set up co-operatives and an Agricultural Bank, which were well established in Egypt before the land reforms, were misunderstood or exploited by most beneficiaries who had no conception of how to make use of such institutions. All in all the agrarian reforms, imposed from Egypt, were unsuitable for Syrian conditions and the failures of the agrarian reforms contributed very substantially towards the collapse of the U.A.R.

The affects of the political conflicts of the next two years, culminating in the seizure of power by the Baath Party, on the agrarian reforms in Syria are discussed and analysed in Chapter IV. The brief resurgence of the political Right at the end of 1961 was reflected in the immediate suspension of many provisions of the agrarian reforms, particularly Laws No. 161 and No. 134. However, little progress was made in returning land to farmer owners before further changes of government in 1962 put Syria back on the path of agrarian reform. Expropriation of land continued, but very slowly as the Right fought to prevent further major reforms from taking place. While expropriation of land was slowed, the distribution of land, especially of state land, was speeded up and an effort was made to restart the programme setting up co-operatives and other services. In 1963, however, the changes of political direction and the resulting uncertainties in the agricultural sector were temporarily resolved by the new Baath government.

Following the political struggles of the 1961 to 1963 period the Baath regime, which then took control, was determined to destroy the residual power of large landowners once and for all. Further and more radical agrarian reform measures were introduced in order to help effect this. Law No. 88 replaced Law No. 161 and in it maximum land holdings were even further reduced and, to underline the political nature of the reforms, back-dated to January 1950 to make sure all the large land owning families were affected. Law No. 218, which replaced Law No. 134 dealing with tenurial arrangements and conditions of work, was both more radical and more detailed and made provisions for bodies to be set up to ensure that the new law was enforced. Other laws dealing with the setting up of co-operatives, the Agricultural Bank, the control of marketing and so on were also introduced in a series of measures to introduce a rapid and comprehensive agrarian reform.

An analysis of the execution of the various laws, however, shows that for the most part the reforms were still too ambitious and failures to meet targets of all sorts set down in the various programmes reflect this. Expropriations followed an uneven course and were subject to delays. The distribution of this land was as erratic and even more delayed. Indeed, by the end of 1969, when distribution of land was declared completed, between 2/3 and 3/4 of the expropriated land had not been distributed to smallholders. While much of it was unsuitable for distribution, there was land which could have been distributed to smallholders but it was held back by the state for its own purposes or simply not distributed.

The distribution of state land proceeded rapidly during the period from 1963 to 1968 in contrast to the distribution of expropriated land. Along with the implementation of Law No. 218 these mark the comparative successes

of the reforms. In contrast, the setting up of co-operatives and the financing of the agricultural sector through the Agricultural Bank were subject to serious delays because, once again, the state lacked the expertise and finance to execute the reforms. Political conflict and external political events, particularly the 1967 war with Israel, also interfered with the planned implementation of the reforms. As a result the distribution of land lagged behind expropriation, and the setting up of essential agricultural organizations and services lagged far behind the distributions. This led inevitably to disillusionment and opposition from the rural population, even those who were to receive land.

The radicalization of the reform laws in 1963, together with the failure to complete the over-ambitious, unrealistic programmes of the agrarian reforms, reflects the strong political element in the reform programme and the conflicts that arose between political and economic considerations in the reforms. These were obvious in the reforms attempted by the U.A.R. from 1958 to 1961 and were just as serious after 1963. After 1963 the private sector had little political power but retained a great deal of economic power in the agricultural sector. Some 60 to 65% of the private land was untouched by the expropriation laws but many private owners were excluded from participating in the planning and financing of agricultural developments directed by the state. For political reasons a variety of measures ensured that most of the private sector was excluded from such participation and had no possible opportunity for regaining its previous position. So uncertain was the position of most private landowners throughout the 1960's that few spent money on their lands and many redirected their investment from agriculture to other, safer sectors of the economy or went abroad. It was only after the change of government in 1970 that the first tentative

steps towards encouraging private sector investment took place. Even after 1970 many landowners felt insecure as they saw no long term place for a large private sector in agriculture in a socialist economy.

Apart from the private sector's position in the agricultural sector, there were conflicts between successive Baathist governments and the beneficiaries, tenants and smallholders who were to benefit from the agrarian reforms. There were also conflicts within the Baath about the direction agricultural policy should take. In both cases political and economic interests clashed. Since 1963 the setting up of state farms has been part of Baathist policy and governments have tried to direct beneficiaries into co-operatives where they would gradually lose their rights to land and control over their own land. While operational co-operatives of this sort would almost certainly be more efficient economically, these have been bitterly opposed by co-operative members who, suspicious of the governments motives and mindful of Baathist policies on state farms, want to ensure they retain and work their own plots of land. As the governments have depended on the political support of the beneficiaries they have been unable to enforce their policies.

Other attempts have been made to control smallholders, including beneficiaries and tenants, through the setting up of the Peasants' Union and the Co-operative Union, both Baathist front organisations. While these bodies are controlled by the Baath they are made up of the people upon whose support the Baath Party depends so they can be used to influence, but rarely coerce their members.

Within the Baath Party itself conflicts have existed over the extent to which the rural population should be forced to accept more economically

efficient agricultural organization and methods. Those on the Left within the party, who were in power from 1966 to 1970, did their best to push forward with collective cultivation, but met with little success. Since 1970 attempts have been made by the Centre/Right of the party to persuade co-operatives and smallholders to integrate production but with little success. As a result the government has taken steps towards starting its own, separate, capital intensive agricultural operations separate from the co-operative sector to the probable detriment of the latter.

While the measures dealing with the expropriation and distribution of land and the tenurial conditions are of course essential to the agrarian reforms, the importance of agricultural planning and investment in the essential services for agriculture to the success of the reforms as a whole cannot be over-emphasised.

Investigation of the nature of planning and investment by the state in the agricultural sector is undertaken to show that from 1960 governments produced five year plans which in the agricultural sector aimed to produce full employment, rapid growth of production and incomes, and a socialist economy. In all three plans, from 1960 to 1965, 1966 to 1970 and 1971 to 1975, a large proportion of planned expenditure was in the agricultural sector and most of this was for the development of irrigation which was considered to be crucial to the plans for consolidating the agricultural area and improving production. In the first and second plans the private sector was to provide the bulk of the working capital and capital for small scale projects, but in the third plan this was to be taken over by the state.

The analysis of the performance of the plans shows that in all three plans investment and production targets were not met, including those in the

agricultural sector. The only exception to this in the agricultural sector took place in the first plan when planned investment in the private sector was exceeded, but this dropped away in the second plan. The failure to meet investment targets has been due to a number of factors. These have included political disruption both within and from outside the country, the failure to control imports, exports and private consumption, and, not least, over-ambitious plans laid down amid great publicity for political purposes.

In the agricultural sector shortfalls in investment were particularly serious and were worse in the second and third plans than in the first. Shortfalls in investment in irrigation, even the great prestige project of the Euphrates Valley, was as bad if not worse than in other areas of the agricultural sector. Other projects designed to intensify crop production and stabilise supplies were also neglected.

Because of the high proportion of investment given over to large scale irrigation projects, little was available or allocated to small scale irrigation projects. These would have provided immediate if unspectacular support for agricultural co-operatives or areas of smallholdings. The large scale projects themselves, particularly the Euphrates but also the Ghab scheme, were behind schedule and contributed little to the intensification of production or consolidation and stabilization of the cultivated area. Settlement schemes on both projects were ill planned and uncontrolled which further reduced the effectiveness of the projects. Other essential but unspectacular projects, such as the provision of extension services, were neglected from an investment point of view to the detriment of the agricultural sector.

The setting up of co-operatives and the provision of working and investment capital in the agricultural sector through the Agricultural Bank, both of which were essential for the success of the agrarian reform, also fell behind schedule. Plans for the setting up of co-operatives and training of co-operative staff were very ambitious but the failure to provide planned investment or implement either in any way was striking.

In all three five year periods the Agricultural Bank has been under-capitalized and failed to provide planned credit facilities. As a result credit available through the Agricultural Bank has not replaced non-institutional sources of working capital even though the Agricultural Bank has concentrated on providing short term credit. Since 1968 and 1970 there has been no consistant increase in the amount of short term credit extended to the Agricultural Bank, a factor which has encouraged smallholders to continue using various sources of non-institutional credit. Shortages of medium and long term credit, even for co-operatives, to finance small and medium scale investments and improvements have been even more severe.

Despite the shortfalls of available credit, the Agricultural Bank has gradually extended credit to smallholders with less and less land and in the marginal areas of cultivation. In both cases these borrowers have turned out to be less reliable in the repayment of loans. Special arrangements have been made to allow co-operatives to guarantee loans made to its members by the Agricultural Bank, thus further extending the numbers of smallholders who can obtain credit. The delay in the setting up of co-operatives has been particularly serious for beneficiaries of the reforms, many of whom have had to wait for the formation of the co-operative before getting credit at all from the Agricultural Bank.

While pursuing a policy of extending credit to co-operative members and other smallholders, successive governments have insisted that the Agricultural Bank is run as a business and that all loans are repaid. Given the poor management of its loans by the bank, poor supervision in co-operatives, and the inexperience of most farmers in dealing with a state controlled credit organization, it is not surprising that the Agricultural Bank has had a serious and continuing outstanding debt. The extent to which the Agricultural Bank has been able to insist on repayment of this debt has been a delicate political issue. While the regulations concerning loans from the bank allow for severe measures to be taken against those with outstanding debts, the bank has not generally carried these out against smallholders and co-operative members. The fact that many debts to the Agricultural Bank, particularly of interest payments, have been waived, has further reduced the strength of the bank in its attempts to insist that all debts are repaid.

Finally, the five year plans included a certain amount of investment for the setting up of processing industries based on agricultural products and targets for the production of the requisite crops. As in the case of other investments, some progress was made but there were serious shortfalls in the investments and delays in the implementation of the projects. This policy was seen as essential both to help reduce the imports of essential foodstuffs and to integrate the agricultural sector with the industrial and commercial sectors by developing agriculture based export industries. The disappointing progress in this policy had serious consequences for the balance of Syrian trade and in perpetuating the backwardness and relative isolation of the agricultural sector.

The study of the agrarian reforms and the associated planning and investment in the agricultural sector shows that, despite problems and failures, far-reaching and irreversible changes were made in agriculture. This thesis investigates the extent to which developments and increases in agricultural production, which were also planned in some detail, actually took place. For both economic and political reasons it was very important to the new governments in 1958 and 1963 that they did.

The production targets made no allowances for the dislocation in production that could be expected, at least during the easy stages in the re-distribution of land and implementation of planned investments. This was also true of the plans to consolidate the cultivated area and intensify production through irrigation and indeed there was almost no progress in either field from 1958 to 1973. In fact the cultivated area increased up to 1963, after which it remained more or less static. The proportion of the cultivated land that was irrigated continued to fluctuate throughout the period but no increase took place and the proportion of fallow land in the cultivated area remained much the same. This is an indictment of the investment policies of successive governments which concentrated almost entirely on large scale projects. What was gained in these areas, particularly as far as irrigation was concerned, was offset by the neglect and decline of small scale projects elsewhere.

It has been shown that attempts to diversify agricultural production and increase yields fell below planned targets. Indeed there is no evidence to show that for the most part either occurred to any significant extent, particularly bearing in mind the fluctuations caused by the dependence of Syrian agriculture on the weather and the changes in the methods of collecting agricultural statistics. The planned diversification of agricultural

production, which involved the introduction of high value crops of all sorts, particularly crops for industrial processing, did not take place. The figures show that only minor increases in the proportion of the cultivated area given over to fruit and vegetables occurred at the expense of cereal and industrial crops, particularly after 1970, and that in cereal and industrial crop production new, higher value crops were not introduced.

There is no evidence to show at the national level that yields of any crops increased significantly over the period from 1958 to 1973. Newly introduced crops performed particularly badly in this respect, especially sugar beet, maize, fodder crops and new fruit crops, a factor which contributed to the reluctance with which they were accepted by farmers.

Failure to diversify production and increase yields has plagued the agricultural sector since 1958. Such failures are undoubtedly linked very closely with the dislocation of the agricultural sector through the inability of successive governments to implement the agrarian reforms or carry out balanced investments to support the redistribution of land. The continuing alienation of the private sector in agriculture has contributed to these problems.

The response of governments to these failures has been circumscribed by political factors and it has not been possible to carry out major alterations to either the agrarian reform laws or the direction of investment in the agricultural sector. Attempts have been made to complete the agrarian reforms, particularly the setting up of co-operatives, more quickly, and since 1970 to encourage the private sector but no significant and essential alterations to policies in the agricultural sector have taken place.

Governments have also been left with the critical problem of trying to finance the reforms and planned investments in the agricultural sector. It was intended that both the reforms and the investments would pay for themselves and that increases in production would provide exports, reduce the need for imports and provide revenue for other developments in the agricultural sector. The reforms have not been self-financing, there have been delays and cost overruns in almost all investment projects, and the agricultural sector has provided a constant drain on government resources since 1958.

Instead of introducing major changes to the agrarian reform laws and investment policies, successive governments have tried to recoup their financial losses in the agricultural sector by increasingly tight controls on prices, marketing and trading of agricultural products. Throughout the period from 1958 to 1973, and particularly after 1965, governments have extended their control in the major cereal and industrial crops and to relatively minor crops to the extent that the marketing of many crops is now a government monopoly. Prices have been kept low with the result that enterprise and innovation in the agricultural sector has been stiffled and incomes of the rural population have risen very slowly, if at all.

While the government controls of prices and marketing is resented in the agricultural sector, successive governments have partly blamed the beneficiaries of the reforms for the failures in the agricultural sector particularly in the refusal to allow collective cultivation in co-operatives and the exploitation of the Agricultural Bank.

Many changes involving the running of co-operatives, taxation in the agricultural sector and technical and organizational innovations have been or

would be blocked by the smallholders and beneficiaries of the reforms. This stalemate between the government and the beneficiaries and smallholders in the agricultural sector, which has persisted throughout the period from 1958 to 1973, has been a fundamental cause of the delays, disappointments and failures of the agrarian reforms. At the same time the private sector upon which agricultural production has largely depended over the whole period, has also had to acquiesce in government policies because the government has the power, at any time, to impose further restrictions and reforms on the private sector.

The study of the province of Hama is an attempt to carry out a detailed local study of the agrarian reforms and their results in one area. Hama itself includes a cross-section of the agricultural zones of Syria, including one of the new, large scale irrigation projects, the Ghab, and is also an area in which much expropriation of land took place.

While the expropriations in Hama broadly followed those of the rest of Syria, a slightly higher proportion of private land, some 19 to 23%, was subjected to the reform laws, reflecting the predominance of the large landowning families in this part of Syria. The detailed study of the expropriations, however, shows the extent to which they were hampered by the lack of a survey of the province and an up to date, complete land register. This resulted in the need for numerous minor adjustments to the areas expropriated and also made it more difficult to assess the exact extent of the various categories of land, limits for which were all different, particularly under Law No. 88. Largely for this reason the area of irrigated land that was expropriated was only about 2/3 that which might have been expected.

A detailed analysis of the extent and political direction of the expropriations in Hama shows that a very large number of villages and families, often families with no reputation as large landowners, were affected by the reforms and re-emphasises the extent to which owners of medium sized land holdings were alienated by the severity of the reforms. Altogether about 2/3 of the village areas of Hama were affected by the expropriations, yet in less than 5% was more than 90% of the land in the village expropriated. This analysis reflects the extent of the disruption of the land ownership patterns that took place.

The principal targets of the reforms were the powerful family oligarchies which controlled the political, social and economic life of the province. Details of the expropriations show that they were hit particularly hard in the 1959 to 1962 and 1965 periods and that more than half of the land expropriated belonged to the five largest families.

The distribution of land in the province was, as in the rest of Syria, subject to delays. There is also evidence that some distribution took place even after 1969 but nevertheless large areas that were expropriated were not distributed. Some of this land was kept back for use by the state. In the areas that were distributed analysis of the size of plots given out indicates that they were well below the maximum, even in the drier eastern parts of the province. There is no evidence that the size of plots given out of either expropriated or state land increased over the period of the reforms, a consequence of the need by governments to give out land to as many beneficiaries as possible for political reasons despite the economic problems that resulted. Apart from the political pressures to give land to many beneficiaries, the government has been influenced by the fact that many beneficiaries already had or were likely to obtain other plots of land in the private sector.

Although this is against the terms of the agreement through which expropriated land is given to beneficiaries it is an abuse well known to the authorities.

Closely associated with the problems of land distribution and the setting up of co-operatives, has been the controversial and difficult problem of the status of distributed land. A close look at the agreement between the state and beneficiaries of such land shows the state has retained rights in the land, its disposition to later generations and in controlling its use that do not exist for private land. This has aroused the suspicion and resentment of many beneficiaries who expected complete private ownership. As a result the state has been unable to persuade beneficiaries to move towards collective operation of co-operatives as any move of this sort is suspected by beneficiaries as a further loss of control over their recently gained land. On the other hand the beneficiaries have no prospect of total ownership of their land.

The distribution of state land, as in the rest of Syria, lagged behind the distribution of expropriated land and even by 1973 less than 2/3 of the state land available for distribution had been sold. The periods of maximum distribution of state land, 1963 to 1968 and 1972 were not the same as those for expropriated land, from 1969 to 1971, reflecting the strain of distributing land of both categories at the same time on the resources of the Ministry of Agriculture and Agrarian Reform. The marginal agricultural areas proceeded more quickly after 1970, reflecting both the more liberal policy of the new government on the activities of private businessmen in agriculture but also a disregard for the need to limit cultivation in the drier agricultural areas. Extension of cultivation into these areas can only result in problems of land deterioration in these areas later.

The thesis includes a detailed study of the development of agricultural co-operatives and the Agricultural Bank in the province. In 1958 there were no co-operatives at all in Hama, which therefore had even less of a tradition of co-operation in agriculture than other areas of Syria. The setting up of co-operatives was a very slow process and lagged far behind the distribution of land, particularly in the areas of state land. Co-operatives were formed with less delay after distribution in the western part of the province and the poorer areas of the east, whether state or expropriated, which had a particular need for co-operative organization, had to wait longer for it. In a few village areas co-operatives were even formed before the formal distribution of land took place but for one reason or another the co-operative programme was subject to delays and inconsistencies.

The co-operative programme in the province suffered a further setback with the amalgamation of the Ministry of Agriculture with the Ministry of Agrarian Reform in 1967. Those co-operatives that were formed by private smallholders to take advantage of generous credit facilities at the Agricultural Bank were under the control of the Ministry of Agriculture and not subject to the many restrictions and pressures of the co-operative under the control of the Ministry of Agrarian Reform. After 1967 the control of all co-operatives followed the line of the Ministry of Agrarian Reform so smallholders in co-operatives found themselves under pressure to move towards the collective working of their land.

While the introduction of co-operatives was an attempt to reconcile the demand for land by the mass of the rural population, satisfied to some extent through the distributions, with the need for more modern and efficient working of the land, the co-operatives failed to get the co-operation of its members. This was partly due to the uncertain rights the members had over

their land. It was also due to the shortage of trained personnel to manage the co-operatives and lack of machinery, marketing and supply organizations to support them. The inadequacies of the Agricultural Bank meant that credit, previously given by landowners and merchants, was not available through official channels and traditional, unofficial sources continued to be used. Throughout the difficulties of the co-operative sector the private sector, previously the source of credit, machinery, management and expertise was excluded, for political reasons, from any involvement with the co-operatives.

Within the co-operatives all but the most general organization of production and working methods has been resisted by the members. Although a detailed plan of production for all villages in the province exists, it is not drawn up in detail by the Ministry of Agriculture and Agrarian Reform but by the co-operative members. Providing their plans fit in with the broad objectives of the Ministry the village plan is endorsed. The co-operative does, however, control the marketing of co-operative production and throughout the province there are constant disputes between the co-operative organizations and the members who try to evade selling their produce through the co-operative from which they get lower prices. The most usual methods of evasion include misrepresentation of the origins of produce and bribery of co-operative officials who are inadequately paid. The local department of the Ministry of Agriculture and Agrarian Reform conducts investigations into about 1/3 of the co-operatives each year, the number it suspects of trying to evade the official marketing channels.

The Agricultural Bank in Hama, as in the rest of Syria, has been under-capitalized and largely unable to replace the sources of non-institutional

credit that preceded it. Particularly serious have been the delays in setting up co-operatives which meant that credit would not be advanced at advantageous rates to the beneficiaries of the reforms. The first loans to co-operative members did not take place until 1964 and it was not until 1970 that the distribution of such credit began to increase substantially. After 1971 increases in short term loans to the co-operative sector were balanced by a reduction in the loans extended to private borrowers, yet the total amount of credit still falls far below the requirements for working capital and further funds are needed for this.

While the Agricultural Bank in Hama has consistently failed to provide short term credit despite the increases in available money, it has also failed to provide for medium and long term loans to be used for small and medium scale investments in machinery, land reclamation and other such projects. While the more wealthy landowners in the private sector no doubt have funds available for such investment smallholders and members of co-operatives do not.

In the province, as elsewhere in the country, the problem of debt has beset the Agricultural Bank since 1958. The disastrous weather conditions of 1959 to 1961 and the problem of taking over the short term credit requirements of smallholders and beneficiaries of the reforms, a sector of the agricultural community that has traditionally been in debt, have been made worse by the poor management and control of loans by the bank. In Hama levels of repayment have been particularly poor in the eastern part of the province, but in the other areas, even in the Ghab, levels have been unsatisfactory. It is also significant that the repayment record of private borrowers has been better than that of the co-operative sector, which has got worse as more credit has been extended to it.

Despite the seriousness of the debt problem, further credit is not generally withheld from borrowers, particularly in the co-operative sector. Outstanding debts have either been waived or re-organized into repayment programmes over 5 or 10 years. In 1973, after the consolidation of several such programmes, the total outstanding was just under L.S. 1 million, considerably more than the total of medium and long term credit extended by the bank. In the past the bank has found that debtors have been unable or unwilling to pay the re-organized debt payments and the problem has continued. Better management and control of loans, especially in the co-operative sector, is essential if debt is to be significantly reduced. The Agricultural Bank has made attempts to do this, particularly through the expansion of credit in kind rather than in cash, but further improvements are necessary and more funds must be made available if debt and non-institutional sources of credit are to be eliminated.

In Chapter IX a study of the agrarian reforms in one particular area, that of the Ghab scheme, is made, and this is followed by an assessment of the developments in production in the province of Hama over the period of the agrarian reforms.

The area of the Ghab irrigation scheme is particularly illuminating in relation to the agrarian reform for a number of reasons. In the first place the record of investments in the irrigation network in this large scale scheme shows that the government failed to keep up investments, that planned investments were inadequate and that delays in completing the scheme have occurred. This has had a serious affect on production in the scheme and therefore on the expected returns to capital invested in it.

Secondly, successive governments have failed to decide on a settlement policy for the Ghab and also the Acharne region, an area of traditional agriculture within the scheme. Settlement in the Ghab has been piecemeal and uncontrolled and many of those who settled were squatters. For political reasons these people were not evicted when final settlement arrangements were eventually made in 1972 and as a result plots distributed to beneficiaries have been well below the suggested optimum size throughout the scheme. The delays in the distribution of land have meant that delays have also occurred in the setting up of co-operatives. Because of the disputes over settlement in the area the setting up of operational co-operatives and co-ordinated agricultural production has been resisted particularly strongly by beneficiaries in the Ghab.

Thirdly, many parts of the Ghab valley, including some which have been settled, are unsuitable for intensive, small scale cultivation. Over the period the scheme has been developed it has become evident that some areas should not be developed in this way because of insufficient water supplies, poor soil conditions, water-logging and flooding and, in some places, susceptibility to high winds. These factors have not been given sufficient weight in the settlement policy, once again showing that political factors have over-riden economic and technical ones.

In some areas the government has decided to set up its own farms for the research, development and production of livestock and special crops. No attempt has been made to integrate these farms with the surrounding co-operatives and smallholdings, indicating that the government may intend setting up its own sophisticated and intensive production units separate from the rest of the government controlled agricultural sector.

In Acharne different but related problems from those in the Ghab have existed. The area was already settled and was subject to the expropriation and distributions. However this was complicated by the imposition of a new irrigation and drainage network on the area. The distribution of land and setting up of co-operatives, which proceeded very slowly in Acharne, took no account of this and was not integrated with the irrigation network at all. This resulted in the inefficient use of water and inadequate maintenance of the system and was due to the decision by the government not to insist on a rational redistribution of land between the private and co-operative sectors and amongst beneficiaries for political reasons. As in the Ghab, but in a different way, the government was thus unwilling and unable for political reasons to follow through the measures necessary for the efficient operation of the agricultural sector.

The development of production in the province, as in the rest of the country, was one of the aims of the agrarian reforms and was essential for the government and for the rural population for both economic and political reasons. The government not only had to show the rural population the benefits of removing the power of the landlords but also that with the reforms came prosperity and increased incomes. It was also essential for national economic policies that increases in production took place.

The thesis has attempted to show that for the most part the prerequisites for achieving increased agricultural production have not been met in terms of the investments in the agricultural sector, the way in which the agrarian reforms have been carried out and the extent to which agricultural methods have been improved.

The period over which the consolidation, diversification and intensification of agricultural production is studied covers ten years, from 1962 to 1972, and this covers the vital period of change and gives an indication of the progress that has been made. There are further complications resulting from the way in which agricultural statistics have been collected and in the annual fluctuations due to weather conditions. However, there is little evidence that the agricultural area has been consolidated or production diversified or intensified in the province of Hama.

The area cultivated and cropped in the province has continued to fluctuate from year to year depending on weather conditions. Areas in the east of the province, some outside the official limit for cultivation, continue to be cropped. The cropped irrigated area, though it has increased slightly, has not increased as a proportion of the land cropped in the province.

In the west of the province the fluctuations in the non-irrigated cropped area have decreased slightly but the fluctuations in the irrigated area have continued, showing the continuing dependence of irrigation on rainfall in this area, including the Ghab. In the east fluctuations in irrigated and non-irrigated cropped area have continued. None of these figures are affected by double cropping which is almost non-existant throughout the province.

The diversification of crops produced, one of the main policies of the government in the attempt to increase the value of agricultural production and produce raw materials for agricultural-based industries, has shown little progress over the period. Figures for the province as a whole show that cereals continue to dominate the cropped non-irrigated area and that wheat

and barley continue to monopolise the area. There have been very minor alterations in the areas under industrial crops, which have declined, and vegetables and fruit which have increased. The non-irrigated cropped area of industrial crops is still dominated by cotton production.

The irrigated cropped area is still dominated almost entirely by cotton production. Of the cereals grown on irrigated land wheat is by far the most important. The development of maize which was planned as a major new crop has been very slight. There has been an increase of the area under sugar beet but this has been much smaller than anticipated. The area under vegetables has increased slightly and two crops, potatoes and onions, have developed quite quickly. However, in both the irrigated and non-irrigated cropped area the minor diversifications that have occurred have been completely overshaddowed by the areas of traditional, well established crops. The area of each of these has fluctuated because of the weather from year to year but there is no evidence of major alterations in the relative areas of each crop type.

In the separate mantikas a detailed study of the cropped area reinforces this finding. In Salemiya the area of irrigated land has increased more rapidly than elsewhere in the province. This has been due to the large number of small scale projects that have been implemented, many by private land owners. Salemiya itself continues to be an area of traditional agricultural production. The non-irrigated area is almost completely dominated by wheat and barley and cereals are also important in the irrigated area. The only industrial crop of significance is cotton. Fruit and vegetable crops are produced in the irrigated areas and the development of onions and potatoes is of interest here as elsewhere in the province.

This is due to the stimulus given by the onion processing factory in Salemiya and an intensive programme of seed distribution and other assistance for potato production. With both crops the possible role of the government in the positive diversification of crops can be seen. It is a reflection on the government's role that virtually no other change has occurred in crop production in Salemiya since 1962.

In the mantika of Hama there has been little alteration in the production of crops and the same can be said of Massiaf. Here, as elsewhere, the fluctuations in the areas of crops in both non-irrigated and irrigated zones dominate any minor changes in the balance of different crops produced.

In the Ghab, where a great deal of research and experimentation was done into the introduction of new crops by United Nations agencies until 1972, there has been little progress in diversifying crop production. Fluctuations in the areas of different crop types have continued whether they are irrigated or non-irrigated. In the non-irrigated area cereals production, of wheat and barley, dominates as elsewhere in the province. Cotton is grown as an industrial crop though another crop in this category, sunflowers, has increased in area rapidly, a response to the high price of vegetable oil. It is noteworthy that this activity is still outside the jurisdiction of government marketing organizations. Vegetable production has also increased slowly though with fluctuations.

The irrigated area of the Ghab continues to fluctuate from year to year and shows no evidence of having increased since 1964/5. Industrial crops cover the largest proportion of this area but again production is dominated by cotton.

The development of sugar beet, in contrast to sunflowers in the non-irrigated area, has been slow. Both cereals and legumes are of minor importance and there has been no diversification into the production of different crops. The area under vegetables has increased, particularly the area under tomatoes, onions and potatoes, but not more so than in other parts of the province.

Even in the Ghab the development of fodder crops and of livestock has been very slow, except in the state-owned farms. There has been no development of mixed farming and what fodder crops are grown are of traditional type, mostly in non-irrigated areas.

An analysis of the development of yields in the province is also made more difficult by the methods in which statistics have been collected and the way in which production has fluctuated because of the weather. In the province there is little evidence that yields have increased significantly in the production of most crops from 1962 to 1970. In 1970 to 1972 the introduction of high yield wheat and barley varieties improved yields considerably in the mantikas of Hama and Ghab where they were tried but other crops showed little improvement.

In most crops better yields have been obtained in the mantika of Hama than in Salemiya or Massiaf, due largely to the weather problems in Salemiya and the difficult terrain and soil conditions in much of Massiaf, and also to the better agricultural practises in Hama. Yields in the Ghab, however, have rarely been above those in the mantika of Hama. In the case of cotton they have been lower due to the unsuitable climatic and weather conditions for the crop there. It is indicative that the most important crop in the Ghab is in many respects unsuitable for cultivation there.

The stagnation of agricultural production over the period of the agrarian reforms, together with the increasing control of the prices of agricultural products by the state, has meant that little improvement has occurred in incomes to the rural population since the enactment of Law No. 88. The failures and disappointments in the agricultural production are directly related to the failure of successive governments to implement the agrarian reform laws adequately and back them up with the planned agricultural investment. The major alterations needed to both the agrarian reform legislation and the investment policies on economic grounds are unlikely to be carried out because of the political implications of doing so. As a result the Syrian agricultural sector will continue to hold back the economic development of the nation.