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**THE AGRO-BASED INDUSTRIES IN MOROCCO: KEY CHARACTERISTICS  
AND REHABILITATION ISSUES**

Studies on the rehabilitation of African industry

No. 9

50

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## Preface

As part of the programme of the Industrial Development Decade for Africa, UNIDO's Regional and Country Studies Branch is issuing a series of studies determining both the major problems of African manufacturing and the potential for regenerating the sector. The aim is to outline policies and measures that may result in overall improvements and to identify individual plants for assistance. The backbone of the series is formed by a number of country-level diagnostic surveys on the rehabilitation requirements of African manufacturing industries. These have been compiled by teams of experts during four-week field missions. As the surveys contain confidential plant-level information, their circulation is restricted. In order to present the salient parts of the full country surveys to a wider readership, a series of 'highlights' is being issued.

This particular report presents the highlights of the Moroccan mission's survey of industrial rehabilitation needs of Moroccan agro-based industries. It provides the reader with a general description of the economic and policy environment for industrial rehabilitation, as well as a description of Morocco's agro-related industries and food-processing branch. Chapters 6 and 7, providing general observations and recommendations regarding government policy and companies, should be very useful in formulating an agenda for rehabilitation efforts. The full survey should be consulted for detailed suggestions for specific plant-level rehabilitation requirements.

The UNIDO field mission visited Morocco from 4 to 31 March 1989. The members of the team were UNIDO consultants: Mr. Bertrand Bellon, team leader, Mr. Abdoulaye Baldé, Mr. Jan Björk, Mr. Jean-Francois Flotté and Mr. Graham Smith. Ms. Chraïbi, in-charge of the Ministry of Commerce and Industry's meat and vegetable canning division, assisted the mission during the visits to the plants.

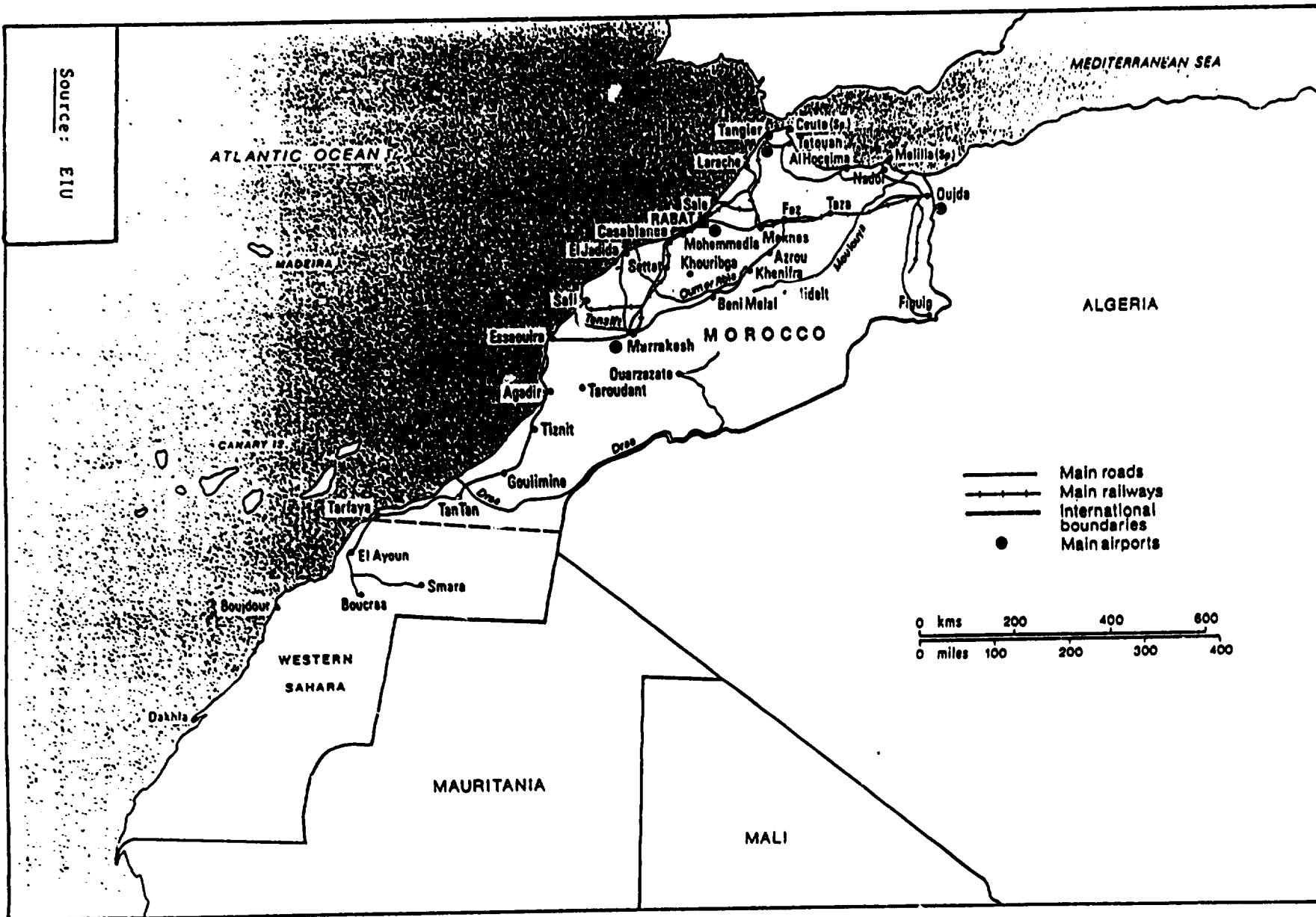
## TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
PREFACE	i
TABLE OF CONTENTS	ii
MAP OF MOROCCO	iv
GENERAL COUNTRY INFORMATION	v
LIST OF ABBREVIATIONS	vi
1. BACKGROUND TO THE STUDY	1
1.1 The approach used in this study	1
1.2 Consultations and discussions	2
1.3 Morocco: some key characteristics	2
1.4 Major aspects of this study	3
2. THE MOROCCAN ECONOMY - AN OVERVIEW	5
2.1 Economic trends and structure	5
2.2 International trade	7
2.3 Debt issues and international co-operation	9
3. THE ENVIRONMENT FOR REHABILITATION: ECONOMIC POLICIES AND INSTITUTIONS	10
3.1 Introduction	10
3.2 Economic reforms since 1983	10
3.3 Key policy measures in Morocco's stabilization and structural adjustment programme	11
3.3.1 Exchange rate policy	11
3.3.2 Industrial promotion policies and trade liberalization measures	13
3.4 Public enterprises: the changing role of the Government	18
3.5 Institutions involved in industrial development and regeneration	19
3.5.1 Banque Nationale pour le Développement Economique (BNDE)	19
3.5.2 Other institutions	19
3.5.3 Export support institutions	20
3.6 The financing system of industry	20
3.7 Economic co-operation parameters	21
4. THE MANUFACTURING SECTOR OF MOROCCO	23
4.1 Introduction	23
4.2 General trends and structure	24
4.3 Employment and firm size	26
4.4 Geographical distribution of industrial activities	28
4.5 Ownership and investment	29
4.6 Trade in manufactured products	30
4.7 Linkages	33
4.8 Capacity utilization and production constraints	34

## TABLE OF CONTENTS (continued)

<u>Chapter</u>	<u>Page</u>
5. FOCUS ON AGRO-RELATED INDUSTRY	37
5.1 Introduction	37
5.2 Characteristics of the agro-industry subsector	37
5.2.1 Size	37
5.2.2 Employment in agro-industry	38
5.2.3 Investment in agro-industry	40
5.2.4 Trends in production and value added	40
5.2.5 Ownership pattern	42
5.2.6 Agro-industry exports and imports	42
5.2.7 Linkages	43
5.2.8 Major problems and constraints	43
5.3 Profile of food-processing branch	43
5.3.1 General trends and structure	43
5.3.2 Food-processing branch exports and imports	44
5.3.3 Linkages	46
5.3.4 Spatial distribution	46
5.3.5 Major problems and constraints	50
6. OBSERVATIONS AND RECOMMENDATIONS REGARDING COMPANIES	52
6.1 Finance	52
6.2 Management, organization and marketing	53
6.3 Physical plant	53
6.4 Inputs	54
6.5 Cost and price structure	54
7. GENERAL OBSERVATIONS AND RECOMMENDATIONS	55
7.1 General observations and recommendations	55
7.2 Food-processing branch	56
8. SUMMARY OF PROJECT CONCEPTS	58
8.1 General	58
8.2 Branch level	58
ANNEX 1: TABLES	59
Table A.1: Balance of payments, 1986-1987	59
Table A.2: 1986 and 1987 value (cif) of imports	60
Table A.3: 1986 and 1987 value (fob) of imports	60
ANNEX 2: UNIDO's approved and/or operational technical co-operation projects	61
SELECTED REFERENCES	62

Source: ETU



Map of Morocco

## General country information

Population: 23.29 million (1987), growth rate 2.3 per cent per year

Area: 447,000 km<sup>2</sup>

Life expectancy: 60 years

School enrolment ratio (1985):	Primary	81 per cent
	Secondary	31 per cent
	Adult literacy rate	29 per cent

Languages: Arabic, French, Berber

Currency: Dirham. 8.30 DH = US\$ 1 (March 1989)

1987 GDP at market price 145.0 billion DH (average growth rate over the 1982-1987 period: +3.1 per cent per annum )

GNP per inhabitant: 6,646 DH (1988)

<u>Origin of GDP 1986</u>	% of total	<u>Components of GDP 1986</u>	% of total
Agriculture, forestry, fishing	13.8	Private consumption	66.7
Mining, fuel, power	6.7	Government consumption	13.3
Manufacturing	14.9	Gross fixed capital formation	18.4
Building and public works	4.0	Change in stocks	1.1
Transport, communications, banking and services	24.1	Exports	15.2
Wholesale & retail trade	16.5	Imports	-14.7
Government salaries	20.0	<u>GDP at market prices</u>	<u>100.0</u>
<u>GDP at factor cost</u>	<u>100.0</u>		

1987 Exports FOB \$M 2,799

1987 Imports CIF \$M 4,220

### Main exports (1987)

Phosphates & phosphoric acid	26.6%
Textiles	12%
Citrus fruits	7%

### Main imports (1987)

Crude oil	12%
Wheat	11%
Sulphur	6%
Machinery	4%

### Main buyers of Moroccan goods (1987)

France	29.3%
India	6.8%
Spain	6.7%
West Germany	5.4%
Italy	5.3%
Japan	4.4%

### Main suppliers to Morocco (1987)

France	22.8%
USA	9.2%
Spain	9.1%
West Germany	6.1%
Italy	5.6%
Iraq	5.6%



## List of abbreviations

BCM	Banque Commerciale du Maroc
BCP	Banque Centrale Populaire
BdM	Banque du Maroc
BMCE	Banque Marocaine du Commerce Extérieur
BMCI	Banque Marocaine pour le Commerce et l'Industrie
BNDE	Banque Nationale pour le Développement Economique
CCG	Caisse Centrale de Garantie
CDM	Crédit du Maroc
CGEM	Confédération Générale des Entreprises Marocaines
CIH	Crédit Immobilier et Hôtelier
CMPE	Centre Marocain de Promotion des Exportations
CNCA	Caisse Nationale de Crédit Agricole
DCE	Directorate of International Trade, MCI (see below)
DH	Dirham
DI	Directorate of Industry, MCI
EEC	European Economic Community
EMIs	Electrical and Mechanical Industries
IMF	International Monetary Fund
ITC	International Trade Centre
ITPA	Industrial and Trade Policy Adjustment Loan
MCI	Ministry of Commerce and Industry
NIC	Newly Industrialized Country
OCE	Office de Commercialisation et d'Exportation
OCP	Office Chérifien des Phosphates
OdC	Office des Changes
ODI	Office pour le Développement Industriel
ORMVAO	Office Régional de Mise en Valeur de l'Ouarzazate
ORMVAT	Office Régional de Mise en Valeur du Tafilalet
SAL	Structural Adjustment Loan
SGMB	Société Générale Marocaine de Banques
SMDC	Société Marocaine de Dépôt et de Crédit
SSIs	Small-scale Industries
UNIDO	United Nations Industrial Development Organization
VAT	Value added tax
UNDP	United Nations Development Programme
USAID	United States Agency for International Development

# CHAPTER 1

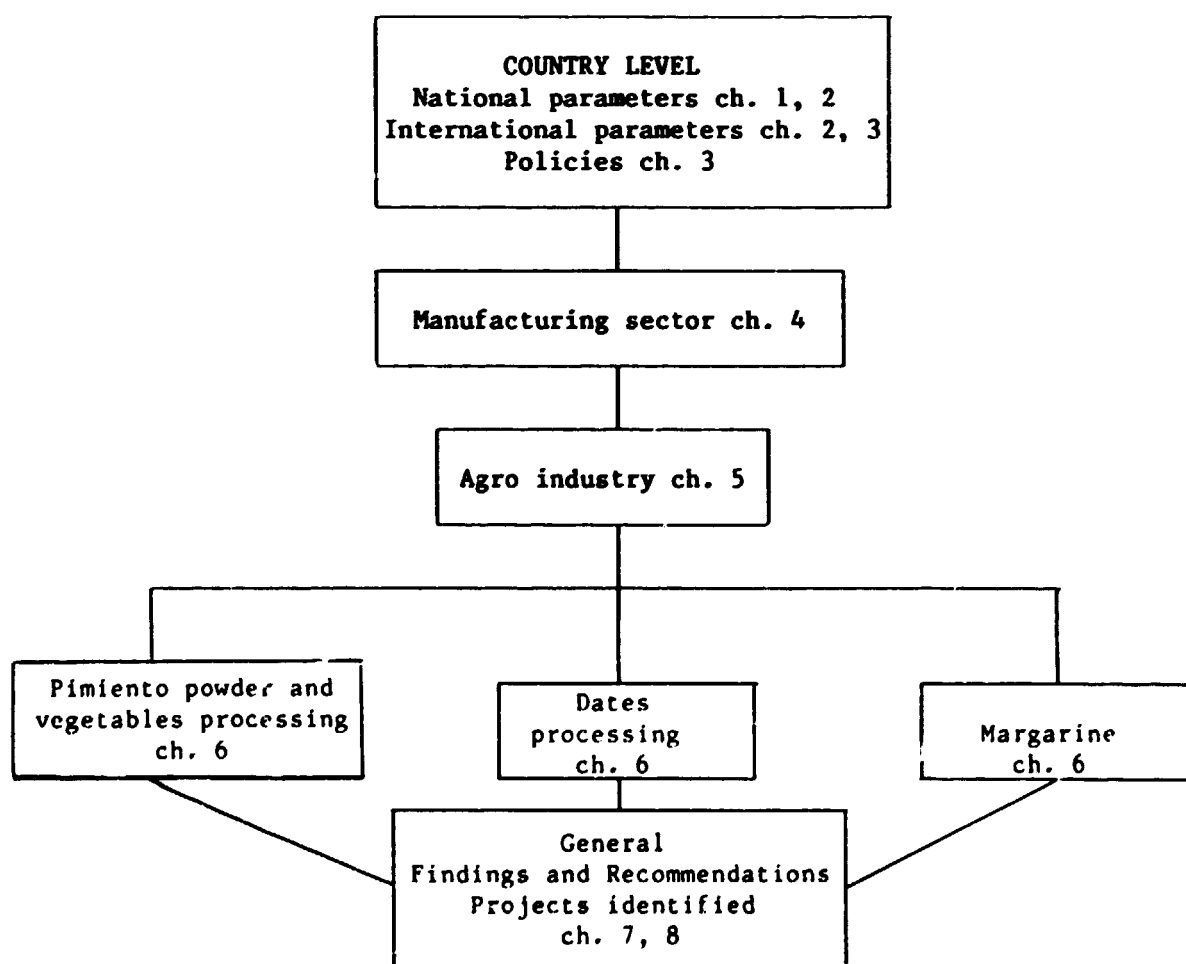
## BACKGROUND TO THE STUDY

### 1.1 The approach used in this study

The basic objective of this study is to provide a diagnostic survey of plant rehabilitation and modernization in the agro-related industries of the Moroccan manufacturing sector. Modernization is used here to indicate relatively minor changes in organization and/or physical plant in a profitable enterprise. Rehabilitation is used to indicate a need for more extensive organizational and/or technical assistance in enterprises that no longer function well, but that are fundamentally viable. In Morocco, modernization is a far more important issue than rehabilitation.

The analysis below leads to suggestions both for projects at the plant and economic policy levels. In order to ensure that all relevant issues are covered, a "top-down approach" has been adopted. Figure 1 summarizes this approach.

Figure 1.1



## 1.2 Consultations and discussions

The mission was assisted by the Ministry of Commerce and Industry. Apart from this Ministry, the two main organizations that helped the mission and suggested specific companies to be analysed were the Chamber of Commerce of Casablanca and the Banque Nationale pour le Développement Economique (BNDE). Discussions were also held with senior officials from the Ministries of Foreign Affairs, Planning, Agriculture and Fisheries. A wide range of financing institutions such as the Caisse Nationale de Crédit Agricole (CNCA), the Office pour le Développement Industriel (ODI), the Banque Marocaine pour le Commerce Extérieur (BMCE), and the Société Marocaine de Dépôt et de Crédit were visited as well.

Discussions were also held with international co-operation partners of Morocco, including the European Economic Community, the French Embassy, the Embassy of the Federal Republic of Germany, USAID and the UNDP office in Rabat.

The team mission had been preceded by a preparatory mission led by Mr. George Assaf, UNIDO, 27 November - 8 December 1988.

## 1.3 Morocco: some key characteristics

Moroccan society is characterized by old traditions and a strong and complex social structure in which family ties play a major role. These social and cultural characteristics have deeply influenced Moroccan business. The country has an abundance of natural resources, agricultural land, and on the whole a favourable climate. It has a key position among Mediterranean countries (both among Maghreb countries and vis-à-vis the European Economic Community), partly because of its advantageous geographical location and excellent transport connexions. The various socio-cultural and geographical characteristics which help to provide a good basis for development are reinforced by a very stable political situation and an active development policy.

In comparison with many other African countries, the country has a very strong financial and business structure. Most of the entrepreneurs are traditionally engaged in trade and speculation, and this has had a great influence on industrial development: short-term returns tend to be favoured above long-term investments. Venture capital is scarce, and quality control and modern production processes do not always get the attention that is needed to keep industries competitive. However, adequate finance for future industrial development is available in the country, and the domestic supply of natural resources and semi-processed goods is secure.

Morocco has relatively abundant natural resources. It has the world's largest and most easily accessible phosphate reserves, which has made the extraction and processing of phosphate a key sector in the economy, and a major source of foreign exchange earnings. Relatively large reserves of other minerals, such as iron ore, copper, barytine, fluor spar, zinc, manganese and lead, are also exploited while local anthracite and hydropower resources meet about a tenth of the country's energy requirements.

The country's agricultural potential is considerable. Intensive rainfed farming takes place in the plains and hills west of the Atlas mountains. Here, fertile soils and a humid, temperate Atlantic climate are found.

Although agriculture is at present far from achieving the maximum possible yields, agricultural products (in part processed) already account for about a quarter of total Moroccan exports.

Fishery resources are considerable along the extensive Mediterranean and especially Atlantic coastlines, but these are only partly exploited. Processed fish is also a major export item.

With regard to human resources, the economy still suffers from a considerable shortage of personnel with a middle-level or higher education or technical training. This is in part a consequence of insufficient attention to technical and economic subjects in the curricula of educational establishments. On the other hand, career prospects for personnel at these levels are often not very bright - in spite of a booming economy. This leads to extensive migration to Europe, especially France.

#### 1.4 Major aspects of this study

Morocco's specific social and economic structure does not only provide the background for this study: it has also influenced the project proposals formulated on the basis of the analysis. The top-down analysis will bring out strengths and weaknesses at each level in the manufacturing sector. Special attention will be given to links between macro- and micro-economic issues. This is expressed, among others, in the treatment of the firms selected for in-depth analysis: although they face modernization or rehabilitation problems that are firm-specific, they are also representative of key issues of a more general nature in the food products subsector and in Moroccan manufacturing as a whole. There are, in other words, a number of common rehabilitation/modernization objectives at the plant, subsectoral and sectoral level.

Three firms were selected for in-depth analysis by the mission. The firms were chosen from a list of at least 10 firms drawn up by the Moroccan authorities. One company specializes in piment powder manufacturing and in dried and canned vegetables processing. It is now expanding into deep-frozen food products. This orientation towards new products and markets implies, among others, the improvement of sanitary conditions and packaging. If these issues are properly tackled and if the attempt to enter new markets is successful, the modernization of this company can act as a pilot case for other small enterprises in the food-processing industry. The second company, a firm processing dates, represents a typical example of industrial rehabilitation. An examination of this firm was requested by the Government as a first step towards strengthening the industrial basis of the economy of the area where it is located, through the transformation of the main local raw material, dates, into higher value-added products. Finally, the third company, a table margarine factory, addresses the issue of increasing production for the domestic edible fats market, a market which is to a large extent covered by imports. The introduction by Company C of a substitute for butter, margarine (a new product for Morocco), would help reduce imports and cover a basic need.

The report will conclude with a number of technical assistance projects. These are based on needs identified both as a result of plant analysis and of subsectoral analysis. Some of these projects can be implemented by the firms themselves; for others, outside assistance will have to be sought. A number of projects will require UNIDO assistance.

This report differs from previous reports on African countries<sup>1/</sup> in that it deals with a country that can now be compared in many ways to NICs like the Republic of Korea. There is no sign of the stagnation that unfortunately is encountered in many African countries; on the contrary, the economy has experienced vigorous growth during much of the past two decades (see section 2.1). Moreover, as already noted above, the country has a stable social and political structure. The overall structure of the economy and the environment for manufacturing have been improved considerably since the early 1980s, and the mission has therefore refrained from making explicit suggestions for general policy changes. It suggests that the Moroccan Government continue and intensify its present efforts in the field of economic policies. The suggestions made by the mission on the basis of its plant-level analysis are also meant to reinforce and support existing trends and tendencies at the general policy level.

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1/ The Regeneration of Zambian Manufacturing Industry with Emphasis on Agro-based Industries, Special reports on industrial rehabilitation series No.1, PPD/R.19.

The Regeneration of Angolan Manufacturing Industry with Emphasis on Agro-based Industries, Special reports on industrial rehabilitation series No.2, PPD/R.21.

The Regeneration of Liberian Manufacturing Industry with Emphasis on Agro-based Industries, Special reports on industrial rehabilitation series No.3, PPD/R.23.

The Regeneration of Tanzanian Manufacturing Industry with Emphasis on Agro-based Industries, Special reports on industrial rehabilitation series No.4, PPD/R.

## CHAPTER 2

### THE MOROCCAN ECONOMY - AN OVERVIEW

#### 2.1 Economic trends and structure

The Moroccan economy experienced a difficult period from 1978 to 1983. In the early and mid-1970s, high earnings on Morocco's primary export, phosphates, had encouraged the Government to initiate large-scale public investment programmes which were partly financed by external borrowing. A number of capital-intensive manufacturing projects were included in these programmes, and a highly protected environment was created for them. With the collapse of phosphate prices later in the 1970s, the Government had to borrow increasingly to complete its investment programmes. From 1978 onwards, some attempts were made to stabilize the economy, but in 1981 another series of public investment programmes was initiated. Military action in the Western Sahara was a major focus of public expenditure. Between 1975 and 1983, public debt rose more than sixfold, reaching US \$11.2 billion in 1983, or 84.2 per cent of GDP that year and 290 per cent of exports. The current account deficit grew to 13.3 per cent of GDP in 1982. Meanwhile, international interest rates had been rising rapidly, and the amount of credit available on concessionary terms had dwindled. Morocco began to find it increasingly difficult to service its debt burden, especially as prolonged draughts in the early 1980s had significantly reduced the country's economic performance.

By mid-1983, Morocco had virtually no foreign exchange reserves left. The country had to reschedule its debts, and at the same time initiated an economic restructuring programme with IMF and World Bank assistance. The programme had two objectives:

- a rapid stabilization of the economy by a reduction of aggregate demand and the Government deficit;
- a change in the structure of the key economic and social sectors to increase the productivity and competitiveness of the Moroccan economy.

Details of the programme may be found in chapter 3. The programme has succeeded in bringing about an appreciable improvement in the performance of the economy, even if much remains to be done to secure sustained long-term growth.

As Table 2.1.1 shows, the Moroccan economy is dominated by tertiary activities, which accounted for some 40 per cent of GDP in 1987. Among these, commerce is the most important, accounting for more than 20 per cent of GDP itself. Public administration accounted for 22 per cent of GDP. The next major sector is manufacturing which accounts for 16 per cent of GDP. Agriculture, although still the major source of employment, now accounts for only 11 per cent of GDP. Mining accounts for less than 3 per cent, but both this sector and agriculture play an extremely important role as suppliers of raw materials to the manufacturing sector.

Table 2.1.1: GDP at constant 1969 prices, 1983-1987  
(in millions of dirhams)

	1983	1984	1985	1986	1987 <sub>a/</sub>
Primary sector	3,844	3,833	4,296	5,283	4,598
Agricultural, forestry and fishing	3,844	3,833	4,296	5,283	4,598
Secondary sector	9,723	9,614	9,826	9,787	10,091
Mining	934	991	972	932	921
Energy and water	1,530	1,536	1,582	1,544	1,621
Manufacturing	5,735	5,638	5,736	5,934	6,172
Construction and public works	1,524	1,449	1,536	1,377	1,377
Tertiary sector	14,480	14,963	15,376	15,984	16,257
Transport and telecommunications	1,811	1,904	1,962	2,048	2,089
Other services	4,757	4,879	5,098	5,296	5,440
Commerce	7,912	8,180	8,316	8,640	8,728
Public administration	6,601	6,973	7,455	8,049	8,532
Gross domestic product	34,648	35,383	36,953	39,103	39,478

Source: Ministère du Plan.

a/ Estimates.

There has been no major shift with regard to GDP shares among the major sectors (commerce, public administration, manufacturing and agriculture) over the 1983-1987 period. In 1987, bad harvests caused a temporary strong decrease of agricultural production, but 1988 appears to have seen a complete recovery of agricultural production. The manufacturing sector has continued to grow by an estimated 4 per cent in both 1987 and 1988. The strongest grower, however, is public administration, which raised its GDP share from 19 per cent in 1983 to almost 22 per cent in 1987.

The growth rate of GDP (in real terms) has averaged 3.7 per cent per year since 1969. The slow-down during 1983-1987 still gives an average rate of growth of 3.1 per cent. 1988 was a record year with an estimated real growth rate of close to 10 per cent over 1987. The difficulties encountered at the beginning of the decade appear to be solved, and continued growth is also expected for 1989.

Morocco's 1988 per capita GDP was DH 6,600 (US \$800). Its recent growth is mainly due to better farming results, an increase in phosphate prices, the reduction of petrol prices and development in the industrial sector.

The growth of expenditure has remained behind the growth of GDP during recent years. This is true for both the private and public sectors. The growth of expenditure in the public sector has even been slower than in the

private sector, as a result of structural adjustment measures (described more extensively in chapter 3). Gross domestic savings (current prices) increased from DH 11.8 billion to DH 20.3 billion during 1983-1987. Moreover, net foreign income increased from DH 2.0 billion to DH 7.8 billion. This seems mainly the result of increased salary transfers by Moroccans working abroad (see also section 2.2). Increased savings have again resulted in increased investment. Gross fixed capital formation rose from DH 20.5 billion in 1983 to DH 28.2 billion in 1987 (current prices). Investment was estimated to have increased to 20.6 per cent of GNP in 1988. Although the available breakdown of investment by type does not allow a strict distinction between the sectors of the economy, the share of plant and equipment in total investment has increased from 38 to 44 per cent; this would indicate that industrial investment has increased even faster than overall investment. It reinforces the impression that manufacturing is doing better than average in an economy that is now strongly growing.

## 2.2 International trade

Morocco's economy is highly dependent on world markets, both for its imports and exports. As table 2.2.1 and 2.2.2 show, the country runs a deficit in international trade. Since 1985, however, the trend towards increasing deficits has been reversed. While the 1985 trade deficit was DH 16.9 billion, it had been reduced to DH 11.9 billion in 1987, and it is estimated that the deficit has gone down to DH 9.5 billion in 1988. Exports have been stimulated by the devaluation of the Dirham and the reorientation of manufacturing to export markets.

The major categories of goods exported are food and beverages, non-oil minerals, semi-manufactured goods and consumer goods. Major imports are industrial equipment, semi-manufactured goods and petroleum. The country's exports are thus fairly diversified, and include a considerable share (probably over 40 per cent, if semi-manufactures are excluded) of manufactured products; among imports, the predominance of inputs and equipment for manufacturing (probably accounting for more than 50 per cent of total imports) is striking. Trade in manufactured goods will be reviewed more extensively in section 4.6.

When older data are included in the analysis (see chapter 4), a clear trend towards a higher trade deficit for capital goods, raw materials and semi-manufactures becomes apparent. On the other hand, the trade in consumer goods and food products shows an increasing surplus.

France is still Morocco's main trading partner, accounting for almost 30 per cent of total exports and 22 per cent of total imports in 1987. The Arab countries combined are the next major trading partners for imports (fuel); for exports, Spain is the second most important partner. The FRG and Italy and - on the import side - the USA are also important trading partners. Trade with other (non-Arab) developing countries could be fairly important: "miscellaneous" partners accounted for one fifth of total imports and one fourth of total exports in 1987.



Table 2.2.1: 1986 and 1987 value (cif) of imports  
(in millions of dirhams)

	1986		1987a/	
	Value	Per cent	Value	Per cent
Foodstuffs and beverages	4,329	12.5	3,980	11.3
Energy and lubricants	5,429	15.7	6,170	17.5
Crude oil	4,587	13.3	5,332	15.1
Raw materials	5,605	16.2	5,454	15.3
Animal and vegetable	2,789	8.1	2,750	7.8
Mineral	2,816	8.1	2,704	7.7
Semi-finished products	7,527	21.7	8,194	23.2
Finished products	11,718	33.9	11,473	32.5
Capital goods	8,248	23.8	7,363	20.9
Agricultural equipment	628	1.8	494	1.4
Industrial equipment	7,620	22.0	6,869	19.5
Consumer goods	3,470	10.1	4,110	11.6
<b>TOTAL</b>	<b>34,608</b>	<b>100.0</b>	<b>35,271</b>	<b>100.0</b>

Source: Office des Changes.

a/ Preliminary.

Table 2.2.2: 1986 and 1987 value (fob) of exports  
(in millions of dirhams)

	1986		1987a/	
	Value	Per cent	Value	Per cent
Foodstuffs and beverages	6,526	29.5	6,346	27.1
Energy and lubricants	564	2.6	642	2.7
Raw materials	5,113	23.1	4,606	19.7
Animal and vegetable	689	3.1	823	3.5
Mineral	4,424	20.0	3,783	16.2
Semi-finished products	4,969	22.5	5,602	24.0
Finished products	4,932	22.3	6,194	26.5
Capital goods	416	1.9	297	1.3
Consumer goods	4,516	20.4	5,897	25.2
<b>TOTAL</b>	<b>22,104</b>	<b>100.0</b>	<b>23,390</b>	<b>100.0</b>

Source: Office des Changes.

a/ Preliminary.

The balance of payments has been positive in the 1986-1988 period (see Annex table 1 for 1986 and 1987), increasing from DH 741.8 million to DH 1.5 billion (estimate) in 1988. Tourism, transfers by Moroccans working in other countries and debt rescheduling have contributed to the positive result. The decreasing trade deficit and the increase in transfer payments and earnings from tourism have made a considerable contribution to the rapidly improving performance of the economy in recent years.

### 2.3 Debt issues and international co-operation

As indicated above, Morocco borrowed heavily during the 1970s. As a result, foreign debt increased sharply, and as Morocco was not able to mobilize sufficient foreign exchange to meet its repayment obligations, a period of repeated reschedulings with both public and private creditors was initiated in 1983. Since then, Morocco has tackled the structural problems of its economy with co-operation and support from the IMF and the World Bank. The results have been encouraging, as the section above has pointed out. Nevertheless, the debt burden is still very high. Total debt amounted to 110 per cent of GDP in 1987, and the debt service ratio, before debt relief in 1986, was 62 per cent. After relief, the ratio dropped to 32.2 per cent. Although even the lower figure means that a large part of the country's foreign exchange earnings will be channelled to debt repayments, there is no indication that this will lead to the serious "squeeze" of essential imports that took place in many other African countries.

During 1987, the last year on which detailed figures were available at the time of writing, Morocco received development assistance for a total of US \$1,487 million. Almost 90 per cent was in the form of loans. As in previous years, the World Bank was the most important partner, providing US \$802 million (all of it in the form of credit). The African Development Bank provided loans for a total of US \$341 million in 1987. Among the types of assistance, financial support predominated, with technical assistance accounting for only 10 per cent of total assistance. The major categories of activities which received support were: agriculture, forestry and fisheries (39 per cent of total assistance); transport and communications (19 per cent); and development planning (19 per cent). Support to industrial development was a very minor category. The sector received some US \$4.2 million in support from multilateral, bilateral and non-governmental sources. Support given to other sectors of the economy and to development planning should, however, also benefit industrial development.

UNIDO is involved in a number of technical co-operation projects in Morocco. These are not so much concerned with direct support to production than with activities that could be categorized as industrial services (normalization and quality control, data banks, maintenance training - see annex). This is a reflection of the comparatively advanced and healthy state of manufacturing.

## CHAPTER 3

# THE ENVIRONMENT FOR REHABILITATION: ECONOMIC POLICIES AND INSTITUTIONS

### 3.1 Introduction

Morocco's recent attempts to stabilize and liberalize her economy have made significant improvements in the country's current economic situation. The detailed arrangements for implementing Morocco's recent initiatives are very important for Morocco's co-operation partners - the World Bank, IMF and other international institutions, bilateral agencies, foreign banks and private companies - and particularly for investors interested in supporting industrial rehabilitation initiatives. Action by the Government in this area constitutes an essential prerequisite for continued and more intensive international support. Because of their importance for effective action in the rehabilitation context, the major elements of Morocco's economic reform programme are described below.

### 3.2 Economic reforms since 1983

As mentioned before, by 1983 Morocco's economic situation was unsustainable. The budget deficit had grown to 12.3 per cent of GDP and the current account deficit had reached 13.3 per cent of GNP. Total foreign debt had reached US \$11.2 billion, which amounted to 84.2 per cent of GDP and 290 per cent of exports, and foreign exchange reserves had been almost exhausted.

The resulting economic crisis prompted the birth of a new government which sought immediate help from the IMF and World Bank to develop an economic recovery programme. This recovery programme had two major objectives: (i) to stabilize the economy in the short term by reducing aggregate demand and the size of the government budget deficit; and (ii) to improve the country's international competitiveness and to increase the production of exportable goods.

To attain these objectives, the Government launched a broad stabilization and structural adjustment programme supported by various loans and stand-by arrangements from the international community. At the IMF's instigation, restrictive monetary and fiscal policies were introduced to correct the disequilibrium between the aggregate demand and supply of resources and to reduce government deficits. At the same time, structural reforms were implemented in the industrial and external trade sectors via industrial and trade liberalization policy reforms.

Industrial policy was directed towards making Moroccan industry more efficient and competitive by attenuating the existing bias against labour and in favour of the use of capital-intensive technologies in industry. By doing so, the Government attempted to re-align Morocco towards its natural comparative advantage in labour-intensive activities.

The aim for the trade liberalization reforms was to eliminate the bias against exports inherent in the country's protectionist external trade regime, or export and import systems. The Government sought to mitigate the existing bias against exports by liberalizing imports and exports, reducing tariff and non-tariff protection, and drastically simplifying the procedures for exports and export-related imports.

These reforms were supported by two consecutive World Bank Industrial and Trade Policy Adjustment (ITPA) loans: US \$450 million since 1984 under ITPA-1 and ITPA-2. The World Bank and IMF have also supported the reforms with additional financing in the form of commercial debt rescheduling which amount to US \$1.7 billion for the period 1983-84.

The Moroccan Government's attempts at economic reforms during 1983-87 by undertaking contracting monetary and fiscal policies at the same time as measures for trade liberalization is an explicit recognition by the Government of the importance of an appropriate macro-economic environment in which liberalization can take place. By doing so, the Government has sought to avoid the mistake made in other countries, especially in Latin America, which have undertaken liberalization programmes without an accommodating macro-economic environment that subsequently ended in failure.

The key elements of Morocco's stabilization programme have been:

- fiscal reform, especially to introduce a value-added tax and improve revenue collection from existing taxes;
- caps on the growth of salaries in the civil service and public sector;
- sharp cuts in the government investment programme and consumer subsidies (prices on subsidized goods were raised 20-40 per cent);
- increases in public enterprise tariffs and charges of 10-25 per cent, limits on credit, annual limits on external borrowing; and
- devaluation of the dirham.

### 3.3 Key policy measures in Morocco's stabilization and structural adjustment programme

#### 3.3.1 Exchange rate policy

Morocco has used the exchange rate as a major policy instrument to try to counter its worsening balance-of-payments situation since liberalization efforts began. Liberalization of its trade regime involved dismantling quantitative restrictions on imports and reducing tariff barriers to international external trade. However, to prevent the liberalization of the trade regime from leading to additional balance-of-payments difficulties, due to the reduction in revenues from trade taxes, it was critical for the authorities to induce a depreciation in the real exchange rate. Since 1983, the Government has undertaken an active exchange rate policy to restrain domestic demand and support trade liberalization measures to stimulate exports.

The World Bank estimates that the real effective exchange rate,<sup>1/</sup> on trade-weighted basis, has depreciated by 26.0 per cent since the end of 1982. As shown in table 3.3.1, Morocco's real effective exchange rate has decreased with respect to a basket of international currencies. The depreciation in the real effective exchange rate has been obtained by devaluations of the currency. The effect of these devaluations apparently have more than offset the difference in the inflation rate between Morocco and her major trading partners. In fact, by 1987 the rate of inflation in Morocco, measured by the consumer price index, had fallen to 2.4 per cent compared to 12.5 per cent in 1983.<sup>2/</sup>

Table 3.3.1: Real exchange rate indices a/ (1980 = 100)  
of the dirham against the currencies of Morocco's major trading partners,  
1980-1987

Year	Nominal effective rate	French Franc	Saudi Riyal	Spanish Peseta	German Mark	Italian Lira	U.S. Dollar	Real effective rate <sup>b/</sup>
1980	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1981	93.7	97.1	112.9	100.3	96.9	98.2	122.0	92.3
1982	92.5	92.9	115.1	98.3	99.3	97.6	129.3	90.3
1983	89.6	95.8	124.9	94.6	105.3	105.0	144.0	84.3
1984	82.8	99.2	131.9	103.3	106.0	109.1	160.7	79.5
1985	78.4	105.5	129.3	109.9	109.2	112.4	166.7	74.2
1986	72.6							70.9
1987	72.7							69.2

Source: World Bank Report No. 6714-MOR, 15 March 1988.

a/ A decrease indicates a depreciation for effective exchange rates whereas an increase indicates a depreciation for bilateral exchange rates.

b/ Basket with multilateral trade weights based on the geographical pattern of trade including third market effects.

1/ The real effective exchange rate measures the evolution of a country's prices relative to those of its trading partners, adjusted for exchange rate changes of currencies. Because it has the ability to capture the overall relative price effects of exchange rate changes, liberalization and fiscal, monetary, and interest rate policies of countries relative to their trading partners, the real effective exchange rate can be an important tool for assessing policy measures in many adjustment programmes.

2/ World Bank, Morocco: The Impact of Liberalization on Trade and Industrial Adjustment, Report No. 6714-Mor, p.6, 15 March 1988.

The combination of a continuous depreciation of the exchange rate (and the real effective exchange rate) and contractionary monetary and fiscal policies has led to a steady improvement in Morocco's trade balance. Since 1983 the demand for imports has been restricted due to a number of factors. The depreciation of the exchange rate has limited imports of consumption goods to sustainable levels. The higher cost of capital as a result of the reforms undertaken in the liberalization programme has dampened investment demand.

Increased domestic agricultural production has led to large declines in quantities of grain imports. Finally, the severe decline in world petroleum prices has reduced the value of imports considerably - in 1986 by 45 per cent.

It is interesting to note the offsetting effects of the depreciation in Morocco's effective exchange rate and contractory monetary and fiscal policies in the country's stabilization programme.

In theory, while reductions in the budget deficit as a result of restrictive macro-policies (monetary and fiscal policies) are unambiguously contractionary, devaluations of the exchange rate can lead to economic recession or expansion.

In Morocco's case, the devaluation of the currency has led to improvements in the balance-of-payments and an increase in GNP. Reductions in public expenditures, on the other hand, have dampened aggregate demand and led to a slow-down in economic activity. The deflationary effect of contractionary demand management policies since 1983 appears to have cushioned the effects of the downward trend in the exchange rate. It seems that devaluation has attracted resources to the export goods/tradable goods sector and stimulated efficient import substitution and export growth, and thereby led to improvements in the balance-of-payments. The improvement in the balance-of-payments has in turn offset the fall in aggregate demand and income that would normally have been the result of traditional stabilization policies alone.<sup>1/</sup>

### 3.3.2 Industrial promotion policies and trade liberalization measures

Broadly defined, industrial policy includes measures to increase industrial incentives and also other measures which although not directly intended for regulation of industry nonetheless have a strong bearing on the development of industry. In Morocco, trade policy has been the major policy instrument used to determine the degree of external competition that is faced by industry. On the other hand, industrial policy has traditionally been used to limit the degree of domestic competition. The combination of both trade and industrial policies have been used together to strongly influence the structure and efficiency of industrial development. As such both these policy instruments have been used to attenuate existing biases against labour and exports in the Moroccan economy. In this connexion, the recent changes in the Investment and Export Codes and liberalization measures appear to be particularly important.

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<sup>1/</sup> World Bank, op.cit. pp. 5-10.

(a) Investment codes

There have been a number of investment codes in Morocco since the 1960s. The current investment code is an outgrowth of the investment code formulated in 1983. In contrast to earlier codes the current code does not allow large firms to be the major beneficiaries of fiscal incentives in the form of tax exemptions. Instead, the current code tries to balance regional objectives and the need to correct the inherent bias in earlier codes toward capital-intensive technologies by implicitly subsidizing the cost of capital. The current code also tries to stimulate employment growth by fostering the development of small- and medium-scale firms.

Under the investment code exemptions from corporate income tax and import duties as well as subsidies for employment generation and the acquisition of land are given on a selective basis for investment in three industrial regions outside the Casablanca-Mohammedia area. The code eliminates allowances for accelerated depreciation for all firms in the major industrial centres. The elimination of these allowances serves to increase the cost of capital, thereby going some way to counter the bias inherent in earlier codes towards capital-intensive technologies.

The advantages offered under the code vary according to the size of firms and their location. For example, small- and medium-scale firms which undertake investment programmes between DH 100,000 to DH 5 million receive DH 5,000 for each permanent job created, provided that the cost of each individual job does not exceed DH 70,000.

In accordance with the Government's regional objectives the code divides the country into four industrial zones:

- Zone I includes the most industrialized area of the country, the Préfecture de Casablanca-Anfa;
- Zone II includes the other Préfectures surrounding Casablanca, and the Province de Ben Slimane;
- Zone III includes the Préfecture de Rabat-Sale and the Provinces of Agadir, Fes, Kenitra, Marraketch, Meknes, Safi, Tanger and Tetouan;
- Zone IV includes the rest of the country not covered by other zones.

In order to encourage the decentralization of industrial activities, the 1983 code offers incentives which increase the farther away a firm (or a subsidiary of a firm) is created from Zone I. Enterprises in the Casablanca area are given the option of accumulating tax free funds up to 20 per cent of their gross profits, if these funds are invested in Zones III or IV within a period of three years.

Finally, for enterprises settling in Zones III or IV, the Government subsidizes up to 50 per cent of the cost of land, depending on the number of jobs created.

Other benefits given by the code include tax refunds on imported capital goods; subsidies to induce firms to save energy, water, and to preserve the environment; exemptions from import duties on materials, equipment, and spare

parts; and the reduction of stamp tax, registration fees and title fees to all industrial firms established in or extended in all zones except Zone I (Casablanca).

Small- and medium-scale firms established in areas outside of Casablanca are also granted total exemption from profit taxes for the first five years of production. This advantage is offered to large firms only if they have to be created in Zones III or IV, which are the least industrialized in the country. In addition, firms settling in Zones III and IV are offered subsidies for land acquisition and exemption from profit tax for the first 10 years. The rationale behind this measure is not only to channel investment away from the already industrialized Zones I and II, but also to encourage firms in Zones III and IV to expand their plants or to diversify their industrial activities.

Although the real impact of Morocco's investment code must await a longer term assessment, preliminary indications suggest that the code has only been partially successful in relocating enterprises to the preferred zones in accordance with the Government's regional priorities; much of the new investment has taken place in the areas directly adjacent to Zone I. More details may be found in section 4.4.

#### (b) Trade liberalization measures

Until as recent as 1983 the barriers to external trade and the regulatory apparatus dealing with trade in Morocco have led to a strong anti-export bias. In addition, the combination of relatively high tariffs and binding quantitative controls has led to a gradual shift in the composition of the demand for imports away from finished goods.

In an attempt to redress existing inefficiencies, the Government has undertaken an extensive programme to liberalize Morocco's trade regime which has involved:

- reforms in import and export policies and associated regulatory apparatus;
- the elaboration of an export code; and
- the accession to GATT.

#### (i) Changes in import policies

The changes in Morocco's import policies are aimed at reducing quantitative restrictions in imports each year and eliminating them by 1989. The extent to which quantitative controls have been dismantled can be seen in table 3.3.2 which shows the steady transference of products from import lists B and C to list A. Goods on list A can be freely imported without prior approval, goods on list B require a licence, and imports of products on list C are not permitted except in special circumstances. Since early 1986, list C has been abolished with the consequence that list A (goods which can be imported without prior approval) now accounts for 67 per cent of all tariff positions and 86 per cent of the total value of Morocco's imports. With the transfer of 332 products due to the 1987 General Import Programme, list A includes over 70 per cent of all tariff positions.



**Table 3.3.2: Changes in import regime, 1983-1986**  
(percentage)

	Tariff position <sup>a/</sup>				Import value			
	1983 <sup>b/</sup>	1984	1985	1986	1983	1984	1985	1986
List A	49.9	52.5	58.5	66.7	38.5	84.7	86.7	86.3
List B	32.1	37.7	41.2	33.3	61.3	15.2	13.3	13.7
List C	18.0	9.8	0.4	-	0.2	0.1	-	-
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Source:** SINTIA Customs Files and Ministère du Commerce et de l'Industrie.

**a/** Six digit CCCN tariff codes.

**b/** February of each year. Does not reflect the closure of the economy in March 1983 where all goods in list A were temporarily shifted to list B.

In addition to the above-mentioned changes in import policies, the protection given by the tariff structure has been rationalized by what has been described as a "concertina approach" whereby progressive reductions have been made in maximum nominal tariff rates. The aim is to achieve a state where no tariff rate can be greater than 25 per cent by 1989. The special import tax (SIT), a generalized uniform surtax, was to be abolished in 1986. In fact, SIT has been reduced from 15 per cent to 5 per cent. Finally, the maximum custom duty rate has been reduced from 400 per cent in 1983 to 45 per cent at present.

**(ii) Changes in export policies**

**The liberalization of export regulations**

A major goal of Morocco's liberalization programme is to actively promote and diversify the country's exports. Since 1983, there have been a number of important reforms aimed at abolishing barriers to exports and simplifying administrative and regulatory procedures related to exports. To this end, export-licensing requirements have been eliminated on almost all industrial, agricultural, and mining products. The levy on exports, the so-called "statistical tax", which was levied at a rate of 0.5 per cent, has also been abolished. The most important part of Morocco's attempts to stimulate exports has been its "temporary admission scheme". This is another strong indication of the country's commitment to promote exports. Under this scheme, exporters and indirect exporters - that is, local suppliers of inputs to exporters - can import all inputs duty-free without having to obtain an import licence.

Since 1983, additional measures have been taken to broaden the scope of the temporary admission scheme. These measures include:

- on-site customs clearance for imported inputs and exported products;
- widespread guarantees, on an annual basis, to provide for payment of duties on imports under the temporary admission scheme which are not re-exported;
- decentralized implementation of the prior export scheme ("exportation préalable"). Under this scheme, which one could interpret as an extension of the above-mentioned temporary admission scheme, manufacturers are allowed duty-free imports of inputs for goods that were originally meant for the domestic market, if they are now exported.
- a reduction in the time it takes to clear customs from, on average, 12 to 6 days.

#### Export code

Morocco's export code grants considerable fiscal and financial incentives to exporters. The export code elaborates and qualifies many of the advantages given in the industrial investment code. Under the export code established in 1973, the profits of industrial firms and artisanal exporting activities are exempt from the corporate income tax for the first 10 years if the firms are newly established. There have been recent proposals to extend the benefits to exporters under the code to 15 years and by an extra 10 years if profits are reinvested. It is also proposed to broaden the scope of the code to include agricultural, fishing, and mining exports. Exporters also benefit from the temporary admission scheme under this code.

Although clearly a step in the right direction, the export code has a major disadvantage: the fiscal incentives appear to discriminate against the use of labour in favour of investment in new capital. This may encourage firms to adopt more capital-intensive technologies, which goes against the country's natural comparative advantage in labour-intensive activities, and against recent developments that indicate a certain shift from capital-intensive to labour-intensive manufacturing (see chapter 4).

#### Accession to GATT

By officially becoming a contracting party to GATT on 1 June 1987, Morocco re-confirmed its commitment to trade liberalization. The country is likely to gain by its accession to GATT in several ways. First, agreements decided with the GATT system will give greater support and encouragement to Morocco's trade liberalization policies. This is because important barriers which have already been agreed within GATT cannot be increased without giving compensation to those trading partners whose exports have been adversely affected by this action. Second, Morocco can use the fact that it is bound by international trade agreements to resist the efforts of powerful interest groups who lobby for more protection. Finally, further liberalization by Morocco can be used as a basis to bargain for increased access to the markets of its trading partners.

### 3.4 Public enterprises: the changing role of the Government

The Government has played a preponderant role in the Moroccan economy through the public enterprises. It owns all mineral rights (including phosphates), the phosphate-, sugar- and tobacco-processing enterprises, the railroad, highway, power and telecommunications networks and the largest part of the airline and navigational services. It also owns the majority of the large-scale irrigation schemes, which gives it control over agriculture, and has participating interests in several large establishments in the manufacturing sector.

The public sector is quite extensive in Morocco. In 1986 public sector enterprises accounted for about 20 per cent of GDP and a much higher part of the value added in the corporate sector.

The performance of public sector enterprises (PEs) has been generally disappointing for three major interrelated reasons:

- inadequate pricing of outputs;
- poor investment planning and project selection;
- inappropriate financing of the enterprise.

The Government's net arrears to public enterprises amounted to about DH 6.5 billion at the end of 1985. In addition, it owed other bodies DH 1.0 billion as a guarantor for PEs that became insolvent.

Economic pressure and additional pressure from the IMF and World Bank, among others, has now induced the Government to re-assess its role and participation in PEs. Its stated intention, reflected in its Orientation Plan for Economic and Social Development 1988-1992, is to increasingly disengage itself from commercial activities. To this end, it has prepared a programme of divestiture for some of the PEs. At the same time, it has started to restructure its relations with the enterprises remaining in the public sector with a view to inducing greater efficiency by more appropriately defining responsibilities and performance objectives.

A major tool in the Government's redefinition of its relationship with PEs would be the delineation of clear objectives, performance criteria and resource requirements for PEs to enable Ministries to monitor and evaluate these institutions. The Interministerial Committee for PEs (CIPEP) is being strengthened so as to provide better overall policy advice concerning PEs to the Government.

In reforming the financing of public enterprises, the Government intends to eliminate all operating subsidies through price adjustment and sectoral or enterprise restructuring. The Government also intends that its investment financing for PEs should be limited to equity, and that it would provide no assistance to PEs able to raise funds on the capital market. A number of public enterprises have already made themselves financially autonomous.

An important part of the Government's redefinition of its position as an entrepreneur is the increasing role to be given to the private sector at the expense of government participation. The strongest argument for this policy is that the private sector has made healthy profits for more than 20 years

mainly in the non-industrial sectors, particularly trading. There is every potential that the dynamism of the Moroccan private sector can be diverted more into industry, and especially into public industrial enterprises.

### 3.5 Institutions involved in industrial development and regeneration

In order to promote industry and encourage the development of the export goods sector, Morocco has developed a number of institutions.

#### 3.5.1 Banque Nationale pour le Développement Economique (BNDE)

Morocco's industrial development bank is the Banque Nationale pour le Développement Economique (BNDE). Its major objective is to foster industrialization by financing profitable and productive industrial projects. It provides most medium- and long-term lending for industry. The Moroccan Government has direct control over 34 per cent of BNDE's shares, and direct control over another 15 per cent of shares retained by other public financial institutions. The Moroccan private sector owns 27 per cent, International Finance Corporation (IFC) 6 per cent and other foreign institutions 18 per cent.

#### 3.5.2 Other institutions

##### (a) The Ministry of Commerce and Industry

The Ministry of Commerce and Industry (MCI) consists of directorates for industry, international trade and domestic trade. The Minister is the president of the Centre Marocain de Promotion des Exportations (CMPE). The Directorate of Industry (DI) is the body which has the overall responsibility for industrial sector policy and management. It is responsible for the direction of industrial protection policy and, together with the Directorate of Domestic Trade and Ministry of Economic Affairs, for price control.

The International Trade Directorate (DCE) has two divisions each for exports and imports. It deals with bilateral and multilateral negotiations with GATT, EEC and other trading partners.

##### (b) The Office pour le Développement Industriel

The Office pour le Développement Industriel (ODI) is a public enterprise under the Ministry of Industry. All key ministries and other key government entities are represented in ODI's Board of Administration. Its mandate is to promote wider industrial development, to increase the linkages between industries, and to support industrial development in general through promotional activities, consultancy and the collection and distribution of information.

ODI participates in a number of medium- and large-scale industrial projects, mainly in the agro-industries and textiles subsectors; its largest individual projects, however, are found in the chemicals and building materials industries. Total turnover of enterprises with ODI participation was DH 1.7 billion in 1987; in the same year, ODI as a whole made a net profit of DH 4.3 million.

(c) National Commission for Simplification of International Trade Procedures

Trade procedures were established by the Prime Minister in July 1986 to simplify and streamline export and import procedures. The Commission's major goals include the reduction of delays in handling goods, the improvements in the efficiency of ports, and the standardization of documents and procedures.

3.5.3 Export support institutions

There are a number of public, quasi-public and private institutions in Morocco involved in exports promotion: CMPE (already mentioned), the Moroccan Association of Exporters (ASMEX), Chambers of Commerce and Industry (especially the Casablanca Chamber of Commerce), Professional Associations and Exporters' Clubs. It appears that all these institutions operate largely on an individual basis. There is reported to be little or no co-ordination in their respective export development programmes, nor priorities for sectors and products, market targets or other quantitative goals. Clearly, immediate attention is required on the part of the Moroccan authorities preferably with the additional help of external financial and technical assistance to correct this situation. The World Bank has already been assisting Morocco in this area.

3.6 The financing system of industry

Moroccan industrial firms derive their resources almost exclusively from borrowing from banks and specialized financial institutions, private capital subscriptions, and accrued undistributed profits. Until 1982, they also received interest rates subsidies (2 per cent) and since 1983, various forms of exports credits and protection against exchange risks.

The Moroccan financial system includes the Central Bank (Banque Al Maghrib), 15 commercial banks, as well as five specialized financial institutions and two savings banks controlled by the public sector. There is also a stock market in Casablanca, which concentrates on public and semi-public bonds transactions, and on a limited number of shares issues from private companies.

Of the five specialized financial institutions, the Banque Nationale pour le Développement Economique (BNDE) has the most important role to play in the financing of industry. It is the central institution responsible for medium- and long-term industrial loans. The BNDE, together with some public agencies such as the ODI and the Société Nationale d'Investissement (SNI), also undertakes equity participation in industry.

In 1987, industrial investment was financed as follows:

- 45 per cent covered by medium- and long-term loans, of which 36 per cent by BNDE, 31 per cent by commercial banks, and 33 per cent by suppliers credits;
- 20 per cent by the firms' own cash-flows; and
- 35 per cent by capital increases.

The BNDE is allowed to extend loans, and commercial banks need its guarantee to make their loans to industrial investors eligible for Central Bank rediscounting. The BNDE is also the sole source of external financing for leasing companies, and any loan to small-scale industries has to be reviewed by the BNDE before it can be granted by commercial banks.

The BNDE's role and operating methods have caused resentment by commercial banks as well as private investors. The BNDE reviewing process is a particular cause of concern. In addition, BNDE is perceived by many industrial firms and private banks as a slow and bureaucratic public sector bank. As a reaction against the restrictions imposed by the BNDE, commercial banks have recently expressed their interest in increasing their investment lending activity by creating subsidiary leasing companies.

There is also the problem that firms tend to consider the guarantees required by banks for extending credits excessive. The position of the banks is justified, however, given the extreme family orientation of business management in Morocco, and the delays and difficulties encountered in collecting loans through legal procedures or liquidation. As we shall discuss in the next chapter, the family orientation is among the principal constraints (bottlenecks) faced by the Moroccan manufacturing sector.

### 3.7 Economic co-operation parameters

Morocco has implemented an extensive economic reform programme since 1983. The country has also strengthened or established institutions to foster the development of industry and exports. These reforms have significantly altered Morocco's economic structure. Recent economic indicators show that Morocco's economic fortunes have improved considerably since it liberalized its trade regime. Since 1983, quantitative import controls have been reduced significantly and almost 86 per cent of the total value of imports is now not subject to licensing. This compares with a figure of 38 per cent in 1983. The maximum custom duty rate has been slashed from 400 per cent in 1983 to a current rate of 45 per cent; the special import tax (SIT), an across the board surtax, has been reduced from 15 per cent to 5 per cent.

All major barriers to exports have been reduced or eliminated. Export licencing arrangements have been virtually abolished, all export taxes have been repealed, and the "temporary admission" scheme has been revamped and made more attractive to exporters. A high level committee has been established to simplify foreign trade procedures to foster the further development of international trade. Finally, Morocco's strong commitment to free trade was reconfirmed by its accession to GATT on 15 June 1987.

In short, Morocco's trade liberalization reforms appear to have the potential to successfully attenuate the previous bias in the country's system of incentives against exports.

The implementation of the industrial promotion policies, codified especially in the 1983 investment codes, also appear to have gone some way in attenuating an earlier bias against labour-intensive activities. By increasing the cost of capital, the investment code appears to realign factor prices in accordance with Morocco resource endowments and redirect industry towards the adoption of more labour-intensive production in line with its natural comparative advantage.

The dual effect of the investment codes and the export codes has been to restructure Moroccan industry such that it can achieve increased efficiency and competitiveness. The stimulus given to the export sector has subjected an increasing portion of Moroccan industry to international competition.

Judicious management of the exchange rate and appropriate macro-policies coupled with the dismantling of external trade barriers appears to have promoted exports and led to a more sustainable level of imports, as will be detailed in the next chapter.

There is, however, a danger in Morocco's trade liberalization programme that fiscal incentives - tax exemptions - may prove to be increasingly costly as trade liberalization proceeds and resources are increasingly directed to the export sector. With exports practically exempt from all forms of taxation, an expansion of exports will lead to declining tax receipts. This could worsen the budget situation and dampen the progress of trade liberalization in the country. If the progress achieved as a result of the liberalization is not to be undermined, macro-economic policies will have to be developed which more than compensate for the serious decline in revenues as the liberalization programme proceeds.

As the recent reforms recognize, the country's economic recovery and return to international creditworthiness is not possible without a significant structural change to transform the Moroccan economy into an efficient producer of goods and services for both the domestic and export market. The country's continued economic recovery requires a sustained and intensified commitment to the type of economic reforms, and the strengthening of institutions to promote industry and exports, already begun in 1983.

On current showing, such a commitment is likely to be forthcoming given the difficult reforms that have already been undertaken. An essential element in the country's continued efforts towards economic recovery and industrial regeneration is the extent to which donor support will be forthcoming to help alleviate some of the obstacles the Government is facing in implementing its reform programme, and thereby accelerate the country's industrial regeneration. The recent reforms should, however, prove attractive to increased donor support and international investment.

## CHAPTER 4

### THE MANUFACTURING SECTOR OF MOROCCO

#### 4.1 Introduction

When Morocco gained its independence in 1956, it had a modest manufacturing sector entirely owned and administered by foreigners. However, Moroccans early engaged themselves in a progressive transition from economic dependency towards a programme of national industrial development.

During the decade after independence, Morocco followed a policy of import substitution for most consumer goods and for some intermediate goods. Stimulated by the growth of domestic demand and heightened protection of the domestic market, industrial production expanded rapidly during the 1960s, especially within the branches which have been oriented to the domestic market, such as mechanical engineering, cement, textiles and food.

The import substitution strategy continued in the 1970s. According to the Ministry of Commerce and Industry,<sup>1/</sup> the 1973-1978 period can be considered as the "take-off and expansion" stage of Moroccan industrial development. In effect, average annual investment rose from DH 240 million in 1965-1972 to DH 1,100 million in 1973-1977, and the share of manufacturing in total investment rose to a peak of 29 per cent in 1977 (15.3 per cent for the public sector and 13.7 per cent for the private sector). Nearly two-thirds of the industrial enterprises active in 1986 were launched in or after 1973.

Induced by economic policies, manufacturing growth progressed during this period at a relatively rapid pace (6.6 per cent per year). This unprecedented rate was permitted initially by the phosphate boom in 1974-1975 and was mainly led by public enterprise investment. The phosphate boom ended in 1975-1976, however, and the former terms of trade gains were reversed. The investment programme was nevertheless continued and financed by increased foreign borrowing, grants and large public sector deficits.

The ensuing excessive increases in both the balance of payments deficits and budget deficits made it necessary to restrain domestic demand from 1978 onwards as part of the 1978-1980 stabilization plan. The rate of growth in the manufacturing sector decreased to 2.9 per cent per year.

The more liberal investment code which was issued in 1983 established the new export-oriented industrialization strategy. The promotion policies applied by the Government since then seem to have had positive effects on manufacturing activities. A World Bank report<sup>2/</sup> indicates that, from 1977 to 1985, "outward-oriented industries had grown at relatively higher rates than import substituting industries. This finding is clearly linked to the export-promoting policies which have occurred since 1983...".

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1/ Ministère du Commerce et de l'Industrie, Evolution et Perspectives des Industries de Transformation, Oct. 1988.

2/ World Bank, Morocco; the Impact of Liberalization on Trade and Industrial Adjustment, Washington 1988.



## 4.2 General trends and structure

In 1987, manufacturing output was estimated at DH 71 billion in current prices, compared to DH 49 billion in 1984.<sup>1/</sup> This gives an annual growth rate of over 11 per cent. When a production index based on constant 1978 prices is used (see table 4.2.1), growth over the 1984-87 period was 2.5 per cent annually, with 4 per cent annual growth in 1985-86 and 1986-1987. In 1987, total MVA was DH 21 billion (current prices); the average annual MVA growth rate over 1984-1987 was 18.7 per cent. Fast growth during recent years has not yet compensated for the effects of slow growth during earlier years: manufacturing's share in GDP decreased from 17.5 per cent in 1981 to 15.6 per cent in 1987.

As Table 4.2.1 shows, growth has been concentrated in four branches: food products, textiles, electrical equipment and chemicals. The latter two have been the fastest growers, with the 1987 index for chemicals at 260 and for electrical equipment at 154 (1978=100). However, neither of these branches is very important yet,<sup>2/</sup> and much of the overall growth in the manufacturing sector is therefore due to growth in the food products and textiles industries. The production index of the former stood at 137 in 1987, the index of the latter at 125. Some of the smaller branches - timber and wood processing, the various metal-processing branches (transport equipment, metalworking, other metal products) - show almost continuous decline, although the situation in the metal-processing branch stabilized during 1986-1987. The unsatisfactory performance of the various metal-processing branches is puzzling. A World Bank source,<sup>3/</sup> using a somewhat different categorization, suggests fast growth in the transport equipment and basic metals industries during 1981-1985: the latter industry exhibited an annual growth of its share in total output of no less than 19.3 per cent. Unfortunately, the available data do not allow a definite statement with regard to the actual trends (downwards or upwards) in production in these branches, which are likely to be of key importance for the future development of the sector.

Table 4.2.1 does not show the present weights of the various branches in total manufacturing production. Since 1978, there has been a shift in the contribution of the various branches, as the table already indicates. In 1987, according to UNIDO figures, the agro-food subsector (comprising food products, beverages and tobacco) contributed 35 per cent of total output and 36 per cent of MVA. Chemicals (presumably including phosphate products - see footnote 2) accounted for 32 per cent of output and 29 per cent of MVA.

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1/ Banque Al Maghrib, Rapport Annuel 1987.

2/ In the case of chemicals, the very important phosphate derivatives industry seems to have been excluded from the table. UNIDO data for selected years suggest that the chemicals subsector, when phosphate products are included, is the second most important subsector (after agro-processing) at present.

3/ World Bank, op.cit., p.53.

Table 4.2.1: Indices of production of manufacturing sector,

1981 to 1987  
(1978 = 100)

	Weight	1981	1982	1983	1984	1985	1986	1987
Total manufacturing	1,000	107	110	116	114	116	120	124
Food products	233	115	117	125	127	125	124	137
Beverages and tobacco	181	103	96	101	108	107	106	109
Textiles	116	94	109	113	100	120	130	125
Tanning and leather footwear	23	117	145	136	141	137	140	110
Timber and woodworking	24	113	106	104	114	105	98	88
Paper and board	26	117	110	114	101	107	107	112
Processed quarry products	81	116	119	119	106	107	105	106
Metalworking industries	7	117	107	118	114	100	85	89
Other metal products	84	90	83	88	79	73	59	61
Transport equipment	55	63	62	61	35	56	53	55
Electrical and electronic equipment	24	114	129	128	113	128	146	154
Chemicals and paracheical	99	137	161	195	206	198	240	260
Rubber and plastic manufactures	47	84	84	83	80	82	88	84

Source: Ministère du Plan.

Textiles and clothing come next, with a 17 per cent share for both output and MVA. The same UNIDO data suggests a rapid increase in the MVA shares of the agro-industrial subsector, and a decrease in the MVA shares for the chemical industries since 1981. Although its output share is decreasing, the agro-industrial subsector has gained through the manufacturing of products with higher value added.

In 1987, the highest MVA/employee ratios were found in the agro-industrial subsector (see table 4.2.2), followed by the metal and electrical products subsector. The figures for agro-processing are well above the overall average. The lowest figure was found in textiles and leather. There has been an increase in MVA/worker in all subsectors during 1981-1987, but the increase was strongest for metal and electrical products, followed by agro-processing. The MVA/worker figures again confirm the importance of the agro-processing industry in the development of the Moroccan manufacturing sector.

Table 4.2.2: Value added per employee in manufacturing sector  
(in thousands of current dirhams)

Subsector	1981	1983	1985	1987
Agro-processing	56	64	66	87
Textiles/clothing	22	24	29	32
Chemicals	64	85	68	79
Mechanical and metallurgical; electrical and electronic	45	62	29	81
TOTAL average	..	..	..	80

Source: Ministère du Commerce et de l'Industrie.

#### 4.3 Employment and firm size

In 1987 some 320,000 persons were employed in the manufacturing sector, of which 190,000 were in modern manufacturing firms. This implies that there is a sizeable traditional, artisanal sector; information on this sector, however, is very scarce. Seasonal labour accounted for some 18 per cent of total manufacturing employment. Nearly 60 per cent of the seasonal workers were employed in the agro-processing subsector; the remainder is employed mainly in the textiles and garments subsector. Real wages in manufacturing decreased by some 6 per cent between 1980 and 1986 and have helped to make Moroccan manufactured exports more competitive.

The employment structure of the manufacturing sector by major subsectors in 1987 is indicated below:

**Table 4.3.1: Structure of employment by major subsectors, 1987**  
(percentage)

Subsector	1981	1983	1985	1987
Agro-processing	20	21	20	27
Textiles/clothing	35	34	36	35
Chemicals	28	28	27	24
Mechanical and metallurgical; electrical and electronic	17	17	17	14
TOTAL	100	100	100	100

Source: Ministry of Industry.

The available data referring to firm size show that small-scale industry is predominant when one looks at the total number of enterprises. Enterprises with a turnover of less than DH 1 million, however, only accounted for 1.4 per cent of industrial output and for 7 per cent of employment in 1987. Those with a turnover of over DH 20 million, on the other hand, accounted for 56 per cent of employment and 32 per cent of output, although they represent only 14 per cent of the total number of firms.

Classifications of firms according to number of employees contain more detail. In 1985 68 per cent of the 4,000 Moroccan manufacturing firms employed 5-33 persons. These firms accounted for 14.3 per cent of total employment in the sector. Their contribution to output was much lower, amounting to 8.8 per cent, and their contribution to exports was only 7.4 per cent. On the other hand, the 250 firms employing more than 190 persons (their share in the total number of enterprises was 6.2 per cent) accounted for 44.5 per cent of total employment, almost 60 per cent of output and over 70 per cent of manufactured exports.

Large establishments are typical of the chemicals, transport equipment and textile (spinning, weaving) industries; in the agro-industries subsector, large-scale manufacturing is predominant in the beverages and tobacco products branches. Otherwise, the size distribution of companies within branches is well spread and is not skewed. In some cases (chemicals, transport equipment), the smaller enterprises serve as subcontractors or suppliers to larger units, but this does not appear to be common for industry as a whole.

The Moroccan Government has introduced a number of support measures for small- and medium-scale industry (SMI). As the above figures indicate, output in the smallest enterprises (those with less than 34 workers) was well below average in 1987. Therefore, the productivity in these firms will have to be raised if the small-scale sector is to make a greater contribution to manufacturing development, as intended by the Government.

#### 4.4 Geographical distribution of industrial activities

The Région du Centre, of which Greater Casablanca is a part, has the largest concentration of industrial activities in the country. It accounts for two thirds of the total number of enterprises, 60 per cent of Morocco's manufacturing output, 40 per cent of exports and 60 per cent of employment. The second most important region is the north-west, in terms of share in the total number of firms and the share in total output (20 and 18 per cent, respectively). The Tensift region comes third. Here, most manufacturing is concentrated in Safi province, where phosphate processing is located. Fish canning is also an important industry. These two industries in Safi combined account for 45 per cent of Morocco's manufacturing export earnings, although the number of firms and the contribution to total production is small.

The most diversified industrial structure is found in the Casablanca area, where the full range of manufacturing branches is represented, including a considerable part of the important food-processing industries. In the north-west, which has been growing more rapidly than the Casablanca area in recent years, the food products, textiles and tobacco products branches stand out. As indicated above, manufacturing in the Safi province centres on phosphate derivatives and fish canning.

The impact of the other regions on manufacturing development is rather limited at the moment. The Moroccan Government is trying to encourage industrial decentralization, especially location outside the Casablanca area. It uses a variety of credit schemes, subsidies and tax privileges to achieve this. The ODI is promoting a number of industrial estates (zones industrielles) outside the Casablanca area. Twenty of these have been completed so far; a total of 35 is to be established.

Agro-industry is to be expanded to improve employment prospects in the rural areas, especially in areas where there is ample food supply but no industrial base. In view of the many different climatic regions of the country, specific agro-industries can be established in various areas. In the north-west region, for instance, the Gharb zone is important for sugar cane, sunflower and beets, as well as for intensive breeding. In the Er-Rachidia and Ouarzazate regions, dates are the major product in areas of virtually no industrialization but with relatively large populations. It is in such areas that the Government is encouraging new industries to establish themselves.

Table 4.4.1: Regional distribution of investment  
(by investment code zones<sup>a/</sup>)

	1979	1983	1985
Zone I	50.1	22.5	9.0
Zone II	4.5	29.4	41.0
Zone III	39.4	38.4	35.7
Zone IV	6.1	9.8	14.1
Zones I and II	54.6	51.9	50.0

Source: Ministry of Industry and World Bank.

a/ The country is divided into four zones: I - Casablanca-Anfa; II - Mohammedia, Ben-Slimane; III - Rabat, Salé, Kenitra, Fes, Marrakech, Meknès, Safi, Tanger, Ictaran; and IV - all other provinces.

The success of the plans and measures to redistribute manufacturing seems rather limited so far. The most conspicuous shift in industrial investment per development zone (see table 4.4.1) has been from Casablanca-Anfa (zone I) to Mohammedia-Ben Slimane (zone II), a "suburbanization" of industrial investment, so to speak, which can be witnessed in congested areas everywhere in the world. Admittedly, zone IV (the peripheral provinces) has seen its investment share more than doubled over the 1979-1985 period, but these provinces still accounted for no more than 14.1 per cent of total investment in 1985. A review of the locational aspects of the investment code may be needed to make its contribution to the diffusion of manufacturing development more substantial.

#### 4.5 Ownership and investment

Total equity capital in the Moroccan manufacturing industry amounted to DH 12 billion in 1987, an increase of 5.4 per cent over the previous year. The private sector owns 55 per cent of equity; the public sector and foreign investors own 31 per cent and 14 per cent, respectively.

France predominates among foreign investors, with almost 45 per cent of total foreign-owned equity in 1987. All EC countries combined held 60 per cent of this total. Foreign investors are mainly involved in the building materials, chemicals, textiles and garments and electrical goods industries.

Altogether, some 100,000 Moroccans worked in industrial enterprises that were partly foreign-owned. Most of these are to be found in the large-scale sector, as defined above (more than 190 employees and/or DH 20 million turnover). These enterprises produced 31 per cent of gross output and 28 per cent of total manufactured exports. Foreign ownership, in other words, has a large impact on development in the manufacturing sector, but it does not play a conspicuous role in agro-processing.

Enterprises which are wholly or partly owned by the Government contributed 29 per cent of gross output in 1987. The great majority of these are to be found in agro-processing (tobacco, sugar) and in the chemicals industry. Other industries in which government ownership plays a role are paper and pulp, petroleum refinery, cement and metal products and machinery. Large-scale enterprises predominate. Some of the firms are jointly owned with foreign investors.

In the absence of similar information on private ownership, it may be concluded, on the basis of the above and of what has been said about manufacturing in general in previous sections, that the private sector is characterized by relatively small enterprises and a predominance of agro-processing. The characteristics of this subsector will be analysed in more detail in chapter 5.

With regard to industrial investment trends, there has been continuous growth from 1983-1986 (average annual increase: approximately 25 per cent), followed by a 9.5 per cent drop in new investment in 1986-1987. Total 1987 investment was DH 3.5 billion. The decrease was strongest in the chemicals subsector (-20.6 per cent); the metal products and machinery subsector and the agro-processing subsector also showed double-digit decreases. Growth continued in the textiles and leather subsector, and resumed (after a decrease in 1985-1986) in the electrical products subsector.

In the absence of sufficiently detailed information it is difficult to interpret the different trends at the subsectoral level. Generally speaking, however, it would seem that the expansion of manufacturing activities is becoming more a matter of increasing employment than increasing investment. Between 1983 and 1986, there had been a steady increase in industrial employment which, however, was slower than the increase in investment. But during 1986-1987, when new investment decreased, the number of newly created jobs jumped from 34,800 to 54,200. This would substantiate the hypothesis formulated in the World Bank document quoted in chapter 3<sup>1/</sup>, that reforms have succeeded in removing the policy bias in favour of capital-intensive industries, and are stimulating the use of Morocco's present comparative advantage in cheap labour.

#### 4.6 Trade in manufactured products

The process of trade liberalization, described in chapter 3, has had a strong influence on patterns of trade as a whole and on trade in manufactured products in particular. Manufactured products have continuously increased their share in total exports, and represented 50.4 per cent of exports in 1987. At the same time, however, the share of manufactured goods in imports also grew (see tables 2.2.1, 2.2.2).

Table 4.6.1: Evolution of the trade deficit for manufactured products

by category of goods, 1983 to 1987  
(in millions of dirhams)

	1983	1984	1985	1986	1987
Foodstuffs	-475	-673	-113	-127	+203
Semi-manufactures	-1,157	-1,363	-2,136	-2,558	-2,592
Capital goods	-4,774	-6,333	-6,367	-7,832	-7,066
Consumer goods	+402	+746	+930	+1,046	+1,787
TOTAL	-6,002	-7,623	-7,686	-9,471	-7,668

Source: Based on data of the Office des Changes.

As Table 4.6.1 shows, there was an increasing trade deficit for manufactured goods<sup>2/</sup> between 1983 and 1986, with a recovery in 1987. The totals are the result of two opposing trends. In the foodstuffs and consumer goods categories, Morocco has consistently improved its position. In the case of foodstuffs, this was in some years the result of decreasing imports rather than increasing exports. The deficit in trade in semi-manufactured and capital goods has worsened continuously. The major increase in the former category is in the unspecified category "others", but in the case of capital goods, the major cause of the increasing deficit is industrial equipment imports, which increased by DH 3 billion over the 1983-1986 period, and then

1/ World Bank, op.cit., p.11-12.

2/ The table excludes energy products, as Morocco's trade in these largely consists of crude oil imports. The category foodstuffs may include small amounts of unprocessed food.

decreased by DH 750 million in 1986-1987 (see annex table 3) - another indication of the slowdown in the growth of capital-intensive manufacturing.

Exports of finished manufactures rose by over 11 per cent per year on average during the 1983-1986 period, compared to an annual average of 2 per cent in 1980-83. This upward trend continued in 1987 with exports of finished manufactures growing by over 20 per cent in real terms.

The merchandise trade figures do not include exports of goods produced by firms that are subcontractors of foreign firms. These are mainly exports of clothing and electronics, and the products are highly labour-intensive. The share of these exports in total exports rose from 1.3 per cent in 1980 to 6.9 per cent in 1985. This is an indication of the success of efforts towards labour-intensive manufacturing.

Looking now at the composition of manufacturing exports (table 4.6.2), it appears that performance has varied considerably across individual industries. Processed food exports declined between 1980 and 1985 with a strong upturn in 1986, while electrical products and clothing have exhibited particularly robust growth throughout. The vigorous growth of chemical products exports, which are mainly phosphate products, ended in 1984. At present, non-traditional manufactures (excluding phosphate derivatives) account for over 30 per cent of total exports, compared to approximately 20 per cent in 1983, whereas the share of phosphates and derivatives has fallen from 45 per cent to 34 per cent over the same period. This illustrates the extent of export diversification which has occurred since 1983.

The contractionary economic policies that have helped to control the growth of total imports have had less of an impact on the growth of manufactured imports. The overall growth of manufactured imports during 1983-1987 was 64 per cent, with a noticeable slow-down in 1986-1987 (see table 4.6.3). The most conspicuous growth has taken place with regard to imports of consumer goods, which expanded by 2.3 times during 1983-1987. Imports specifically intended for the manufacturing sector - intermediates and most of the capital goods - showed growth rates of 52 per cent and 66 per cent, respectively. The decrease in capital goods imports in 1986-1987 has already been the subject of earlier comment.

Morocco's major trading partner, the Economic Community, is also the most important importer of Moroccan manufactures. But whereas in 1985 the EC's share in total Moroccan exports was over 50 per cent, the share in manufactured exports was 43 per cent. Although most Moroccan exports qualify for preferential treatment in the EC, and although the quota for Moroccan textiles are relatively generous, the country has been looking for ways to diversify its export markets. Since 1983, there has been an increase in exports of manufactured goods to developing countries, which now account for 36 per cent of total manufactured exports. A continuation of the export diversification strategy should benefit the long-term development of the manufacturing sector, as the EC market potential is not unlimited. There has, however, been little change in regard to sources of imports, with France still being the most important single supplier of manufactured goods.



**Table 4.6.2: Value of manufactured exports by sector**  
(in thousands of US dollars)

	1983	1984	1985	1986
Food	176,449	171,860	191,861	251,861
Beverages and tobacco	6,463	5,477	4,664	5,687
Textiles	155,307	152,729	162,283	221,442
Clothing	114,314	138,273	151,148	216,015
Leather footwear	41,801	37,982	44,859	57,327
Wood and wood products	15,975	14,289	13,704	17,424
Paper/cardboard and printing	18,610	24,839	17,512	29,738
Non-metallic mineral products	5,064	4,241	4,238	7,163
Basic metals and industry products	8,111	10,065	9,635	8,013
Metalworking	6,575	7,093	8,443	7,965
Mechanical equipment	2,724	2,732	2,398	5,851
Electrical and electronic products	6,704	7,407	8,125	15,695
Office machines, precision instruments, watches, etc.	437	168	633	321
Chemical products	439,657	500,879	454,948	457,098
Rubber and plastics	3,461	4,750	5,212	6,342
Other manufactured products	9,238	12,2378	16,596	18,186
<b>TOTAL</b>	<b>1,010,890</b>	<b>1,095,162</b>	<b>1,096,259</b>	<b>1,325,528</b>

Source: Office des Changes.

**Table 4.6.3: Value of manufactured imports, 1983-1987**  
(in millions of dirhams)

	1983	1984	1985	1986	1987
Food products	1,964	2,493	2,527	2,844	2,534
Intermediate inputs	4,934	6,494	7,423	7,527	8,194
Capital goods	4,854	6,460	6,533	8,248	7,363
Consumer goods	1,773	2,092	2,758	3,470	4,110
<b>TOTAL</b>	<b>13,525</b>	<b>17,539</b>	<b>19,241</b>	<b>22,089</b>	<b>22,201</b>

Source. Annex table 2.

#### 4.7 Linkages

Recent input-output tables that would allow a detailed analysis of linkages are not available. However, an analysis of import contents based on 1978 input-output tables is available, and this analysis gives an impression of the extent to which the manufacturing sector has domestic linkages. It should be noted that import dependency is related to a number of factors (technological choice, domestic agricultural performance, and so forth) which will change over time. The figures in table 4.7.1 should therefore be interpreted as indicating orders of magnitude only - they are unlikely to give an exact picture of branch-level import dependence in the late 1980s.

The lowest import contents are found in the beverages and tobacco and leather and footwear branches; domestic inputs represent four fifths of the value of production. Relatively low figures are also found in other food industries and clothing. The other food industries include key export industries such as vegetable and fish canning, and it can therefore be said that the major export-oriented industries rely strongly on the domestic resource base. One implication is that the success of Morocco's industrial export drive depends to a considerable extent on a strong agricultural sector that has good linkages with industry. The highest degree of import dependence (and therefore the lowest degree of domestic linkages) is found in the various branches producing metal and electrical products. In the machinery branch, over 80 per cent of the value of production can be traced to imports.

The indirect import contents show the extent to which production in one branch generates a need for products from other manufacturing branches that are based on imports. In a way, these figures therefore show inter-industry linkages. In the case of clothing, for example, the indirect import contents are far higher than the direct contents. The most probable explanation is that the branch buys inputs (cloth) from the textiles branch, which again shows a relatively high direct import content. The highest indirect import contents figures are found in the "other" industries, metalworking, electrical products, non-metallic minerals and wood and furniture. In the food products subsector, the figures are relatively low. The branches in that subsector are, in other words, mainly linked to the domestic agricultural sector.

**Table 4.7.1: Import content by branch 1978**

	Import contents <sup>a/</sup>		
	Direct	Indirect	Total
Flour, sugar and bakeries	0.287	0.086	0.373
Other food industries	0.165	0.081	0.246
Beverages and tobacco	0.085	0.060	0.145
Textiles	0.221	0.108	0.329
Clothing	0.070	0.144	0.214
Leather and shoes	0.70	0.117	0.187
Wood and furniture	0.273	0.215	0.488
Paper and paper products	0.163	0.084	0.247
Non-metallic mineral products	0.162	0.154	0.316
Metallurgy	0.672	0.064	0.736
Metalworking	0.256	0.177	0.433
Machinery	0.748	0.112	0.860
Transport equipment	0.569	0.131	0.720
Electrical products	0.556	0.181	- .737
Office machinery, measure inst.	0.546	0.072	0.618
Chemicals	0.346	0.077	0.423
Rubber and plastics	0.391	0.064	0.455
Other industries	0.325	0.240	0.565

Source: World Bank, Morocco, Industrial Incentives and Export Promotion, Washington 1984. Calculations based on the 1987 preliminary input-output table for Morocco.

a/ Imports generated by one dirham of production in each sector.

#### 4.8 Capacity utilization and production constraints

A 1988 study<sup>1/</sup> indicates that overall capacity utilization had gone down from 66 per cent to 60 per cent over the 1984-1987 period. The 1987 capacity utilization rates in percentages by sub-sector were:

Agro-industries	64
Textiles and leather	55
Chemicals	63
Metal products	50
Electrical goods	46

1/ Ministère du Commerce et de l'Industrie, Situation des Industries de Transformation. Exercice 1987, Rabat 1988.

In individual branches, capacity utilization was highest (80 per cent or more) in sugar products, pulp, wooden panels<sup>1/</sup> and industrial equipment. The lowest figures (below 30 per cent) were found in structural steel and pesticides. Low figures are quoted for vegetable and fish canning (42 per cent) and garments (49 per cent). This seems surprising, given the prominent and successful role of these industries in export markets. (The beverages, tobacco and miscellaneous food products branches, which also export a considerable part of their products, have utilization rates of 72-74 per cent.) What are the problems that lie at the root of these low utilization rates?

The most important overall constraints mentioned by industrial entrepreneurs are:

- insufficient domestic demand (in unspecified industries producing for the home markets);
- shortages of imported inputs and intermediates, which are often caused by delays in obtaining foreign exchange;
- difficulties in obtaining credit for manufacturing firms;
- high energy costs (among the major industries, this is especially a problem of textiles);
- shortages of qualified employees of the middle level;
- shortcomings of industrial services such as transport, maintenance insurance and export insurance in particular.

The most commonly quoted bottleneck is the delay in obtaining the foreign exchange for imported inputs, which usually amounts to 90 days according to the World Bank study quoted before. Virtually all enterprises are therefore constrained to hold stocks of imported inputs at levels higher than would otherwise be necessary; this pushes up financial costs, which again lowers competitiveness.

Moroccan importers are currently required by foreign suppliers to open letters of credit confirmed by correspondent banks. Unlike large enterprises which have high credit-worthiness and good connexions with the central bank and foreign suppliers, medium-sized or small firms encounter great difficulties in obtaining such letters of credit.

Other measures, such as deposit requirements for imports, increasing lending rates and authorizations to seek credit abroad to pay foreign suppliers, are also likely to discriminate against the smaller firms, with their limited financial means and credit-worthiness.

The constraints outlined above would, to an extent, also explain the low capacity utilization rates in some of the major export industries, such as the relatively small-scale vegetable-processing industries. Transport and export insurance problems may keep enterprises from exporting as much as they could,

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<sup>1/</sup> Wood products are included with the chemicals subsector.

which again may force them to reduce production. Delays in the delivery of essential imports (an estimated one fourth of the inputs used in food processing is imported) may result in drastic production cuts.<sup>1/</sup> But another reason may be the very fast growth of capital stock over the past

years. If markets do not expand fast enough, and if the industrial infrastructure and the supply of middle level personnel are not keeping pace with the expansion of manufacturing capacity, then it is only logical that plants cannot operate at full capacity. Unfortunately, the available information does not allow specific explanations for separate industries.

Finally, the traditional structure of Moroccan business is a constraint on manufacturing development as a whole. As pointed out before, tight family structures and concentration on commercial activities, with their relatively rapid gains, are not conducive to industrial development, which requires both social dynamism and long-term investments.

The traditional business structures, with their deep cultural and social roots, will probably take a long time to change. The Moroccan manufacturing sector is nevertheless going through a process of rapid development, the basis for which has been laid by the reforms of the 1980s. The remaining imbalances seem to a large extent related to trade policy. Further adjustments in trade policy will contribute to stable manufacturing growth in the future.

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<sup>1/</sup> The import dependency of the machinery industry is more than three times as high as that of the food industry - yet this industry attains very high capacity utilization rates.

## CHAPTER 5

### FOCUS ON AGRO-RELATED INDUSTRY

#### 5.1 Introduction

The role of agro-related industries in economic development has become increasingly recognized. The backward linkage effects of these industries serve as a strong stimulus to agricultural growth and development. Since most of the inputs for agro-industry are produced domestically, the drain on foreign exchange tends to be smaller than in other industries. The forward linkages are also important, as these industries produce key outputs for agricultural growth. In addition to their great export potential, agro-industries also meet the needs of domestic consumers by providing a greater variety of goods over longer time intervals than is possible with unprocessed foods.

Agro-related industries occupy a particularly important position in the Moroccan economy. Agro-industry firms satisfy a large part of the domestic market for basic consumer goods, and help to sustain the demand for local agricultural and animal products. Agro-industry accounts for nearly 30 per cent of all firms and employs about 20 per cent of all workers in the manufacturing sector. In comparison with the manufacturing sector as a whole, agro-industry has kept pace with the rate of growth in production and has exceeded the rate of growth in value added. It also has served as a major source of Morocco's foreign exchange earnings.

The Government of Morocco has shown a particular interest in encouraging the growth of agro-industry as part of its programme of decentralization and rural development. It has sought to improve employment prospects in rural areas, especially where agricultural products provide the basic raw materials for the growth of agro-industry. It also has recognized the importance of agro-industry in building-up an industrial tradition, together with the associated technical and managerial skills for sustained progress in industry.

In order to increase the contribution of agro-industry to overall economic growth, the Government of Morocco in recent years has sought to persuade local agro-industrial firms to substitute local food and raw materials for imported food, and to encourage the social and economic development of the collectives and farmers which supply the raw materials to agro-industrial firms.

#### 5.2 Characteristics of the agro-industry subsector

##### 5.2.1 Size

In 1987, the agro-industry subsector numbered 1,354 firms, of which 83.6 per cent had been established since 1961, amounting to 20 per cent of the total number of manufacturing companies. The growth in the number of agro-industrial firms, 6.7 per cent between 1986 and 1987 (from 1,269 to 1,354) was slightly more than that in the total of manufacturing enterprises (6.2 per cent - see table 5.2.1)

Table 5.2.1: Changes in the number of agro-industrial & manufacturing firms  
1986-1987

	1986	1987	Percentage change
Manufacturing sector firms	4,354	4,624	+6.2
Agro-industry subsector firms	1,269	1,354	+6.7
Agro-industries as percentage of all industrial enterprises	29.1	29.3	+0.6

Source: Administration de l'Industrie, Secteur des Industries Agro-Alimentaires. Rabat

#### 5.2.2 Employment in agro-industry

The number of permanent employees in the agro-industry subsector has increased by approximately 31 per cent between 1981 and 1987, compared with 34 per cent in the entire manufacturing sector (see table 5.2.2)

The permanent employment in the agro-industry subsector has registered a annual growth of approximately 5.8 per cent during that period, which was also higher than the growth of employment in all the manufacturing industries, 4.5 per cent annually, apart from a temporary stagnation in 1986-1987.

Table 5.2.2: Changes in the number of permanent employees in manufacturing sector & agro-industry, 1981-1987

	1981	1983	1985	1986	1987
Permanent employees in manufacturing sector	193,827	206,398	224,361	241,795	260,461
Permanent employees in agro-industry subsector	38,394	44,319	45,326	50,027	50,327
Employees in agro-industry as percentage of manufacturing	19.8	21.5	20.2	20.7	19.3

Source: Administration de l'Industrie, op.cit.

In addition to the permanent employees of agro-industries, another 35,000 persons were employed in agro-industry on a seasonal basis in 1987, which accounts for 58 per cent of the 60,000 seasonal workers hired in the manufacturing sector. Seasonal workers thus account for 41 per cent of all

85,000 persons who were employed in the agro-industry branch in 1987, but account for only 18 per cent of workers in the manufacturing sector as a whole.

Table 5.2.3 indicates the creation of new employment was lower in the agro-industries than in the manufacturing sector.

Table 5.2.3: New employment in agro-industry and manufacturing sector, 1981-1987

	1981	1983	1985	1986	1987
New employment in manufacturing sector	24,584	26,500	30,573	34,768	54,158
New employment in agro-industry subsector	4,149	6,880	4,295	4,473	4,235
New employment in agro-industry as percentage of manufacturing	16.9	26.0	14.0	12.9	7.8

Source: Administration de l'Industrie, op.cit.

With the exception of 1983 the creation of new employment stagnated in agro-industries and this is reflected by the decrease of the share of new agro-industry employment in the total employment of the manufacturing sector from 16.9 per cent in 1981 (and 26 per cent in 1983) to 7.8 per cent in 1987.

The number of permanent employees was approximately one third less in agro-industrial enterprises than in the other manufacturing companies in 1986 and 1987 (see table 5.2.4), slowly decreasing in this period.

Table 5.2.4: Permanent employment per firm in manufacturing and agro-industries, 1986-1987

	1986	1987	Percentage change
Manufacturing sector	55.5	56.3	+ 1.4
Agro-industry	39.4	37.2	- 5.6

Source: Administration de l'Industrie, op.cit.

In terms of the total number of employees there is a much smaller difference between agro-industry and the manufacturing sector as a whole. In 1987, for example, agro-industry firms hired an average of 63.6 employees (37.2 permanent and 25.4 seasonal) per company, compared with 69.6 employees (56.3 permanent and 13.0 seasonal) per firm in the manufacturing sector. Employment of seasonal employees per firm was double that in agro-industries.



### 5.2.3 Investment in agro-industry

According to table 5.2.5 agro-industrial investments increased irregularly between 1981 and 1987 from DH 304 million to DH 649 million, the average annual investments over the period amounting to DH 706.6 million.

Table 5.2.5: Investment in agro-industry, 1981-1987  
(in millions of current dirhams)

	1981	1982	1983	1984	1985	1986	1987
Manufacturing sector	1,510	2,681	2,266	2,778	2,832	3,546	4,692
Agro-industries	304	849	949	553	672	970	649
Investment in agro-industry as percentage of manufactur- ing sector	20.1	31.7	41.9	19.9	23.7	27.4	13.8

Source: Administration de l'Industrie, op.cit.

The investments in the manufacturing sector increased substantially and regularly with an average of 21 per cent per year during the last seven years. The share of agro-industries in the global investment, however, decreased over this period.

### 5.2.4 Trends in production and value added

The agro-industries accounted for about one third of the global production of the manufacturing sector since 1981 (see table 5.2.6).

The value added of agro-industries more than tripled between 1981 and 1987 (see table 5.2.7), in spite of the decrease in 1983. The global value added of the manufacturing sector increased more slowly between 1981 and 1987 (2.4 times only). This accounts for the increase of the share of agro-industries in the global value added of the manufacturing sector, from a quarter in 1981 to over one third (35.8 per cent) in 1987.

The productivity of agro-industries (see table 5.2.8) was much higher than that of the manufacturing sector, leading to the reinforcement of the position of the agro-industries within the Moroccan economy.

The average productivity of the employee of the agro-industry subsector was 1.2 times that of the average productivity of the employee of other manufacturing industries in 1981 and 1.8 times higher in 1986 and 1987.

In 1987 the productivity of agro-industries was 166 per cent higher than in 1981 (value added per employee: 56 in 1981 and 149 in 1987), while the productivity of the manufacturing sector increased by only 77.8 per cent during the same period (45 in 1981 and 80 in 1987).

Table 5.2.6: Production in agro-industry and manufacturing sector,1981-1987

(in millions of current dirhams)

	1981	1982	1983	1984	1985	1986	1987
Production in manufacturing sector	31,994	37,051	42,057	49,467	59,930	66,908	71,541
Production in agro-industry subsector	11,685	13,311	15,513	16,918	19,492	23,076	25,368
Agro-industry production as percentage of manufacturing	36.5	35.9	36.9	34.2	32.5	34.5	35.5

Source: Administration de l'Industrie, op.cit.Table 5.2.7: Value added in agro-industry and manufacturing sector,1981-1987

(in millions of current dirhams)

	1981	1982	1983	1984	1985	1986	1987
Manufacturing sector	8,629	10,113	11,566	12,468	15,019	17,855	20,928
Agro-industry subsector	2,157	3,605	2,818	3,554	5,018	6,537	7,494
Agro-industry as per cent of manufacturing	25.0	35.6	24.4	28.5	33.4	36.6	35.8

Source: Administration de l'Industrie, op.cit.Table 5.2.8: Value added in agro-industry and manufacturing industry,1981-1987

(in thousands of current dirhams)

	1981	1982	1983	1984	1985	1986	1987
<u>Value added per employee</u>							
Manufacturing sector	45	53	56	57	67	74	80
agro-industry subsector	56	90	64	71	110	131	149

Source: Administration de l'Industrie, op.cit.

### 5.2.5 Ownership pattern

About 35 per cent of the capital of agro-industrial companies is public, compared with 47 per cent for manufacturing as a whole. Within agro-industry, the rate of public participation varies considerably, ranging from 67 per cent for flour, sugar and baked goods, to 23.3 per cent for beverages, and 15.5 per cent for canned vegetables and fish.

No separate figures are available for distribution of foreign capital in the agro-industry branch, but the UNIDO mission estimates that it is as high as it is for manufacturing industry in general, and that the general trend toward privatization also applies here.

### 5.2.6 Agro-industry exports and imports

Table 5.2.9 presents data on exports and imports in two parts, relating respectively to the manufacturing sector as a whole and to the agro-industry subsector. The table indicates that the agro-industry subsector accounts for a smaller and steadily decreasing share of the foreign trade deficit in the manufacturing sector as a whole; the agro-industry export deficit declined during the period 1981 to 1986, and in 1987 turned into an export surplus. Another way of expressing this favourable trend is that coverage of imports of agro-industries by the exports amounted to 146.4 per cent in 1987, which was more than twice as much than the coverage of the manufacturing sector as a whole, amounting to 164 per cent.

**Table 5.2.9: Manufacturing sector and agro-industries imports  
and exports, 1981-1987**  
(in millions of current dirhams)

	1981	1982	1983	1984	1985	1986	1987
<b><u>Manufacturing sector:</u></b>							
Exports	4,852	5,523	7,361	10,198	11,365	12,918	15,334
Imports	12,690	15,635	14,639	19,178	21,328	23,815	23,922
Net exports (imports)	(7,838)	(10,112)	(7,278)	(8,980)	(9,963)	(10,897)	(8,588)
<b><u>Agro-industry subsector:</u></b>							
Exports	876	999	1,179	1,498	1,956	2,337	2,930
Imports	2,331	2,200	1,780	2,451	2,720	2,626	2,001
Net exports (imports)	(1,455)	(1,201)	(601)	(953)	(764)	(289)	929

**Source:** Banque Marocaine du Commerce Extérieur.

The improvement in the balance of trade of the agro-industry subsector came about largely through the maintenance of a relatively stable level of imports, throughout a period when agro-industry exports rose at a slightly more rapid rate than the manufacturing sector as a whole. The agro-industries covered 18 per cent of the global exports and imports of the manufacturing sector in 1981. Their share in the exports of manufactured products increased slightly to 19.1 per cent in 1987, while their participation to imports decreased to 8.4 per cent.

### 5.2.7 Linkages

The linkages between agricultural production and agro-based industries is poorly developed. Some agro-industries are poorly linked with other related industries, and thus do not have a dynamic effect on them. Some of the export-oriented agro-industries, such as fish- and vegetable-canning, are linked with raw material sources and the packaging industry, while the margarine industry, for example, has practically no linkage with vegetable oils (importing up to 90 per cent of its needs).

The general problem results from the distinctly different characteristics of demand relating to goods destined for the domestic and export markets. Production for the domestic market satisfies traditional consumption needs, which provides little incentive for value-added processes or for diversification. Export-oriented products are much more likely to involve value added through industrial processes.

The output of Morocco's food industry is highly dependent on the level of consumption. For 20 years the Moroccan food industry has continually focused its activity on the same market, with habitual foreign customers purchasing the same products. The static level and type of market demand has thus had little effect on stimulating agro-industry, which in turn gives little stimulus to agricultural production.

### 5.2.8 Major problems and constraints

Major problems are related to the relatively low rate of the utilization of production capacity caused by irregular supply of raw material, non-modernization of equipment and low efficiency of the production.

There is not a sufficient linkage between agriculture and industry to give confidence to either the suppliers or purchasers of agro-industry raw materials that their respective needs will be met.

There is insufficient quality control over production processes and finished products, especially for the fats and oil, sugar and canning industries.

## 5.3 Profile of food-processing branch

### 5.3.1 General trends and structure

Within the agro-industries subsector, the food products branch is the most important. Most of Morocco's agro-industrial exports, such as canned fish, fruit and vegetables, are supplied by this branch. It also provides a wide range of basic needs goods to the domestic market. The importance of

the branch was stressed during the mission's discussions with the Ministry of Industry, the Ministry of Agriculture and other institutions. Therefore, the food-processing branch has been chosen for further study.

In 1987 the food products branch consisted of 453 firms, which employed 9 per cent of permanent employees in the manufacturing sector. The food-canning sub-branch accounted for 25.9 per cent in quantity and 59.6 per cent in value of the total exports of food products, against 19.5 per cent and 61.4 per cent respectively in 1988. Given the importance of these industries, a vegetable canning factory has been considered for study.

### 5.3.2 Food-processing branch exports and imports

**Table 5.3.1: Export and import of food products, 1987-1988**

	<u>January-September 1987</u>		<u>January-September 1988</u>		<u>Weight Value</u>	
	<u>(tonnes)</u>	<u>('000 DH)</u>	<u>(tonnes)</u>	<u>('000 DH)</u>	<u>(Percentage change)</u>	
Imports	1,956,864	2,924,873	1,419,256	2,811,087	-27.47	-3.9
Exports	708,797	4,421,076	972,701	4,874,897	37.23	10.3

Source: Banque Marocaine du Commerce Extérieur, Revue d'Informations.

The imports of food products decreased by 3.9 per cent in value and 27.5 per cent in quantity between September 1987 and September 1988 (see table 5.3.1). This decrease was due to the reduction in imports of the following products:

- cereals : reduction of 18.4 per cent, from DH 1,088 million to DH 883 million;
- tobacco : reduction of 11.1 per cent, from DH 276.1 million to DH 245.6 million.

The importation of other food products increased by approximately 7 per cent.

Exports of food products in quantity tripled during the same period and the value of exports increased by 10.3 per cent, mainly due to the increase by 8.3 per cent of the exports of fish preserves (up to DH 561.3), and the rise by 10.1 per cent of the exports of vegetable preserves (up to DH 410.8 million - see table 5.3.2).

The main trading partners of Morocco for the purchase of processed fruits and vegetables are given in table 5.3.3, according to the latest information provided by the Moroccan Bank of Foreign Trade in September 1988.

**Table 5.3.2: Food and beverage exports by groups of products, 1987-1988**

	<u>January-September 1987</u>		<u>January-September 1988</u>	
	(tonnes) ('000 DH)		(tonnes) ('000 DH)	
Citrus fruit	285,268	639,500	342,099	852,339
Canned vegetables	40,300	373,060	42,110	410,785
Fruit/vegetable juice	8,523	77,569	21,414	316,222
Fruit preserves/jam	10,572	91,326	9,472	69,497
Other fruit/vegetable products	153,437	781,724	141,546	716,549
Canned fish	34,848	518,749	36,843	561,263
Other fish products	89,427	1,575,244	79,456	1,637,182
Other food products	86,422	163,904	299,761	311,060
<b>TOTAL</b>	<b>708,797</b>	<b>4,421,076</b>	<b>972,701</b>	<b>4,874,897</b>

Source: Banque Marocaine du Commerce Extérieur.

**Table 5.3.3: Principal customers of food and beverage exports,**

Sept. 1988

	Weight (tonnes)	Value (DH millions)
<u>Citrus fruit</u>		
France	131,198 (38%)	330.2 (39%)
United Kingdom	40,798 (12%)	102.6 (12%)
Netherlands	35,870 (10%)	89.5 (11%)
Federal Republic of Germany	34,282 (10%)	80.9 (10%)
<u>Canned vegetables</u>		
France	33,636 (80%)	313.4 (76%)
United States	1,635 (4%)	23.9 (6%)
Italy	2,234 (5%)	20.5 (5%)
Federal Republic of Germany	1,434 (3%)	13.7 (3%)
<u>Fruit/vegetable juice</u>		
France	10,203 (48%)	147.6 (47%)
Federal Republic of Germany	8,972 (42%)	126.9 (40%)
Netherlands	1,960 (5%)	36.4 (11%)
United Kingdom	136 (3%)	2.6 (1%)
<u>Fruit preserves/jam</u>		
France	7,990 (84%)	57.7 (83%)
Federal Republic of Germany	550 (6%)	5.0 (7%)
Belgium/Luxembourg	267 (3%)	1.7 (2%)
Switzerland	284 (3%)	1.6 (2%)

Source: Banque Marocaine du Commerce Extérieur.

The exports of preserves and fruit juices are excessively concentrated on three to four countries of the EEC, which absorb over 90 per cent of the total trade in quantity and value. France is by far the major trade partner of Morocco.

### 5.3.3 Linkages

The food industries have well developed backward linkages with the agricultural sector, while the forward linkages with other industries, such as packaging and chemicals are yet insufficiently developed. The utilization of by-products and the wastage of the food industries in general and the preserves industries in particular, could provide new linkages with animal feed or fertilizer manufacturers.

The most important and current linkages of the food industries are shown in Figure 5.3.1.

### 5.3.4 Spatial distribution

#### (a) Vegetable and fruit canning

In 1988 the canned vegetable sector consisted of 85 industrial units, which were situated along the Atlantic coast at Larache and Agadir and at large cities in the interior of the country. The following products are manufactured:

- condiments;
- vegetables preserves;
- fruit preserves;
- frozen and deep-frozen fruits and vegetables;
- fruit and vegetable juices; and
- dried and dehydrated fruits and vegetables.

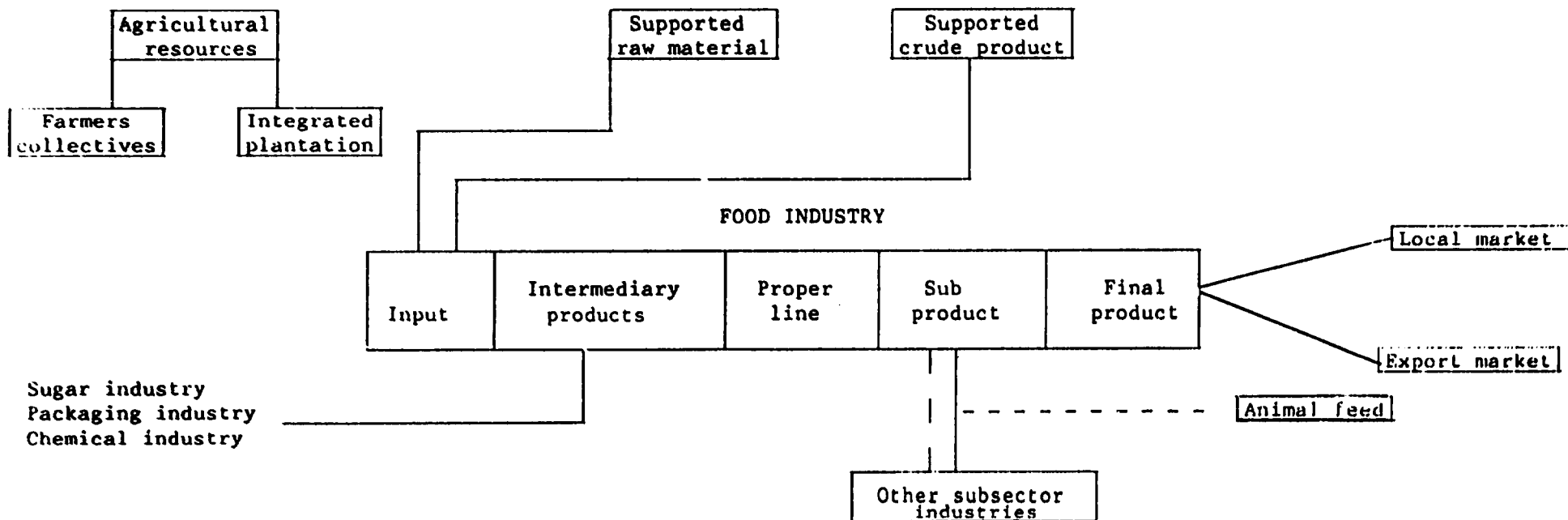
These industrial units are unequally situated across the country due to the fact that most of them are located near zones of agricultural production and/or ports of embarkation. This criteria is due to the heavy dependence on the export market for each of these types of products, except for condiments, which are also sold in volume on the domestic market.

Marrakech is the most important production centre, with 26 units (31 per cent), followed by Casablanca with 13 units (15 per cent). The provinces of Fes and Agadir each have 10 units (12 per cent). The other 26 units are spread among 11 other provinces.

The distribution of vegetable and fruit canning factories is quite different in terms of production capacity and numbers of units. With a total annual production capacity of 773,284 tonnes, the average production per enterprise is approximately 9,100 tonnes. In Casablanca, however, with a total capacity of 259,440 tons, or 33 per cent of the national total, the average capacity of each enterprise is 19,956 tonnes.

In Marrakech the capacity of canned vegetables is 134,944 tonnes, or 17 per cent of the national capacity, each enterprise having a capacity of about 5,190 tonnes.

Figure 5.3.1 Linkages of the food-processing branch



- - - - - = no linkage



Table 5.3.4: Distribution of vegetable and fruit canning factories

Province	Number of units	Products
Larache	5	Vegetables, condiments, tomatoes
Kenitra	3	Green beans, citrus fruits
Casablanca	13	Condiments, vegetables, citrus and other fruits
Mohammedia	1	Vegetables
Rabat	1	Vegetables
Agadir	10	Tomatoes, fruits, gherkins, carobs, bitter almonds
Taroudant	1	Vegetable juice, tomatoes
Fes	10	Olives, capers, fruits
Meknes	5	Olives, vegetables, fruits, gherkins
Marrakech	26	Condiments, pimientos, fruits, carobs
El Kelaa	2	Fruits, olives, pimientos
Safi	3	Fruits, vegetables
Sidi Kacem	1	Olives
Oujda	3	Vegetables, fruits, dried and dehydrated fruit
Khemisset	1	Dried prunes and raisins
<b>TOTAL</b>	<b>85</b>	

Source: Ministry of Agriculture, Report on Canned Vegetables, September 1988.

The third most important area is Larache, with 105,600 tonnes or 13 per cent of the national total. This is the most important centre in Morocco for the canning of tomatoes, with an annual capacity of 81,000 tonnes.

The many different climatic regions within the country dictate the types of product which can be grown in each particular area. Marrakech is an important centre for apricots and olives, with 75 per cent and 69 per cent of the national total, respectively. Larache cans or concentrates 58 per cent of the national production of tomatoes, while Casablanca is the most important area for vegetable concentrate and fruit juice, with 59 per cent of the national capacity.

(b) Dates

In Morocco there are only three main date-producing areas, Er-Rachidia, Ouarzazate and Tata, all characterized as fertile river valley systems within an otherwise desert area. The date-growing areas are at an altitude varying between 700 and 1,000 metres, with high summer temperatures and rainfall between 60 and 150 millimetres per year, which give good growing conditions for date-palms.

The degree to which date-palms are concentrated in these three areas is shown in the following table.

Table 5.3.5: Distribution of date-palms by province

Province	Number of palm trees	% of total
Ouarzazate	1,700,000	35.8
Er-Rachidia	1,200,000	25.3
Tata	1,222,431	25.8
Figuig	140,352	3.0
Agadir - Tiznit	147,407	3.1
Other provinces	<u>330,320</u>	<u>7.0</u>
TOTAL	4,743,510	100.0

Source: Ministry of Agriculture, Plan National du Développement du Palmier Dattier, May 1986.

The two main areas are also characterized by the different distribution of the types of dates within each area, as shown in the following table:

Table 5.3.6: Distribution of date-palms within provinces (percentage)

Date type	Er-Rachidia	Ouarzazate
Khalt [la Sair]	42.0	37.1
Bouslikhène	28.0	-
Feggous	24.0	5.2
Las Lehmer	1.5	-
Mejhoul	1.0	-
Boucerdoun	0.5	-
Belhazit	0.5	-
Jihel	-	25.3
Bousthani	-	16.3
L'Iklane	-	4.7
Bourara	-	3.8
L' Aguehid	-	2.8
Ahardane	-	2.6
Other types	<u>2.5</u>	<u>2.2</u>
	100.0	100.0

Source: Ministry of Agriculture, ibid.

This differing distribution of date types, their yields and cultivated surfaces has led to quite different production characteristics in these two main regions, which is shown in the following table:

**Table 5.3.7: Date-palm production characteristics**  
(annual average for periods indicated)

	1968/72	1973/77	1978/79	1981/85
<u>Yield (kg/tree)</u>				
Ouarzazate region	18	14	21	13
Er-Rachidia region	30	32	7	10
<u>Production (tonnes)</u>				
Ouarzazate region	36,000	27,000	40,000	24,000
Er-Rachidia region	30,000	35,000	8,000	10,000

Source: ORMVAO & ORMVAT.

In both regions, but particularly in the Er-Rachidia area, the yield per tree and also the total production level has fallen considerably over time, partly due to the age of the plantations.

Attempts have been made to establish a date-processing industry in both of the two valley systems which are noted for the production of dates. In the Ouarzazate region the company Dattes de Zagora was established in 1981, but the operation collapsed within two years, despite assistance from UNIDO during the planning stage, feasibility stage and commissioning stage of the factory. The factory has operated intermittently since that time but is currently almost at a standstill.

In the Er-Rachidia area, another date-processing factory was first established in 1977, but this factory also suffered from many technical, marketing and financial problems, which eventually caused it to close down completely in 1983. Attempts are now being made to revive this company.

In addition to these two companies, date conditioning is also done by many small farmers, located in the date-producing areas of the country, who process the dates by traditional means.

### (c) Margarine

There is only one table margarine factory in Morocco, INDUSALIM, which is located at Settat, approximately 75 kilometres east of Casablanca.

In addition, there are three manufacturing companies providing industrial margarine for the biscuit and cake industries. These companies, MARGA/Margarinerie Nouvelle located in El Gara, Casablanca, MARGA Afrique and OUBAHA, also in the Casablanca area, have a total combined production of 5,000 tonnes of industrial margarine per year.

### 5.3.5 Major problems and constraints

The most important problems and constraints are those related to supply of inputs, production methods, cost and price structure, and marketing.

(a) Inputs

The liberalization of prices on the market offers several possibilities for the sale of agricultural products to the food industry or to the free market. The strong competition in the market between the large number of buyers of raw materials has had a speculative effect on prices, and consequently on the cost of the final product.

(b) Production

Technology and process lines are not adapted for the production of high quality goods as required by international markets. In addition, the utilization rate of installed capacities does not exceed 60 per cent, largely due to the seasonal availability of most fruit and vegetable inputs.

(c) Cost and price structure

Food industries do not generally provide high value-added finished products and the production costs are generally too high mainly because of the high price of raw materials and packaging materials. The high level of production costs adversely affect the competitiveness of Moroccan products on the export market.

(d) Markets

The local consumption of preserves is very limited because fresh products are cheaper and preferred; the canning industry is therefore highly dependent on the export demand. Exports are determined by the demand of a very limited number of European Community countries (three or four), which prefer to buy the same traditional type of Moroccan products. Export markets as well as the export products are therefore insufficiently diversified.

## CHAPTER 6

### OBSERVATIONS AND RECOMMENDATIONS REGARDING COMPANIES

The mission examined three plants in detail in order to specify the rehabilitation needs at the plant level. These were:

- a pimiento powder and canned vegetables factory;
- a dates processing plant;
- a margarine factory.

Two of the firms are privately-owned and one is a semi-public company. These plants are located in Larache, Er-Rachidia and Settat. They were selected from a list of at least 10 firms presented by the Moroccan authorities.

In making the choice of the plants, the mission consulted with the Ministry of Commerce and Industry, the Casablanca Chamber of Commerce, National Economic Development Bank (BNDE), Ministries of Agriculture, Fisheries and Merchant Shipping, and Planning, as well as ODI. Representatives of several financial institutions (e.g. BMCE, CNCA) as well as of main bilateral co-operation partners (e.g. UNDP, USAID, EC) were also consulted.

The following general observations and recommendations are made with respect to finance, management and organization, marketing, physical plant, and inputs.

#### 6.1 Finance

##### General observations

All the plants visited faced financial problems due to debt accumulation. This was either a result of the plants' inefficient collection of customer debts or their heavy dependence on long term debts. It was also observed that realistic depreciation rates were not applied by some plants. Thus, this overvalued the capital assets of the plants. These factors contributed to the financial losses of some plants in recent years.

##### Recommendations

Improvements in the system and efficiency of collecting outstanding debts are necessary to increase the sales revenues of the plants and to reduce the amount of customers debts. Stricter financial management, and in some cases restructuring, is recommended to reduce the indebtedness of the plants.

## 6.2 Management, organization and marketing

### General observations

A general weakness in the management and organization of all the companies visited is very evident. The plants have a very limited number of management personnel. Not all have managers to handle sales, purchasing and finance and so the General Manager had to perform all the duties of middle management. It was also observed that computerizing administrative, purchasing, sales and personnel operations can contribute significantly to the improvement of management and organization.

The marketing performance of the plants is hindered by factors such as a saturated domestic market, overdependence on a few export markets and over reliance on a few highly seasonal products. In some cases, the plants are faced with marketing problems like buyers resistance and inadequate consumer knowledge of the marketed product which contributed to poor sales. This situation had driven all the plants to seek ways of expanding both their export and domestic markets.

### Recommendations

It is recommended that managerial vacancies be filled by highly skilled managers and a computer system be set up to improve the management and organization of all companies. Special emphasis should be given to the hiring of middle managers to handle sales, purchasing and finance.

With regard to marketing, all the plants could consider expanding exports to the Maghreb region. It is recommended that a market survey of the Maghreb region be undertaken by all the plants. On this basis, an effective marketing strategy can be designed. Marketing efforts of the plants investigated should also be strengthened to enable the plants to succeed in both export and domestic markets. Product diversification should be seriously considered by some companies to reduce the heavy dependence on one seasonal product. The distribution system should also be improved to ensure that there is better market access.

## 6.3 Physical plant

### General observations

Overall, the plants have good-running machineries and equipment, although some are very old. Maintenance and repair is not a problem because of the availability of spare parts and service from equipment suppliers, except for one plant, which had difficulties purchasing spare parts due to lack of working capital. Thus, very few technical problems exist with regard to the physical plant. The concern at the plant level centers more on the need to improve efficiency and quality. The products were of low quality because they lack consistency and the raw material inputs used were not properly prepared, that is, they were not thoroughly washed or cleaned. Product quality was therefore partly affected by poor hygiene control. Poor packaging, especially of products for the export market, was also a major constraint to effective marketing.

In terms of transport equipment, the plants requiring refrigerated trucks had no trucks which is vital to enable the plants to distribute their products more widely and to ensure that the quality of the products are maintained when they reach the market.

### Recommendations

It is recommended that product quality and packaging should be improved to match at least the quality of existing competing products and to increase the overall competitiveness of the plants. This can be done mainly by improving hygiene control through the installation of better washing facilities and installing additional instrumentation to control temperature and humidity. Quality can also be improved with the installation of an equipment such as an automatic weighing and proportioning machine, to ensure consistency in the preparation of raw material inputs. Redesigning the packaging of products, especially those for exports, is essential to enable the plants to expand sales in both domestic and export markets. However, the plants are not generally in a position to invest capital for such improvements. Thus, technical assistance should be provided to improve plant productivity, efficiency, quality control procedures and packaging. Refrigerated trucks should be purchased by the companies requiring them in order to improve their distribution capacity.

## 6.4 Inputs

### General observations:

It was observed that the irregularity of input supply was among the major factors contributing to the low capacity utilization of the plants. The poor quality of inputs was also a common problem among the plants visited and this has contributed to the poor quality of product output.

### Recommendations:

Alternative schemes should be drawn up to encourage suppliers to provide high quality inputs more regularly. Such schemes may include changes in the methods of buying or in the purchasing policy of the companies with the aim of making the return more attractive to suppliers. This will also contribute to better security in terms of input supply. Diversifying the sources of supply is likewise an alternative. To improve the quality of inputs, prices could be differentiated on the basis of the quality of the input. This will give suppliers an incentive to provide only high grade inputs.

## 6.5 Cost and price structure

### General observations

Very little can be said about the cost and price structures of two of the plants surveyed because of insufficient information and the ongoing financial restructuring when the mission visited the plant. In the case of the third plant, the price of its product is well structured and the high cost of packaging significantly affects the cost of production and the sales price of the product. Suggestions for improvements are unnecessary.

## CHAPTER 7

### GENERAL OBSERVATIONS AND RECOMMENDATIONS

#### 7.1 General observations and recommendations

The general environment for industrial development in Morocco is much better than in many other developing countries. Major elements contributing to this supportive environment are recent improvement in macro-economic and industrial policies, domestic finance looking for investment opportunities, rapid improvements in physical infrastructure, and the assistance provided to the agricultural sector (i.e. irrigation networks and crop improvements) which again helps to improve the raw material base for agro-industries.

Moreover, Morocco's political and economic position in the Maghreb region and vis-à-vis the EC is strong. The price of petroleum, a major import, has not been prohibitive, while the price of Morocco's most important single export product group, phosphate and phosphate derivatives, has increased. This has helped to improve the trade balance, while tourism and remittances from Moroccans working overseas have had a very favourable impact on the balance of payments.

The overall situation and trends in the economy show many parallels to those in Newly Industrializing Countries (NICs). With regard to the manufacturing sector, the similarities between Morocco and NICs are brought out by the fact that industrial modernization and restructuring have become central issues. The country has recognized that industrial development is a key to overall economic growth, and it has made considerable progress in manufacturing. However, a number of obstacles are still to be surmounted. Domestic banks and private investors do not yet show sufficient appreciation for the future importance of industry, and prefer to invest in economic activities with the fastest possible returns, such as trade. The increased availability of long- and medium-term investment for industry will be essential for the further expansion of the sector. Other important issues to be addressed are:

- training of employees, especially middle-level technicians, accountants and managers;
- better recruitment procedures and adequate pay for middle-level managers to fill the many vacancies at this level with capable graduates;
- improvement of work efficiency, with emphasis on performance-related pay;
- a reduction of the very tight family control over private business. Family control has been the starting point for financial accumulation in Morocco through the very strong networks it created; however, it has become a handicap as it has also been the cause of nepotism, risk aversion and isolation - among firms and from other economic activities.

#### Recommendations

The environment in which plants operate in Morocco has been much improved in recent years. The new investment code, the restructuring of the public sector, the increased role of the private sector, the development of a



new tax system, the balancing of the budget, the increased support for small enterprises, the liberalization of the trade regime and so on, are all concrete signs of the Government's commitment to reforms which have put Morocco firmly back on the path to economic recovery. The mission fully supports the Government's efforts in this regard and feels it unnecessary to give detailed suggestions for policy changes. Instead, the mission strongly recommends that ongoing economic reforms be intensified. A number of specific problems have been identified by the mission, however, and the following recommendations are made to help solve these problems:

1. The standardization and quality control of exports must be enforced;
2. In-house quality control should also systematically take place;
3. The quality of water for agro-industrial purposes needs to be improved (better supply by local or regional Water Boards, treatment and recycling of water used in food processing);
4. Quality control can be improved by investing in appropriate equipment and attracting qualified technicians with good salaries. Generally speaking, wages are too low to be an incentive for good work, especially for skilled workers and middle-level personnel;
5. A review of the existing regulations for subsidizing and protecting the domestic consumption of imported butter against the locally produced margarine should be undertaken;
6. The issue of utilizing waste products should be addressed more systematically. Often, agro-industrial waste products can be transformed into animal food, compost or biogas.
7. The very tight family control over private business has helped to lay the foundation of Morocco's present strong economy. The same structure, however, is too static for modern business, because of such characteristics as risk-avoidance, nepotism and an unwillingness to enter into joint ventures with other, especially foreign, businesses. Greater openness will help future growth of the manufacturing sector.
8. Strong efforts should be made to improve the training facilities for middle-level management. One of the most pressing problems at this level is the shortage of personnel capable of making cost and price analyses and controlling production costs. Training in the use of personal computers could help to solve this problem.

## 7.2 Food-processing branch

### Observations

The mission found that the food-processing branch, in spite of a positive overall trend towards further development, is still suffering from several shortcomings. These mainly concern inputs and the quality of middle-level management and production supervisors.

Although the food-processing branch already has strong links with agriculture, the quality, quantity, price and seasonality of agricultural raw materials often prevent individual firms from attaining full capacity utilization and delivering a first-rate product at a competitive price. To a large extent, this is due to the lack of co-operation among farmers and manufacturing firms. But the present state of Moroccan agriculture, which is still largely a very traditional sector, presents obstacles as well. In the long-term, the relative lack of technological sophistication in the food-processing branch will also be an obstacle to further expansion of the production and to the competitiveness of Moroccan products, as it will not allow the firms to make the most of the inputs available from local sources.

Technologically more sophisticated plants can function well only if skilled employees are already available. In the short-term, today's relatively unsophisticated plants would need better skilled middle-level employees in particular to enhance the quality of production. In this connection, the insufficient availability of well-trained middle management and production supervisors is an issue that must be addressed soon.

#### Recommendations

- Firms in the fruit and vegetable-processing industries should improve their system of obtaining local supplies of raw material inputs, taking account of the different harvesting seasons, the different cultures and the differences in prices in the provinces, in order to assure themselves of a continuity of production and reduce the costs of production;
- Efforts should be made in improving contractual relationships between farmers and food-processing industries;
- Food-processing industries could help to increase the performance of the agricultural sector by offering farmers logistical and technological support as part of a supply agreement. Initiating and supervising such support schemes could possibly be entrusted to a special unit to be created by the Federation of Agricultural Products Canning in Morocco (FICOPAM). Important issues that come to mind in this context are the identification and introduction of better crop varieties and the improvement of traditional harvesting and stockage methods on farms.
- Middle-level production management and production supervisors should receive instruction in factory hygiene and quality standards. They should, in turn, pass on their knowledge to production workers. The supervisors who specifically deal with seasonal workers have a special responsibility in this case, as seasonal workers are less acquainted with day-to-day production routines and requirements.

## CHAPTER 8

### SUMMARY OF PROJECT CONCEPTS

#### 8.1 General

- Assistance to the BNDE to increase its capacity to analyse projects
- Study of possible methods to improve the training of middle-level management
- Investigation of the improvement of quality control methods at the plant level (possible extension of UNIDO project DP/MOR/86/015 - see Appendix)

#### 8.2 Branch level

- Branch-level study of ways to improve raw material supplies to food-processing industries
- Instruction in factory hygiene and quality standards

## Annex 1: Tables

Table A.1: Balance of payments, 1986-1987  
(in millions of dirhams)

	1986			1987*		
	Credit	Debit	Net	Credit	Debit	Net
<b>A. Goods and services</b>	33,056.3	49,121.9	-16,065.6	35,525.6	48,823.8	-13,298.2
1. Merchandise fob	21,946.0	31,654.9	-9,708.9	23,250.7	32,184.0	-8,933.3
2. Shipping freight and insurance	1,599.2	3,134.3	-1,535.1	1,582.9	3,194.9	-1,612.0
3. Other transport	595.4	291.1	+304.3	559.7	364.7	+195.0
4. Travel	6,730.0	910.0	+5,820.0	7,800.0	1,100.0	+6,700.0
5. Investment income	136.4	6,405.1	-6,268.7	130.1	6,505.4	-6,375.3
6. Government transactions not included elsewhere	713.9	6,048.9	-5,335.0	712.6	4,594.5	-3,881.9
7. Other services	1,335.4	677.6	+657.8	1,489.6	880.3	+609.3
<b>B. Transfer payments</b>	14,584.0	480.7	+14,103.3	15,244.4	542.1	+14,702.3
8. Private	13,742.9	194.7	+13,548.2	14,361.9	227.3	+14,134.6
9. Public	841.1	286.0	+555.1	882.5	314.8	+567.7
Current account (A+B)	47,640.3	49,602.6	-1,962.3	50,770.0	49,365.9	+1,404.1
<b>C. Non-monetary capital</b>	11,687.8	6,386.5	+5,301.3	8,234.5	7,231.6	+1,002.9
Private	2,346.9	838.0	+1,508.9	941.2	1,585.1	-643.9
10. Commercial credits	1,217.3	-	+1,217.3	-	988.6	-988.6
11. Loans and investment	944.3	838.0	+106.3	941.2	467.2	+474.0
12. Others	185.3	-	+185.3	-	129.3	+129.3
Public	9,340.9	5,548.5	+3,792.4	7,293.3	5,646.5	+1,646.8
13. Commercial credits	3,707.6	2,769.1	+938.5	2,448.6	2,244.5	+204.3
14. Foreign currency loans	5,599.5	2,676.4	+2,923.1	4,810.1	3,269.8	+1,540.3
15. Dirham loans	-	62.1	-62.1	-	41.2	-41.2
16. Others	33.8	33.5	+0.3	34.6	36.9	-2.3
17. Foreign liabilities	-	7.4	-7.4	-	54.3	-54.3
<b>D. IMF facilities</b>	319.4	2,916.6	-2,597.2	1,734.2	2,639.2	-905.0
<b>Total</b>	59,647.5	58,905.7	+741.8	60,738.7	59,236.7	+1,502.0

Source: Office des Changes.

**Table A.2: 1986 and 1987 value (cif) of imports**  
(in millions of dirhams)

	1986		1987 <sup>a/</sup>	
	Value	Per cent	Value	Per cent
Foodstuffs and beverages	4,329	12.5	3,980	11.3
Energy and lubricants	5,429	15.7	6,170	17.5
Crude oil	4,587	13.3	5,332	15.1
Raw materials	5,605	16.2	5,454	15.3
Animal and vegetable	2,789	8.1	2,750	7.8
Mineral	2,816	8.1	2,704	7.7
Semi-finished products	7,527	21.7	8,194	23.2
Finished products	11,718	33.9	11,473	32.5
Capital goods	8,248	23.8	7,363	20.9
Agricultural equipment	628	1.8	494	1.4
Industrial equipment	7,620	22.0	6,869	19.5
Consumer goods	3,470	10.1	4,110	11.6
<b>TOTAL</b>	<b>34,608</b>	<b>100.0</b>	<b>35,271</b>	<b>100.0</b>

Source: Office des Changes

<sup>a/</sup> Preliminary.

**Table A.3: 1986 and 1987 value (fob) of imports**  
(in millions of dirhams)

	1986		1987 <sup>a/</sup>	
	Value	Per cent	Value	Per cent
Foodstuffs and beverages	6,526	29.5	6,346	27.1
Energy and lubricants	564	2.6	642	2.7
Raw materials	5,113	23.1	4,606	19.7
Animal and vegetable	689	3.1	823	3.5
Mineral	4,424	20.0	3,783	16.2
Semi-finished products	4,969	22.5	5,602	24.0
Finished products	4,932	22.3	6,194	26.5
Capital goods	416	1.9	297	1.3
Consumer goods	4,516	20.4	5,897	25.2
<b>TOTAL</b>	<b>22,104</b>	<b>100.0</b>	<b>23,390</b>	<b>100.0</b>

Source: Office des Changes.

<sup>a/</sup> Preliminary.

## ANNEX 2

UNIDO's Approved and/or Operational Technical Co-operation ProjectsKingdom of MOROCCO

<u>Project Number</u>	<u>Backstopping Responsibility</u>	<u>All.Acc.Code</u>	<u>Project Title</u>
DP/MOR/85/015*	IO/IIS/INFR Mr. Goubet	J12102	Assistance dans le domaine de la normalisation, le contrôle de la qualité et la métrologie
US/MOR/87/173*	IO/IIS/INFR Mr. Nickels	J12103	Développement de la coopération industrielle entre le Royaume du Maroc et la République Fédérale d'Allemagne dans le domaine des petites et moyennes industries électro-mécanique basée sur l'emploi de la méthode ACT (Analyse de la Complexité Technologique)
DP/MOR/87/017	IO/IIS/INFR Mr. de Crombrughe	J12104	Assistance à l'établissement d'une bourse de sous-traitance et du partenariat dans les Industries Métallurgiques Mécaniques Electriques et Electroniques (IMEE) (related to DP/RAB/86/001)
US/MOR/88/248*	IO/T/AGRO Mr. Galat	J13103	Redéploiement et modernisation du secteur des industries de transformation de poisson
XA/MOR/88/664	IO/SD/TRNG Mr. El Gallaf	J14203	Programme de formation à la maintenance entretien et réparation industrielle y compris méthodes et techniques de formation

\* Large-scale project (= total allotment \$150,000 or above)

\*\* Total allotment \$1 million or above

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