



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

15484

Distr.
LIMITED
UNIDO/IS.615
6 March 1986
ENGLISH

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

**INDUSTRIAL DEVELOPMENT REVIEW
SERIES**

CUBA

Prepared by the
Regional and Country Studies Branch
Division for Industrial Studies

This document has been reproduced without formal editing.

The designations employed and the presentation of material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area of its authorities, or concerning the delimitation of its frontiers or boundaries.

Mention of company names and commercial products does not imply the endorsement of the United Nations Industrial Development Organization (UNIDO).

The views and comments contained in this study do not necessarily reflect those of the Government of the Republic of Cuba nor do they officially commit UNIDO to any particular course of action.

**INDUSTRIAL DEVELOPMENT REVIEW
SERIES**

CUBA

Preface

This series of industrial development reviews on developing countries is prepared within the framework of UNIDO country studies by the Regional and Country Studies Branch of the Division for Industrial Studies.

The reviews provide a survey and brief analyses of the respective country's industrial sector, as an information service to relevant sections within UNIDO and other international agencies as well as aid agencies in developed countries concerned with technical assistance to industry. It is expected that the reviews will prove a handy, useful information source also for policy-makers in the developing countries as well as for industrial entrepreneurs, financiers and economic researchers.

The reviews draw primarily on information provided by the UNIDO data base and material available at UNIDO headquarters from national and international statistical publications. Since up-to-date national statistical data usually are not complete, it is evident that the reviews will need to be updated and supplemented periodically. To supplement efforts underway in UNIDO to improve the data base and to monitor industrial progress and changes on a regular basis, it is hoped that the appropriate national authorities and institutions in the respective countries and other readers will provide UNIDO with relevant comments, suggestions and information. Such response will greatly assist UNIDO in updating the reviews.

The present Review was prepared on the basis of information available at UNIDO headquarters in September 1985. It is divided into two rather distinct parts. Chapters 1 and 2 are analytical in character, giving first a brief overview of the country's economy and its manufacturing sector and then a more detailed review of the structure and development of its manufacturing industries. Chapters 3 and 4 contain various kinds of reference material on national plans and policy statements relevant to industrial development, on the more important governmental and other institutions involved in industrial development and on the country's natural, human and financial resources for industrial development. The Review also contains relevant basic indicators

and graphical presentations of manufacturing trends as well as statistical and other appendices.

It should be noted that the reviews are not official statements of intention or policy by Governments nor do they represent a comprehensive and in-depth assessment of the industrial development process in the countries concerned.

CONTENTS

	<u>Page</u>
Basic indicators	vi
Executive summary	xi
Resumen	xiii
1. THE ECONOMY OF CUBA	1
1.1 Recent economic trends	1
1.2 Economic structure	3
1.3 Overview of the manufacturing sector	5
2. STRUCTURE AND PERFORMANCE OF THE MANUFACTURING SECTOR	13
2.1 Growth and structural change	13
2.2 Performance and efficiency	17
2.3 Exports and imports of manufactures	20
2.4 Ownership and investment patterns	24
2.5 Geographical distribution of manufacturing enterprises	25
3. INDUSTRIAL DEVELOPMENT STRATEGIES, POLICIES, PLANS AND INSTITUTIONS	28
3.1 Aims of industrial policy	28
3.2 Recent changes in industrial policy	30
3.3 Institutional framework for industry	32
4. RESOURCES FOR INDUSTRIAL DEVELOPMENT	33
4.1 Human resources	33
4.2 Agricultural resources	33
4.3 Mineral resources	38
4.4 Energy resources	39
4.5 Financial resources and technical assistance to industry	40
Appendix A. Statistical tables	43
Appendix B. The approved and/or operational technical cooperation projects of UNIDO	51
Selected References	52

LIST OF TABLES

	<u>Page</u>
Table 1. Sectoral origin of GSP, 1965-1983 (selected years)	4
Table 2. Composition of manufacturing value added, 1973-1982	15
Table 3. Manufacturing output, 1982-1984	16
Table 4. Industrial output, selected products, 1965-1984 (selected years)	17
Table 5. Growth rates of MVA, employment and labour productivity by branch of manufacturing, 1973-1981	19
Table 6. Destination of sugar exports by country and region, 1983 and 1984	21
Table 7. Convertible currency exports, 1983, 1984 and 1985	22
Table 8. Manufactured imports, selected products, 1970-1984	23
Table 9. Agricultural and food production indices, 1977-1984	34
Table 10. Indicators of agricultural production, 1970-1982	36
Table 11. Fish catch, 1977-1984	37
Table 12. Energy production, 1977-1982	39

List of Tables in Appendix A

Table A-1	Material product index, 1979-1982	44
Table A-2	Production of raw sugar and sugar cane (milled), 1960-1984	45
Table A-3	Exports of goods by main countries and country groupings, 1979-1982	46
Table A-4	Imports of goods by main countries and country groupings, 1979-1982	47
Table A-5	Number of students in secondary and higher educational establishments, 1970-1982 (selected years)	48
Table A-6	Graduates by field of study, 1980	49
Table A-7	Indicators of external indebtedness, 1979-1982	50

EXPLANATORY NOTES

Dates divided by a slash (1970/71) indicate a crop year or a financial year. Dates divided by a hyphen (1970-71) indicate the full period, including the beginning and end years.

References to dollars (\$) are to United States dollars, unless otherwise stated.

In tables:

Three dots (...) indicate that data are not available or are not separately reported;

A dash (-) indicates that the amount is nil or negligible;

A blank indicates that the item is not applicable;

One dot (.) indicates that there is insufficient data from which to calculate the figure.

Totals may not add precisely because of rounding.

Basic indicators and graphical illustrations of manufacturing trends contained in this Review are based on data sourced from the UNIDO data base, international organizations and commercial sources.

The following abbreviations are used in this document:

b/d	barrels per day
CMEA	Council for Mutual Economic Assistance
ECLAC	Economic Commission for Latin America and the Caribbean
EEC	European Economic Community
GDP	Gross domestic product
GSP	Gross social product
ISIC	International Standard Industrial Classification
MVA	Manufacturing value added
SITC	Standard International Trade Classification

BASIC INDICATORS 1
The economy

GSP: \$30 billion (1983)
 Population: 10 million (1984)
 Labour force: 6.3 million (1983)
 GSP per capita: \$3,520 (1983)

Annual average growth rate of GSP (per cent):	<u>1971-75</u>	<u>1976-80</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
	10.0	4.0	14.8	2.7	5.2	7.0

<u>1985^{a/}</u>	<u>1981-85^{b/}</u>
5.6	7.3

<u>GSP by sector of origin:</u> (per cent)	<u>1965</u>	<u>1983</u>	<u>1984</u>
Agriculture	15.7	13.8	13.9
Industry	43.0	43.4	43.4
Construction	7.6	8.1	8.8
Other productive material activities	33.7	34.7	33.9

Currency exchange rate: (Peso equivalents to \$1)	<u>January - June 1983</u>	<u>June - December 1984</u>	<u>January - September 1985</u>	<u>November 1985</u>
	0.86	0.87	0.92	0.93

a/ January-September.

b/ Provisional.

BASIC INDICATORS 2
Resources and transport infrastructure

Resources

Cash crops (leading products by value):	sugarcane, citrus fruits, tobacco, coffee, rice
Livestock (total number in millions):	5.1 mn cattle, 8.7 mn pigs, 3.75 mn sheep, 0.8 mn horses, 25.7 mn poultry (1983)
Fisheries (total catch):	199.4 thousand tons (1984)
Forestry:	Lumber output, 2.6 mn cu. m. Logs output, 83.4 thousand cu. m. (1983)
Mining:	('000 tons) nickel and cobalt 33.2, copper concentrate 2.7, crude petroleum 770.4, natural gas, chromium, salt, silica and sand (1984)
Energy production:	Electric power 12,291.3 million kw. (1984)

Transport

Roads:	34,000 km (1984)
Railway:	14,834 km including a narrow gauge network (1984)
Shipping:	96 vessels (1983)
Ports:	Havana, Cienfuegos
Airports:	La Habana, Santiago de Cuba, Camagüey

BASIC INDICATORS 3
Foreign trade and balance of payments

In 1984

Exports:	total value:	5,462.1 mn pesos
	main goods:	sugar, minerals (nickel), citrus fruit, tobacco, fish products
	main destinations:	USSR, GDR, People's Republic of China and Bulgaria
Imports:	total value:	7,207.2 mn pesos
	main goods:	machinery and transport equipment, fuels, manufactures, chemicals, raw materials
	main origins:	USSR, GDR, People's Republic of China and Japan
Balance of payments		
	(current account deficit):	1.745.1 mn pesos
Gross reserves (Sept. 1985):		394.9 mn pesos
Foreign Debt:		
	(total):	3,032.5 mn pesos
	percentage of GSP:	15 per cent
Debt service (1982):		
	percentage of GSP:	4.5 per cent
	percentage of total exports:	64.7 per cent

BASIC INDICATORS 4
The manufacturing sector

Manufacturing value added:	\$2.3 billion (1982)
MVA per capita:	\$210 (1982)
Employment in manufacturing:	551,800 persons (1982)
As percentage of total labour force:	8.8 per cent

Annual growth rate of MVA (per cent):	^{a/} <u>1971-75</u> 9.7	<u>1976-80</u> 1.8	<u>1981</u> 10.0	<u>1982</u> -1	<u>1983</u> 4.7	<u>1984</u> 7.2
Sectoral Composition of MVA (per cent)		<u>1973</u>		<u>1982</u>		
Mainly consumer goods:		62.7		63.1		
Mainly intermediate goods:		31.4		23.5		
Mainly durable and capital goods:		5.9		13.4		

b/ c/

Trade in manufactures	
Total value - Exports:	71.8 mn pesos (1983)
- Imports:	2,779 mn pesos (1983)

Share of manufactures (1983)	
in total exports:	1.3 per cent
in total imports:	44.7 per cent

a/ Estimated.

b/ SITC 5-8, less 67-68.

c/ Estimated.

BASIC INDICATORS 5
Inter-country comparison of selected indicators

	Unit	Cuba	Trinidad and Tobago	Dominican Republic	Haiti	Jamaica
I. Demographic indicators						
Population (1983)	million	9.88	1.1	6.0	5.0	2.0
Population growth (1973-83)	per cent per annum	0.8	0.6	2.4	1.8	1.3
Infant mortality (1983)	per 1000	20	28	63	107	28
Life expectancy (1983)	years	72	68	63	54	70
Area	'000 km ²	115.0	5.0	49.0	28.0	11.0
Density (1983)	persons/km ²	86	220	122	93	182
II. Economic indicators						
GDP (1983)	\$ million	26,158 ^{a/}	8,620	8,530	1,630	3,140
GDP per capita (1983)	\$	3,320	7,836	1,422	326	1,570
GDP growth (1973-83)	per cent per annum	6.5	5.2	4.4	3.0	-1.7
Agriculture (1983)	per cent of GDP	13.8 ^{b/}	...	17.0	...	7.0
Industry (1983)	per cent of GDP	43.4 ^{b/}	...	29.0	...	34.0
Services (1983)	per cent of GDP	34.7 ^{c/}	...	55.0	...	60.0
Exports of goods (1983)	per cent of GDP	20.7 ^{d/}	36.0	15.0	27.0	40.0
Gross domestic investment (1983)	per cent of GDP	14.1 ^{b/}	34.0	22.0	16.0	22.0
External public debt (1983)	per cent of GNP	15.0 ^{d/}	10.7	26.7	26.8	65.2
III. Industrial indicators						
NVA (1982)	million \$ at constant 1975 prices	2,060	424	1,005	...	284
Share of NVA in GDP (1982)	per cent	8.5	5.0	13.9	...	8.9
Growth of NVA (1973-82)	average annual per cent	3.2	-0.2	4.7	7.8	-4.8
Growth of Gross industrial output (1973-83)	average annual growth rate (per cent)	7.7	...	3.9	5.3	-4.3
Share of manufactured exports ^{e/} in total exports (1982)	per cent	1.3 ^{f/}	11.0	16.0	...	58.0

a/ GSP (1981).

b/ per cent of GSP (1983).

c/ Other productive material activities as per cent of GSP (1983).

d/ per cent of GSP (1984).

e/ SITC 5-8 less (67 + 68).

f/ (1983).

Executive Summary

The Cuban economy remains heavily reliant on a single commodity. With sugar accounting for 80 per cent of export earnings and 25 per cent of GNP, the pace of economic growth has been indicative of the volume of sugar harvest, and of sugar prices on the world market. GSP grew at an annual average rate of 10 per cent during 1971-75. Having suffered deceleration in economic growth in the second half of the 1970s, the economy registered a record growth rate of 14.8 per cent in 1981. Towards the end of the Second Five-year Plan (1981-85) GSP grew at 7.0 per cent in 1984 and 5.6 per cent in 1985, which surpassed the Plan target of 5 per cent. The document on the Third Five-year Plan (1986-90) envisages a realistic annual growth rate of 5 per cent during the Plan period to make the Plan target compatible with the country's energy-saving drive and new restrictions on imports.

Until at least 1990, most of Cuba's sugar will be exported to the USSR under an arrangement providing price support during periods of low world market prices. Fluctuations in production have led to re-exports of cheap sugar bought on the world market to meet export commitments. Re-exports of oil also take place, guaranteeing a major flow of foreign exchange. Cuba thus earned about \$540 million in 1985.

The search is now for diversifying the Cuban economy and for finding other sources of export earnings. Nickel is emerging as a promising industry. The industry has a significant growth potential and could become an important source of foreign exchange earnings in the future. The fishing industry has received much attention in recent years. It shows great promise of making a major contribution to the domestic economy and balance of payment position. Priority has also been accorded to the citrus industry which promises to be an increasingly large foreign exchange earner. These emerging industries attempt to invigorate the process of economic diversification.

In 1984 the non-sugar industrial branches recorded 8.2 per cent increase over the preceding year, compared with 3.1 per cent registered by the sugar

industry. The industrial sector as one of the sources of growth accounted for over 52.8 per cent of overall economic growth achieved in 1984, and 90 per cent of the increase stemmed from the non-sugar industrial branches. Consumer goods accounted for 63.1 per cent in total MVA in 1982. The share of durable and capital goods in MVA increased rapidly and that of intermediate goods declined markedly. This trend suggests that priority has been accorded to industrial activities linked to the satisfaction of basic needs and to the policy aiming at substituting the domestic capital goods for imports.

The share of manufactured imports (using the narrow definition of trade in manufactured goods, i.e., SITC 5-8 less 67 and 68) declined from 58.9 per cent in 1970 to 44.7 per cent in 1983. It shows the impact of import restrictions and progress achieved in import substitution. Manufactured exports (SITC 5-8 less 67 and 68) accounted for 1.3 per cent in 1983. The USSR and other CMEA countries are the leading trade partners. In an attempt to diversify the export structure, Cuba solicits trade expansion with the market economies. In 1985 Cuba signed a series of bilateral trade agreements in pursuit of expanding her exports through increased trade links.

The newly released draft of Cuba's Third Five-year Plan (1986-1990) attaches importance to the introduction of incentives with renewed emphasis on modernization and diversification. The 20-page report released in mid-November 1985 stresses the need to earn more hard currency, cut imports, and improve efficiency. Economic incentives seem to become a genuine lever in the next five years. Tighter accounting procedures are expected to be introduced for public sector enterprises. The new economic strategy outlines measures to ensure that sugar, nickel and citrus industries, Cuba's big three hard currency earners, receive absolute priority in investments.

Resumen

La economía cubana continúa dependiendo de un solo producto. Como el azúcar provee 80 por ciento de los ingresos por exportaciones y 25 por ciento del PNB, el ritmo de crecimiento económico ha sido indicativo del volumen de la producción de azúcar y su precio en el mercado mundial. El PBS creció con una tasa promedio anual del 10 por ciento durante 1971-75. Después de tener una reducida tasa de crecimiento el segundo quinquenio de los años 1970, la economía alcanzó el crecimiento récord de 14,8 por ciento en 1981. Hacia el final del Segundo Plan Quinquenal 1981-85, el PBS creció un 7,0 por ciento en 1984 y 5,6 por ciento en 1985, tasas que sobrepasaron el objetivo del Plan de crecer al 5 por ciento. El Tercer Plan Quinquenal 1986-90 propone una tasa de crecimiento anual del 5 por ciento durante el quinquenio, a fin de compatibilizar el objetivo del Plan con las medidas reductoras del consumo de energía y las nuevas restricciones a las importaciones.

Hasta por lo menos 1990, la mayoría del azúcar cubano será exportada a Rusia dentro de un convenio de apoyo de precios, durante períodos de bajos precios mundiales. Fluctuaciones en la producción azucarera llevaron a la compra de azúcar barata en el mercado mundial, a fin de re-exportarla para cumplir con los compromisos previos de exportación. Asimismo, las re-exportaciones de petróleo se constituyeron en un flujo importante de divisas. De esta forma, Cuba obtuvo ganancias de alrededor de 540 millones de dólares en 1985.

Actualmente, los esfuerzos se concentran en diversificar la economía cubana y en encontrar otras fuentes de ingreso por exportaciones. El níquel se perfila como una industria promisoría. Esta industria tiene buenas perspectivas de crecimiento y podría constituirse en una fuente importante de ingreso de divisas en el futuro. La industria pesquera ha sido objeto de mucha atención en años recientes, ya que se ha convertido en una gran promesa capaz de aportar una contribución importante a la economía y a la situación de la balanza de de pagos. Prioridad ha sido dada a la industria de cítricos, la cual promete convertirse en una fuente importante de generación de divisas. Estas industrias nacientes podrían vigorizar el proceso de diversificación económica.

En 1984, las ramas industriales no azucareras crecieron un 8,2 por ciento sobre el año anterior, mientras que la industria azucarera creció un 3,1 por ciento.

El sector industrial contribuyó en un 52,8 por ciento al crecimiento total de la economía en 1984, del cual las ramas no azucareras aportaron 90 por ciento del crecimiento industrial. Los bienes de consumo representaron el 63,1 por ciento del valor agregado industrial en 1982. La participación de los bienes durables y los bienes de capital en el valor agregado industrial creció rápidamente, mientras que la participación de los bienes intermedios tuvo una marcada declinación. Esta tendencia indica que la prioridad fue dada a ramas industriales ligadas a la satisfacción de las necesidades básicas de la población, y a la sustitución de las importaciones de bienes de capital.

Las importaciones de manufacturas (usando la definición restringida de comercio en manufacturas, CUCI 5-8 menos 67 y 68) disminuyeron del 58,9 por ciento en 1970 al 44,7 por ciento en 1983. Lo que demuestra el impacto a las importaciones y el progreso obtenido en la sustitución de importaciones. Las exportaciones de manufacturas (CUCI 5-8 menos 67 y 68) representaron el 1,3 por ciento de las exportaciones en 1983. Rusia y otros países miembros del CAEM son los principales socios comerciales de Cuba. El país está tratando de diversificar la estructura de sus exportaciones, para lo cual Cuba busca la expansión de su comercio con los países de economías de mercado. En 1985, Cuba firmó una serie de tratados bilaterales de comercio a fin de expandir sus exportaciones a través de los nuevos contactos comerciales.

El reciente borrador del Tercer Plan Quinquenal 1986-1990 de Cuba da importancia a la concesión de incentivos económicos con un énfasis reiterado en la modernización y diversificación industrial. El borrador, publicado a mediados de noviembre de 1985, reitera la necesidad de incrementar la ganancia de divisas, reducir las importaciones y mejorar la eficiencia. Los incentivos económicos podrían dar los resultados esperados durante el quinquenio. Procedimientos contables más estrictos que los actuales se espera que sean introducidos en las empresas del sector público. La nueva estrategia económica esboza medidas para asegurar que las tres ramas industriales que generan más divisas -el azúcar, el níquel y los cítricos- reciban prioridad absoluta en las inversiones.

1. THE ECONOMY OF CUBA

1.1 Recent economic trends

Following a bumper sugar harvest, Cuba's economic performance improved significantly in 1981 with Gross Social Product (GSP)^{1/} growing at 14.8 per cent. This impressive upsurge in economic growth ran out of steam in 1982, and growth of GSP fell to 2.7 per cent. The Cuban economy grew by 5.2 per cent in 1983. The growth rates of 7.0 per cent achieved in 1984 and of 5.6 per cent in 1985 - above the target of 5 per cent envisaged in the Five-year Plan ending 1985 - was at the cost of high level of imports and intensive consumption of energy and resources. The overall growth rate of GSP during the Second Five-year Plan (1981-85) is estimated at 7.3 per cent. To keep pace with Cuba's energy-saving drive and new restrictions on imports, the Government decided not to sustain this high pace of growth and a growth target of 5 per cent has been set for the Third Five-year Plan (1986-1990).

Cuba remains vulnerable to the vagaries of sugar harvest and the world sugar prices as sugar alone generates approximately 80 per cent of the country's export earnings. The price of sugar has held below the most pessimistic predictions and has even plunged below the minimum price established in the International Sugar Agreement, i.e. below \$0.13 per pound. Cuba lost \$500 million in the early 1980s due to falling prices. Due to crop fluctuations, Cuba has had to resell cheap sugar bought in the world market to meet export requirements. Most of Cuba's sugar is bought by the USSR under an arrangement lasting to 1990 at least and providing for price support shielding the crop from low world market prices.

The search is now on for diversifying this single-crop economy and for finding other sources of foreign exchange. The most important and immediate means of generating hard currency is surplus Soviet oil. The Government

^{1/} By GSP is meant the value of all goods and productive services generated in the country in the course of the year. GSP does not include the value of services such as financial, housing, personal, public health, education, public administration and defence.

envisages a cut in fuel consumption to increase oil "re-exports" which guarantee the country a major flow of freely convertible earnings. Cuba earned about \$540 million from selling imported petroleum. There are indications that the Soviet Union would continue to supply about 11 million tonnes of oil annually, allowing Cuba to sell on the spot market any surplus it manages to save through austerity measures.

Nickel, sea food, citrus fruit and tourism are earmarked for expansion in the sphere of economic diversification. The 1981-1985 Plan provided for a substantial increase in production of nickel, Cuba's second largest hard currency earner, from its level of 40,000 tonnes to 100,000 tonnes in 1985. Planned increases in output were not realised. A \$570 million plant is being built with Soviet financing and equipment. The country plans to achieve further growth of fishing and fish processing through the development of fish farms. By 1990, Cuba may attract 400,000 tourists a year. Plans are under way to upgrade four provincial airports and to implement an extensive hotel building programme.

According to official statistics, there is no unemployment in Cuba. The surplus labour force in the eastern part of the country, especially Santiago, is absorbed to some extent by the rapidly expanding youth detachments for coffee, cacao and forest development schemes. The budget for 1985 allotted \$2,267 million for culture and science and \$868.6 million on house maintenance and community services.

In the early 1980s Cuba succeeded in achieving agreements with her creditors on debt rescheduling. In 1983 Cuba signed an agreement with its creditor nations which covered \$413 million payments. Cuba was granted a grace period of three-and-a-half years and five more years to pay 95 per cent of maturities negotiated. Cuba owes \$3.4 billion to private and Government banks worldwide, primarily in Japan, Great Britain, France, Federal Republic of Germany, Spain and Canada. Recently, Cuba has proposed trade conditionality to creditors and repayments have been postponed.

Cuba is now seeking to widen its industrial base and improve economic efficiency. Profit and material incentives are given key importance in a newly released draft of Cuba's Third Five-year Plan (1986-1990). The Plan

document emphasizes that economic incentive must become a genuine lever in the next five years, with renewed planned emphasis on modernization, diversification, efficiency and productivity.

At the Party Congress held in February 1986 the need to diversify the economy away from sugar, reduce imports and increase hard currency earnings from nontraditional exports and from tourism was stressed. Greater coordination in key sectors of the economy, such as agriculture and transport, was emphasized. The Congress also stressed the need for wages to be related to productivity. The formation of a government commission with ministerial rank to review management techniques in the economy and recommend improvements was announced.

1.2 Economic structure

Cuba's population was estimated at 10 million in 1984. The island of Cuba is the largest in the Caribbean. Following the 1959 revolution, almost all sectors of the economy are State controlled and centrally planned, with some private sector activities existing only in agriculture. Ever since the country assumed full membership of the Council for Mutual Economic Assistance (CMEA) in 1972, it has followed the Soviet system of economic management and planning.

The Cuban economy is largely dependent on the export of a single commodity, sugar, which amounts to 25 per cent of the Cuban gross national product. Since the Cuban economy has long been dependent on sugar, the pace of economic growth has been, to a large extent, indicative of the vagaries of sugar harvest and sugar prices on the international market. During the period 1971-75 real GSP grew at an annual average rate of 10 per cent. This high pace of economic growth was largely due to the enormous increase in sugar prices in 1973. As a result, the foreign exchange constraint loosened and Cuba had funds available for importing capital and intermediate goods from developed market economies.

The Cuban economy experienced deceleration when the price of sugar began its descent from the \$0.65 high of November 1974 and collapsed to about \$0.08

a pound in mid-1976. The price of this key component of Cuba's export soared in 1980, but fell by almost 70 per cent in the early 1980s. The change in sugar prices largely attests to the change in economic conditions. The impact of falling sugar prices on the Cuban economy can be seen through the fall in the purchasing power of 1 ton of sugar between 1960 and 1982. In 1960, the earnings from the sale of 1 ton sugar could buy 6.3 tons of oil. In 1982 it purchased only 0.7 tons.^{1/} Despite advances in economic diversification, sugar continues to remain the backbone of the Cuban economy.

Table 1 presents figures pertaining to the sectoral origin of GSP during 1965-83. No single sector has significantly altered its share of GSP. The Table suggests that overall growth in each sector during 1965-83 has been in line with the overall economic growth. However, during periods of economic boom, industry and construction sectors seem to have grown more rapidly than other sectors. In 1981 industry and construction grew by 17.4 per cent and 13.8 per cent respectively. Industry accounted for 43.4 per cent of GSP in 1983.

Table 1. Sectoral origin of GSP, 1965-1983 (selected years)
(percentage)

Kind of economic activity in material sphere	1965	1975	1980	1983
Agriculture	15.7	11.3	11.7	13.8
Industry	43.0	47.8	46.3	43.4
Construction	7.6	8.8	8.9	8.1
Other productive material activities	33.7	32.1	33.1	34.7
Total	100	100	100	100

Source: Economic Commission for Latin America and the Caribbean, Statistical Yearbook, Latin America, 1984.

^{1/} World Development, "The Recent Worldwide Economic Crisis and the Welfare of Children: The case of Cuba", 1984, Vol. 12, No. 3, p. 248.

After sugar, meat production is the most important farming activity. A major programme is underway to develop citrus fruit, as the second export crop, and to rehabilitate coffee plantations. A strong expansion of fishing and fish processing has occurred in recent years. Nickel is the second largest export item. Indeed, Cuba has the 4th largest reserves in the world. Despite its close integration with the CMEA countries, export markets in developed market economies continue to be important to Cuba as foreign currency earnings are needed to finance essential imports of chemical products, high technology capital goods and spare parts. The major non-CMEA trading partners are Canada, Japan, France, Spain, the Netherlands, the UK and Federal Republic of Germany. Following British entry to the EEC in 1973, Cuban cigar sales to the UK fell sharply. Spain's entry into the EEC in January 1986 poses problems to Cuba's tobacco exports as Spain accounts for about a third of Cuba's total cigar exports.

Government revenue is derived largely from the profits of State enterprises, income tax and national insurance contributions. Substantial aid is also received from the USSR and other CMEA members. A fall in sugar output and prices invariably leads to budget deficit. According to an agreement reached with Western creditors, the budget deficit is to be reduced drastically. In March 1983, State subsidies were reduced by about 170 million pesos. Rationing is still in force. Consumer price increases average 10 per cent. Savings are encouraged through the People's Savings Bank and spending on consumer durables is discouraged by increasing downpayment and interest charges.

1.3 Overview of the manufacturing sector

Agricultural processing accounts for a substantial part of the Cuban manufacturing sector. Sugar processing is the largest single component. The Cuban sugar industry is characterized by low energy consumption since it consumes to a significant degree its own renewable energy resources, namely, sugar cane waste-bagasse. The sugar industry has undergone extensive modernization and this process is going on with the assistance of other CMEA member countries. Thus Soviet aid has been received for the rebuilding of 21 sugar mills, and a factory for the production of 600 harvesters per annum,

which entered into operation in 1978, has also been built with Soviet co-operation. Considerable emphasis has been placed on the development of sugar by-products. Several paper mills have been converted to manufacture bagasse pulp, and a bagasse-board factory is under construction. Sugar cane bagasse as a raw material will be used by a cellulose paper plant being built by a French company.

Other important industrial products include cement, electric power, machinery (linked to agricultural needs), food and beverages, tobacco and cigarettes, paper, fertilizers, textiles, footwear, hides and refined oil. The new economic strategy calls for priority to be given to the development of export-oriented industries and import substitution programme. It also demands measures to ensure that sugar, nickel and citrus industries, Cuba's big three hard currency earners, receive absolute priority in investments.

The industrial sector as a whole generated 52.8 per cent of the total economic growth in 1984, and more than 90 per cent of the increase in industrial output stemmed from the non-sugar industrial branches which recorded 8.2 per cent increase, compared with 3.1 per cent registered by the sugar industry. As the country progresses towards higher levels of industrialization, it needs more raw materials, machinery and spare parts.

There has been a rapid growth of metallurgical and mechanical industries to provide spare parts for equipment installed prior to the US embargo introduced in the early 1960s. Small plants have been established for the production of steel girders and structures, ball-bearings, spare parts, rail, wagons and consumer durables. In 1984, 430 million pesos worth of spare parts were made or repaired. Several segments of metal products industry witnessed increases in 1984 - compressible aluminium containers (8.9 per cent), steel containers (8.5 per cent) and steel structures (3.8 per cent). Cuba's demand for steel is expected to rise from the current level of 1 million tons a year to 1.8 million tons in 1990. The country's steel making capacity stands at only 400,000 tons a year. The USSR is currently invited to study the possibilities of further expansion.

In 1984 the food industry experienced rapid growth in the production of pork (18.7 per cent), poultry (18.5 per cent), processed citrus fruit

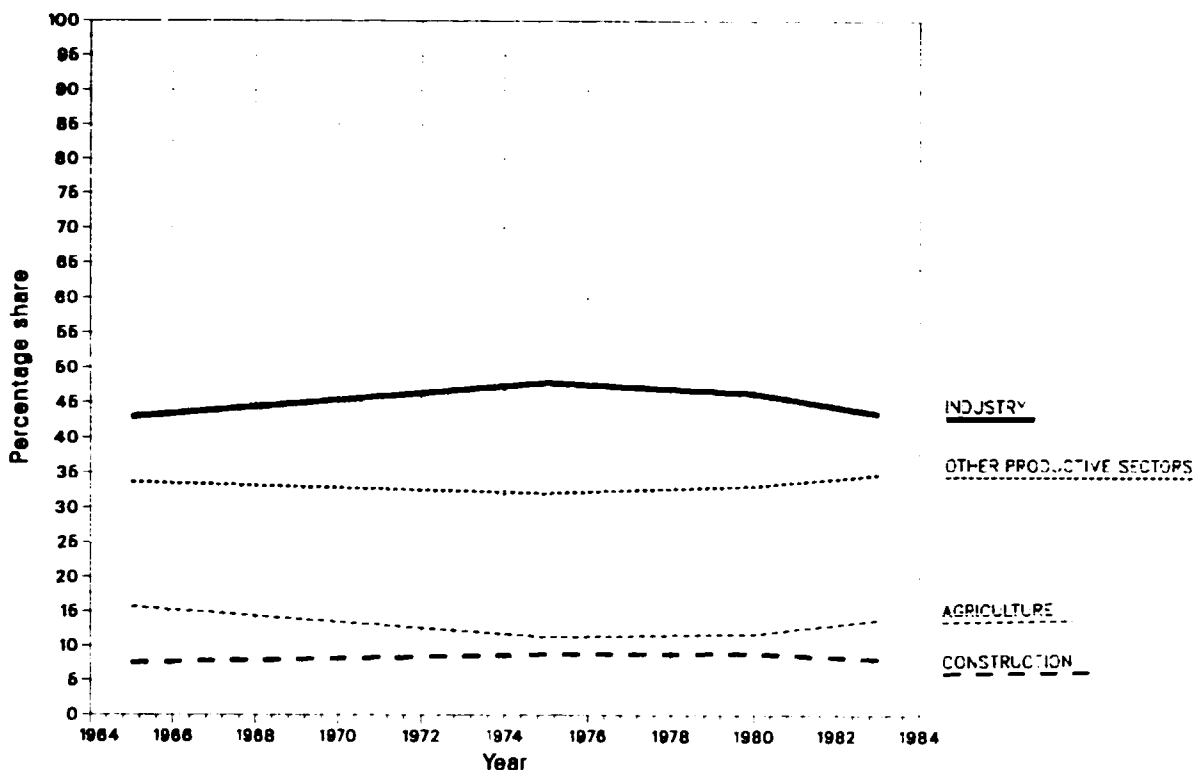
(13.6 per cent), canned meat (11 per cent), condensed milk (6.9 per cent), rice (5.9 per cent) and bottled milk (5 per cent). In the fishing industry, total catch was similar to that attained the preceding year (1983), growing by only 0.6 per cent. Cuba has developed a small-scale shipbuilding industry.

Textile production doubled its output in the first half of the 1970s. The subsector engaged in the production of underwear recorded a growth rate of 11.6 per cent in 1984. Although a declining trend in the production of intermediate goods affected the total output of chemical industry in recent years, three sub-sectors registered outstanding growth rates in 1984 - production of urea (a little over 100 per cent), ammonium nitrate (91.2 per cent) and new tires (27 per cent). Savings of fuel in the various spheres of the economy made it possible to maintain a positive growth in oil processing during 1984-85. The construction industry grew by 16.5 per cent in 1984 and the total value of output stood at 326 million pesos.

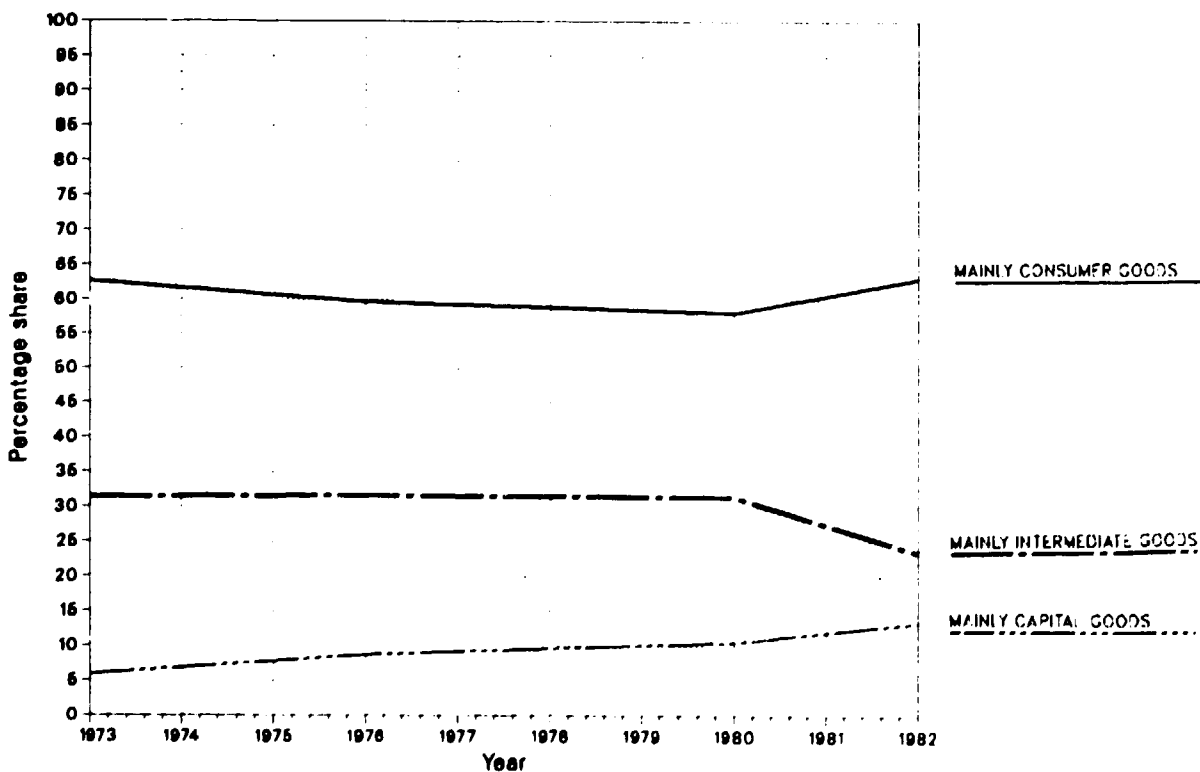
The main source of increase in output in the industrial sector in general during 1984 was increase in productivity which grew at 5.1 per cent. The additional output resulting from a 5.1 per cent increase in productivity tantamounts to saving 102.9 million pesos on wages. The average monthly wage rate grew by 2.9 per cent, and the average number of workers by 2 per cent.

MANUFACTURING TRENDS

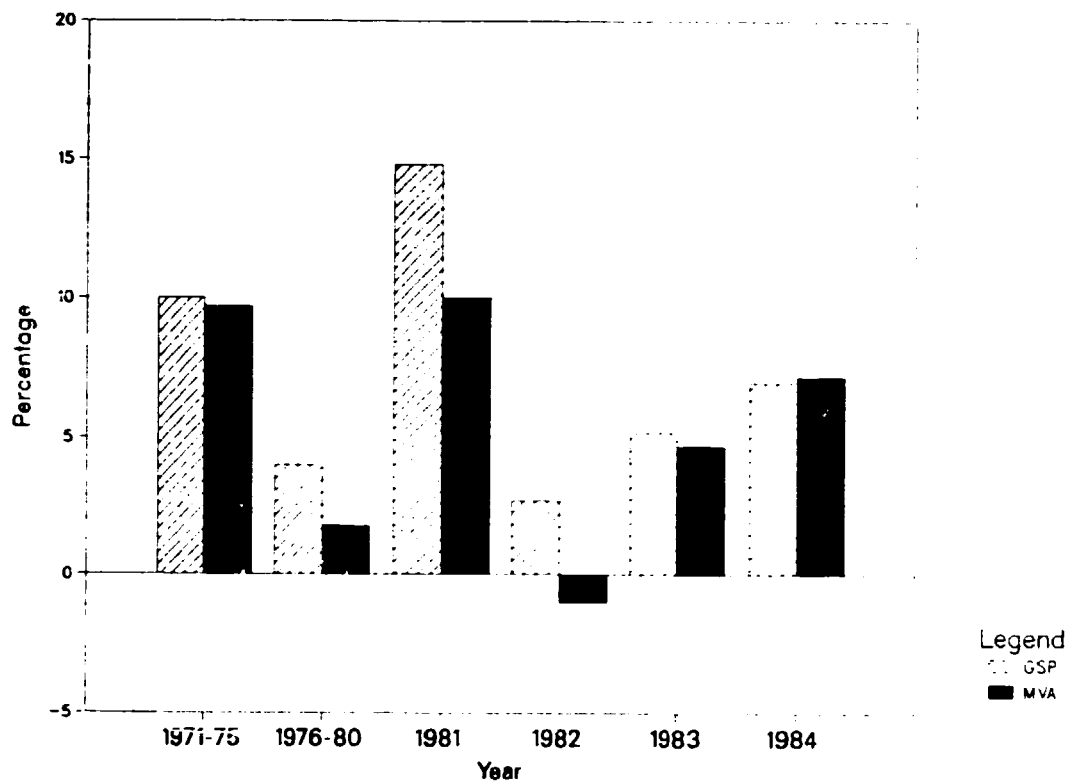
SECTORAL ORIGIN OF GSP, 1965-1983 (at current prices)



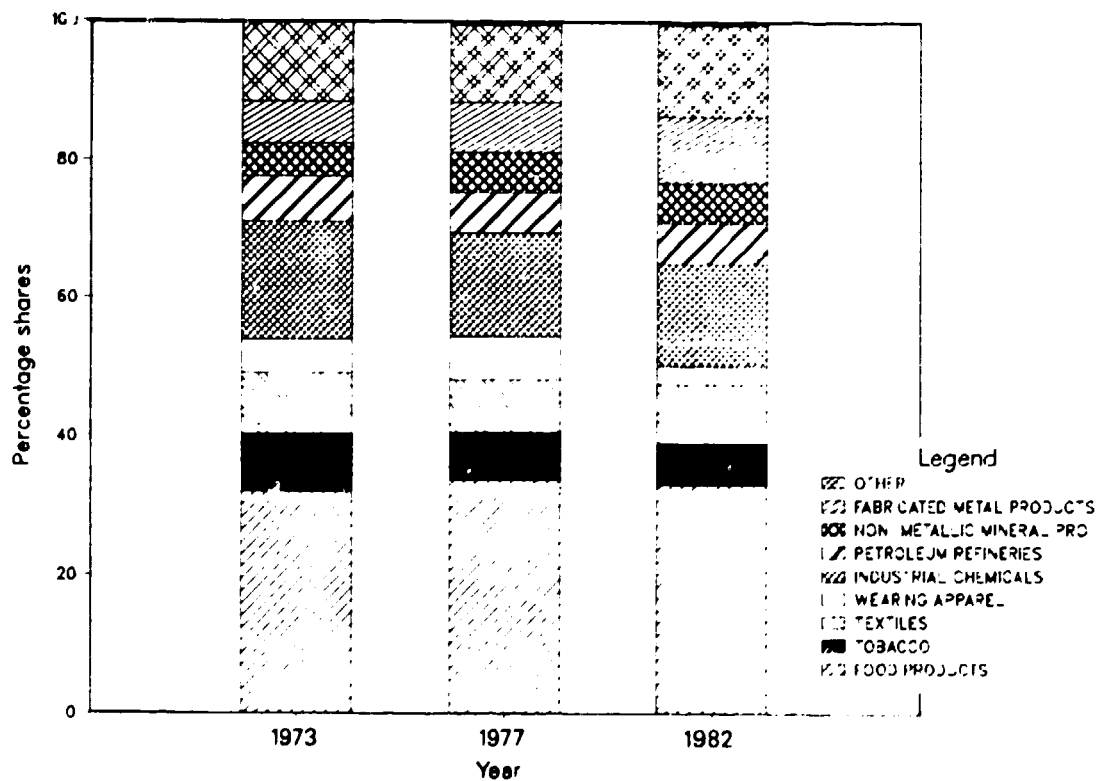
COMPOSITION OF MVA BY END USE, 1973-1982



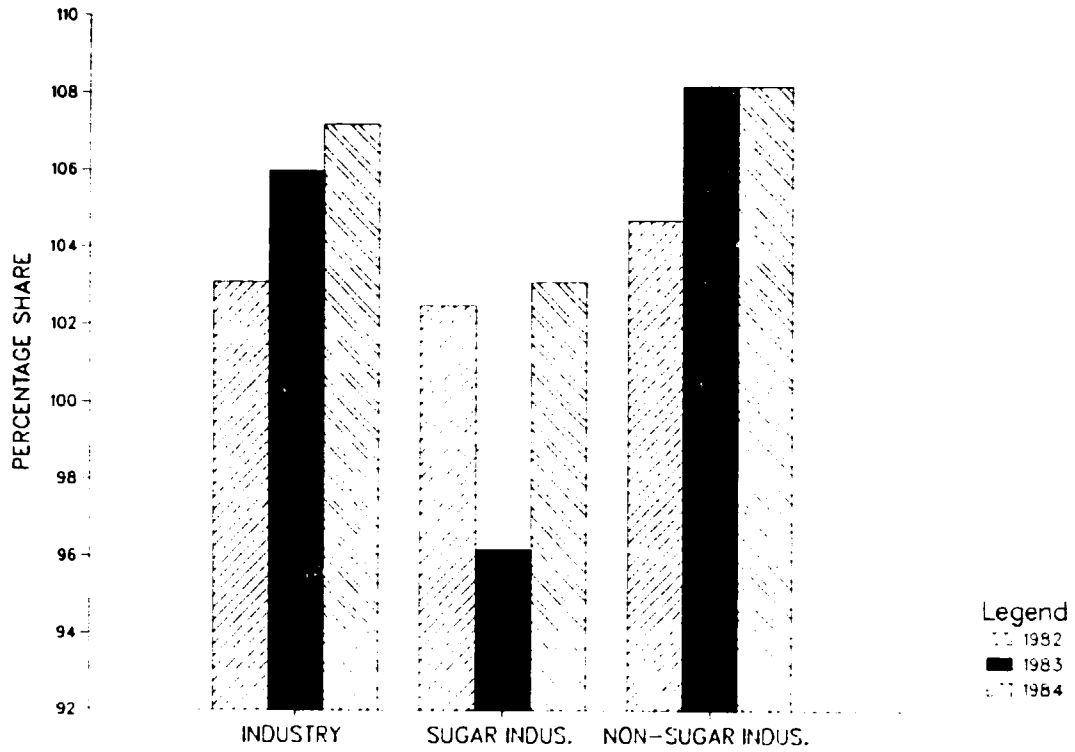
GROWTH RATES OF GSP AND MVA, 1971-1984



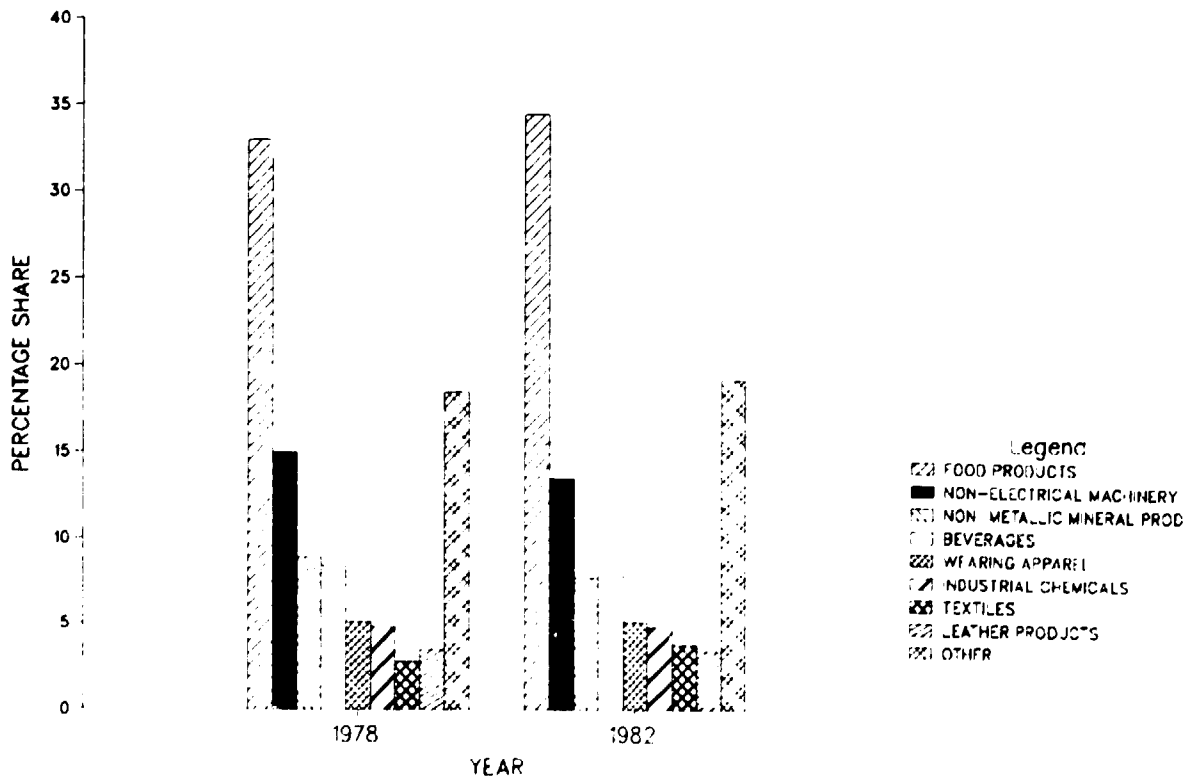
COMPOSITION OF MVA BY MAIN BRANCHES, 1973, 1977 AND 1982



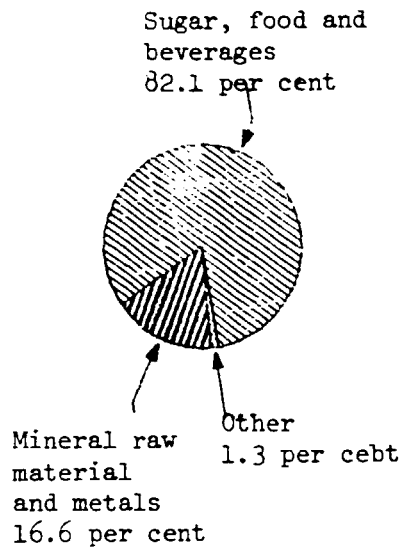
**INDEX OF SUGAR AND NON-SUGAR PRODUCTION, 1982, 1983 AND 1984
(PRECEDING YEAR INDUSTRIAL PRODUCTION INDEX=100)**



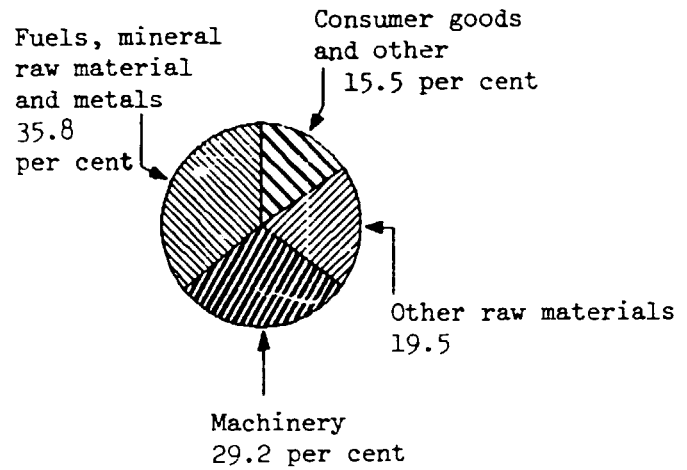
STRUCTURE OF MANUFACTURING EMPLOYMENT, 1978 AND 1982



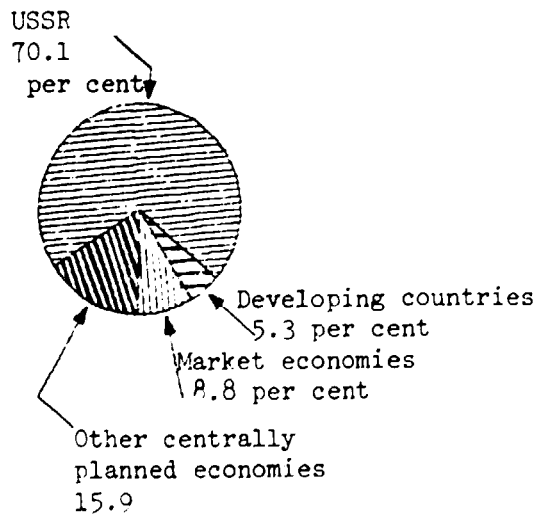
COMPOSITION OF EXPORTS, 1983



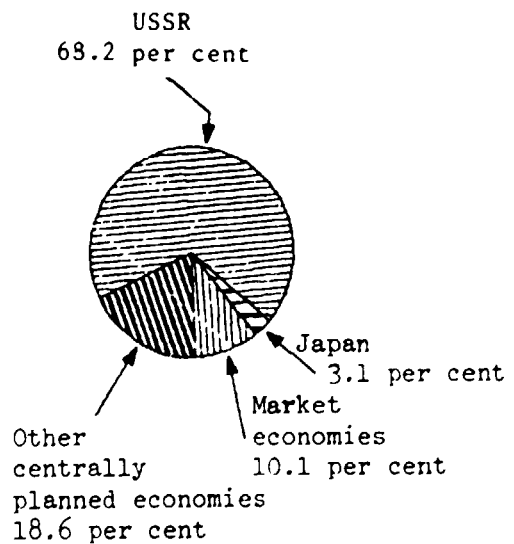
COMPOSITION OF IMPORTS, 1983



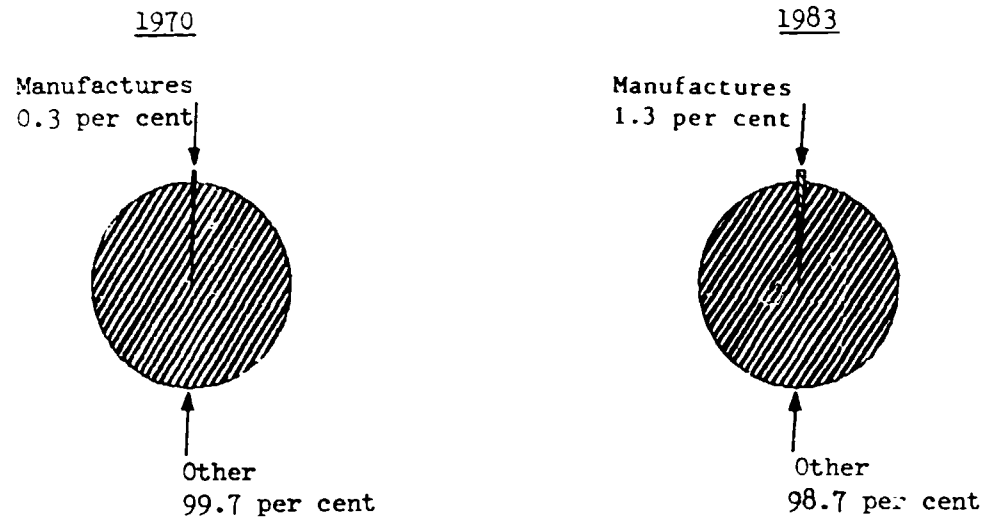
DESTINATION OF EXPORTS, 1983



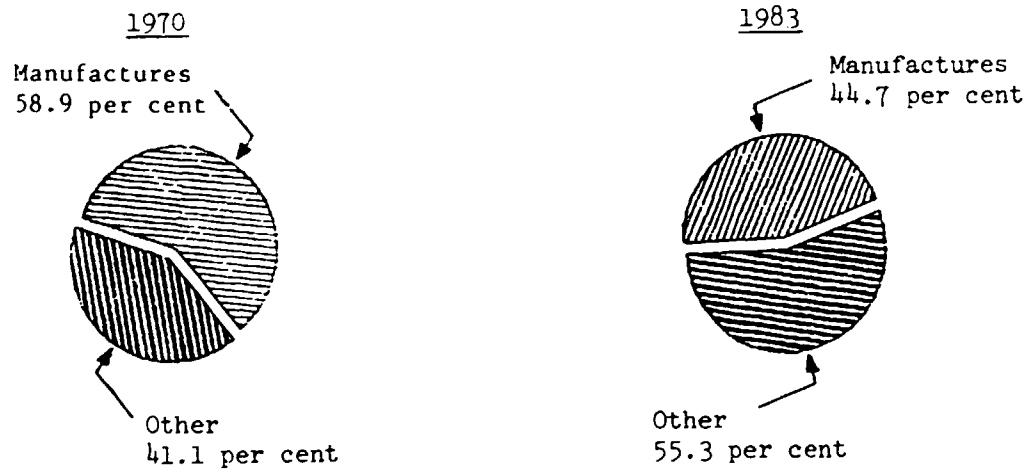
ORIGIN OF IMPORTS, 1983



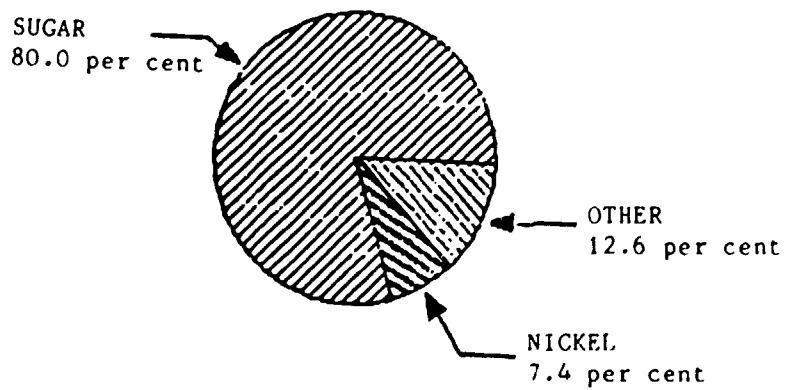
**SHARE OF MANUFACTURED EXPORTS IN TOTAL EXPORTS, 1970 AND 1983
(SITC 5-8 less 67 and 68)**



**SHARE OF MANUFACTURED IMPORTS IN TOTAL IMPORTS, 1970 AND 1983
(SITC 5-8 less 67 and 68)**



SHARES OF SUGAR AND NICKEL IN TOTAL EXPORTS, 1985



2. STRUCTURE AND PERFORMANCE OF THE MANUFACTURING SECTOR

2.1 Growth and structural change

Cuba did not share in the general wave of industrialization that occurred in most of the Latin American countries in the 1940s and 1950s. The scarcity of natural, human and capital resources coupled with the small domestic market placed serious constraints on the possibility of undertaking industrialization programmes. A rather backward industrial sector heavily dependent on imported materials underwent drastic change since 1960.

Indicators of industrialization clearly show the great dynamism of the activity of the manufacturing sector in the 1970s. During 1973-79 manufacturing value added (MVA), measured in constant 1975 prices, grew at an average annual rate of 5.3 per cent. Having suffered a negative growth rate of 3.9 per cent in 1980, MVA grew by over 10 per cent in 1981. The pace of industrial expansion experienced in the 1970s culminated in unprecedented growth of MVA in 1981. This was primarily due to the fact that a number of investment projects reached maturity and the application of incentives to production through the systems of awards provided for through the wage reforms yielded quick results.

With the emergence of a number of problems, the manufacturing sector faced deceleration in 1982, and MVA declined by 1 per cent. In many branches activities had to be reduced because of some delay in the supply of raw materials, especially from the market economies. Material product index^{1/} provided in Appendix Table 1 shows great variations in growth of individual branches of manufacturing. Non-durable consumer goods and durable consumer goods, including capital goods, grew rapidly. This extraordinary growth is explained by Government's priority accorded to activities linked to the satisfaction of basic needs and to the policy aiming at the mechanization of the agricultural sector, the development of construction, and an increase in

^{1/} Cuban Statistical Yearbooks generally contain a table in which year-to-year changes in the value of output of material product sectors are analysed. These index numbers could be presumed to be quantity indexes of industrial production.

the assembly of transport equipment as well as the manufacture of fishing boats in the country. The manufacturing sector grew by 4.7 per cent in 1983. The non-sugar industry registered a sustained average annual growth rate of 8 per cent in 1984, and the industrial sector as a whole produced 9,471 million pesos worth of goods (7.2 per cent increase over 1983).

Table 2 shows that the food industry continues to be the major component of the manufacturing sector, accounting for 33 per cent of MVA. Apart from sugar processing in food industry - tinned meat, processing of rice, wheat flour and butter - grew rapidly and accounted for a large share. Although lack of imported inputs caused a decline in the production of ready-made clothing, the textile industry did not alter its share over a ten-year period. The share of industrial chemicals declined from 17.1 per cent in 1973 to 14.8 per cent in 1982. The contraction in the chemical industry was partly due to the deterioration in the intermediate products. The share of fabricated metal products in total MVA rose from 6 per cent in 1973 to around 10 per cent in 1982. Considerable emphasis has been placed on the development of mechanical industries to provide spare parts for industries equipped with machines installed prior to the US embargo. The highly favourable results achieved by the metal manufactures and machinery were mainly due to the entry into operation of an agricultural implement factory and a factory for the production of non-electrical equipment, plus the expansion of steel products plants. The share of petroleum refineries stagnated at around 6 per cent and that of wearing apparel declined by almost 50 per cent during 1973-82. Lack of leather from the exterior was responsible for a decline in the manufacture of footwear.

Table 3 presents recent data on manufacturing output. The Table shows that non-sugar food industry accounted for 20.7 per cent of total manufacturing output while sugar industry had a share of 19.2 per cent in 1984. Non-electrical machinery, beverages and tobacco, chemicals, and fish processing recorded above 10 per cent growth in 1984. Mining and metallurgy industry suffered a negative growth of 1.8 per cent in 1984. Nickel output in 1984 seems to have continued at the 1983 level of about 38,000 tons. The nickel/cobalt ores were processed at refineries at Pedro Alba and Nicerol. Nickel production may increase substantially in the near future.

Table 2. Composition of manufacturing value added, 1973-1982

(percentage)

Description (ISIC)	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
TOTAL MANUFACTURING(300)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Food products(311)	32.0	31.9	31.4	30.1	33.7	34.1	33.8	30.9	32.0	33.1
Beverages(313)	1.1	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0
Tobacco(314)	8.3	7.8	7.3	6.9	6.9	6.4	5.7	4.0	4.0	4.0
Textiles(321)	4.8	5.3	5.1	5.3	6.1	7.2	6.6	7.8	8.4	8.6
Wearing apparel,except footwear(322)	4.8	5.0	5.1	5.3	6.1	7.2	6.6	7.8	8.4	8.6
Leather products(323)	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
Footwear,except rubber or plastic(324)	2.7	2.3	2.4	2.2	2.4	2.6	2.3	2.4	1.9	2.0
Wood products,except furniture(331)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Furniture,except metal(332)	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Paper and products(341)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Printing and publishing(342)	..	..	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Industrial chemicals(351)	17.1	18.0	17.9	17.7	15.1	15.7	16.3	17.4	16.6	14.8
Other chemicals(352)	..	..	..	..	..	..	..	..	..	..
Petroleum refineries(353)	6.7	6.8	7.0	6.7	6.5	6.2	6.1	6.5	6.2	6.5
Misc. petroleum and coal products(354)	..	..	..	..	..	..	..	..	..	..
Rubber products(355)	..	..	..	..	..	..	..	..	..	..
Plastic products(356)	..	..	..	..	..	..	..	..	..	..
Pottery, china, earthenware(361)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Glass and products(362)	0.5	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.4	0.5
Other non-metallic mineral prod.(369)	4.7	4.5	4.6	5.6	9.4	5.4	5.5	5.0	6.0	5.5
Iron and steel(371)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Non-ferrous metals(372)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.1
Fabricated metal products(381)	6.0 ^{a/}	6.1 ^{a/}	6.5 ^{a/}	7.2 ^{a/}	7.1 ^{a/}	7.4 ^{a/}	8.4 ^{a/}	9.0 ^{a/}	10.3 ^{a/}	9.5 ^{a/}
Machinery,except electrical(382)	..	..	..	..	..	..	..	..	..	..
Machinery electric(383)	0.6	0.8	1.3	1.3	1.0	0.8	1.0	1.1	0.8	0.7
Transport equipment(384)	..	..	..	..	..	..	..	..	..	..
Professional & scientific equipm.(385)	..	..	..	..	..	..	..	..	..	..
Other manufactured products(390)	4.7	5.1	4.6	4.6	4.1	4.3	4.7	5.1	6.3	6.4
TOTAL MANUFACTURING IN MILLIONS US \$	1582	1734	1916	1917	1932	2121	2152	2066	2275	2273

Source: Statistics and Survey Unit, UNIDO. Based on data supplied by the UN Statistical Office, with estimates by the UNIDO Secretariat.

Note: TOTAL MANUFACTURING is the sum of the available components, and does not necessarily correspond to ISIC 300 total.

Footnotes: a/ 3810 includes 3820 3840 3850.

Table 3. Manufacturing output, 1982-1984
(million pesos)

	1982	1983	1984
Non-sugar food industry	1,685.2 (21.1)	1,846.3 (21.8)	1,962.3 (20.7)
Sugar industry	1,451.9 (18.1)	1,397.6 (16.9)	1,821.8 (19.2)
Non-electrical machinery	630.2 (7.8)	742.3 (8.7)	855.8 (9.0)
Fuel industry	529.8 (6.6)	538.2 (6.3)	540.3 (5.7)
Electricity generation	486.7 (6.1)	502.8 (5.9)	534.7 (5.6)
Beverages & tobacco	447.4 (5.6)	412.9 (4.8)	456.4 (4.8)
Textiles & clothing	354.7 (4.4)	397.2 (4.7)	396.7 (4.2)
Chemicals	367.6 (4.6)	397.1 (4.6)	456.4 (4.8)
Building materials	351.8 (4.4)	352.1 (4.2)	381.6 (4.0)
Mining & metallurgy	249.1 (3.1)	274.9 (3.2)	269.9 (2.8)
Fish processing	242.2 (3.0)	258.4 (3.0)	296.4 (3.1)
Other metal products	158.2 (1.9)	184.1 (2.1)	203.7 (2.1)
Total, including others	8,003.4	8,454.9	9,471.1

Source: Banco Nacional de Cuba.

Note: Figures in parenthesis indicate percentage shares.

According to recent estimates by the National Bank of Cuba, industry grew by 6.5 per cent in the first quarter of 1985. Seventeen of the 21 industrial branches grew rapidly, nine of them achieved growth rates of more than 10 per cent. Those with the highest growth rates were the beverages and tobacco industry (28 per cent) and the electrotechnical and electronics industry (25.7 per cent). The new policy favours greater efficiency as a fundamental and decisive task during the Third Five-year Plan (1986-1990). To this end a new set of incentives is given key importance.

Data provided in Table 4 on physical output of selected industrial products during 1965-1984 shows the rapid increase in production of steel, sugar cane harvesters, buses, fertilizers, cement, wires and cables as well as such consumer durables as radios, TVs and batteries. In other product groups

such as man-made fibers, textiles, wearing apparel, refrigerators and other industrial products, production increases were marginal or declining.

Table 4. Industrial output, selected products, 1965-1984 (selected years)

Product	Unit	1965	1970	1980	1984
Profifled steel	thousand tons	36.0	140.0	303.8	338.2
Corrugated steel bars	thousand tons	26.3	85.0	260.2	270.5
Sugar cane harvesters	units	-	-	501	631
Vessels	units	-	36	120	...
Buses	units	-	300	1,846	2,219
Lorries	thousands	...	...	0.6	0.5
Tires	thousands	...	202	387	450
Mineral fertilizers	thousand tons	...	591	1,405	1,446
Man-made fibres	thousand tons	...	2.4	4.9	3.8
Textiles	million sq. m.	...	78	159	172
Wearing apparel	millions	...	22.2	25.5	31.7
Cement	thousand tons	...	742	2,831	3,347
Carts for sugar transportation	thousands	2.0	.	3.4	...
Household refrigerators	thousands	11.9	5.8	25.0	22.4
Radio sets	thousands	81.9	19.1	200.0	253.4
TV sets	thousands	-	-	40.3	91.6
Household gas stoves	thousands	10.2	6.0	6.9	...
Storage batteries	thousands	102.1	95.2	301.9	335.1
Electric wires and cables (up to 1 kV)	thousand kilometres	23.6	13.1	38.0	...
Wire	thousand tons	7.3	0.5	8.2	...
Computers	thousands	-	-	13.8	...
Mini computers	units	-	-	38	...

Source: CMEA Secretariat, Cuba - a CMEA Member Country. Moscow 1984.

Banco Nacional De Cuba - Comite Estatal De Estadisticas, Cuba, Quarterly Economic Report. December, 1984.

2.2 Performance and efficiency

One of the basic objectives of Cuban economic policy is to provide remunerative occupation to workers and to ensure that there is no open unemployment in the country. Even during periods of stagnation many branches

of manufacturing retained workers for social reasons. High growth rates in several industrial branches have been accompanied by high rates of employment growth, partly due to redeployment of workers from other occupations to industry. Underemployment seems to have been on the rise. A recent study^{1/} by the Department of Labour Inspection for the capital shows that Cuba's drive for economic efficiency, energy conservation and increased exports has exposed the volume of disguised unemployment.

The majority of the industrial labour force is employed in resource-based industries. Of these the food industry absorbed around 40 per cent in 1982. The contribution of the tobacco industry increased from 7.1 per cent in 1975 to 20.2 per cent in 1982.

Table 5 shows growth rates of MVA, employment and value added per employee. During 1978-81 nine out of fourteen industrial branches experienced negative growth rates in labour productivity. Growth of value added by employee declined by 23.3 per cent in wearing apparel. In food industry, beverages experienced a 6.8 per cent increase in labour productivity. The incidence of technical progress seems to be relatively high in furniture, paper products and non-ferrous metals.

To overcome the problem of low productivity, important changes were introduced in many branches of manufacturing. Within the framework of an austerity expenditure policy, there was continued application of standards designed to stimulate production, rationalize the use of resources and eliminate superfluous expenditure. Outstanding performance was achieved by the sugar industry whose extraordinary productivity was due to the consolidation of the bonus system introduced in 1981 and extensive rationalization and modernization programmes.

The Ministry of the Sugar Industry (Minaz) invested almost 190 million pesos in 1985 to achieve greater efficiency in sugar production. This investment was made to carry out the plan to increase production capacity, replace, and modernize sugar mills, make better use of the existing capacity, and improve energy efficiency.

1/ Financial Times, 30 August 1985.

Table 5. Growth rates of MVA, employment and labour productivity by branch of manufacturing, 1973-1981

Description (ISIC)	Growth of value added at 1975 prices	Growth of employment	Growth of value added per employee
	1973-1981	1973-1981	1973-1981
Food products(311)	4.35	2.13 a/	-2.66 a/
Beverages(313)	3.16	-7.18 a/	6.84 a/
Tobacco(314)	-4.58	-7.18 a/	-5.24 a/
Textiles(321)	2.14	16.79 a/	-6.91 a/
Wearing apparel,except footwear(322)	1.62	1.85 a/	-23.34 a/
Leather products(323)	-0.37	...	...
Footwear,except rubber or plastic(324)	1.47	...	...
Wood products,except furniture(331)	1.24	0.70 a/	-3.58 a/
Furniture,except metal(332)	5.68	0.68 a/	13.67 a/
Paper and products(341)	5.41	-2.09 a/	17.57 a/
Printing and publishing(342)	1.33 b/	-1.12 a/	-3.79 a/
Industrial chemicals(351)	3.00	...	...
Other chemicals(352)	...	...	...
Petroleum refineries(353)	2.59	...	...
Misc. petroleum and coal products(354)	...	...	...
Rubber products(355)	...	...	...
Plastic products(356)	...	...	...
Pottery, china, earthenware(361)	11.37	...	...
Glass and products(362)	4.25	...	...
Other non-metallic mineral prod.(369)	7.60	-0.46 a/	7.42 a/
Iron and steel(371)	4.53	5.53 a/	-5.44 a/
Non-ferrous metals(372)	7.61	2.10 a/	4.74 a/
Fabricated metal products(381)	...	-1.94 a/	...
Machinery,except electrical(382)	...	-2.50 a/	...
Machinery electric(383)	5.26	0.65 a/	-0.84 a/
Transport equipment(384)	...	...	...
Professional & scientific equipm.(385)	...	...	...
Other manufactured products(390)	6.06	17.36 a/	-1.90 a/

Source: Statistics and Survey Unit, UNIDO. Based on data supplied by the UN Statistical Office, with estimates by the UNIDO Secretariat.

a/ 1978-1981.

b/ 1975-1981.

The process of improving the organizational structure in the productive sphere, which took place in 1983 and during the first few months of 1984, has modified the figures appearing in the chronological series of mercantile production.^{1/} The organization of the so-called agro-industrial complexes in the sugar economy sector encompasses the merging of sugar cane enterprises with the sugar mills. According to data published by the National Bank of Cuba, 72.6 per cent of the increase in mercantile production in the Cuban industry during 1984 was due to 5.1 per cent increase in productivity.

^{1/} Mercantile production is the sum of the values of all goods and services of the productive sectors (excluding trade) destined for sale. In general, it is an appropriate estimate of economic activity and is used in national statistical practice as the basis for measuring economic behaviour in periods of time of less than one year. For details, see National Bank of Cuba, Cuba, Quarterly Economic Report, December 1984.

Programs are initiated to substitute domestic products for imports, and to promote export-oriented industries in pursuit of fulfilling Cuba's commitments to leading importers and creditors. Priority has been accorded to sugar, nickel and citrus industries, Cuba's big three hard currency earners. Increasing emphasis is given to raise production efficiency.

2.3 Exports and imports of manufactures

Cuba's dependence on exports of primary commodities has remained unchanged in the past two decades. In 1980 around 95 per cent of Cuba's exports in 1980 were primary commodities - exactly the same as in 1960. Apart from sugar which accounts for 80 per cent of exports, manufactured exports (narrow definition of trade in manufactures, i.e., SITC 5-8 less 67 and 68) accounted for only 1.3 per cent of total exports in 1983. Efforts are being made to increase sales abroad of non-traditional industrial products.

Although a bilateral trade agreement signed with the Soviet Union in 1980 provides for an increase in Cuba's exports of sugar, at prices fixed well above world market levels, international sales of sugar are exposed to vulnerabilities. The prices of this commodity experienced a very severe deterioration on the world market. Despite favourable quotation obtained in trade with Socialist countries, primarily with the Soviet Union, the deterioration in the export prices of sugar is, in any case, a disturbing factor as Cuba tries to develop trade links with market-economy countries to earn more hard currencies. According to recent estimates, nearly 20 per cent of the total volume of trade in sugar is destined to market-economy countries. Countries of European Economic Community, which were once overall net importers of sugar, became net exporters some years ago, due to their growing production of beet sugar. Cuban efforts to change the direction of sugar exports to developing countries may be constrained by the gradual increase in the total supply of sugar in the world. In these circumstances, all efforts are encouraged by the Cuban Government to diversify its exports.

Demand for Cuban nickel, which accounts for 7.4 per cent of the country's total exports, has been low due to high worldwide inventories and a generally poor steel market. Further, the US trade embargo against Cuba includes

Table 6. Destination of sugar exports by country and region, 1983 and 1984
(in metric tons)

	<u>1983</u>	<u>1984</u>
<u>CMEA</u>	<u>4,602,610</u>	<u>4,824,909</u>
Bulgaria	331,485	360,107
Czechoslovakia	144,648	226,489
German, Dem. Rep.	280,922	278,773
Mongolia	4,699	-
Romania	221,454	272,088
USSR	3,542,268	3,649,996
Vietnam	77,134	37,456
<u>Other Socialist Countries</u>	<u>819,323</u>	<u>761,867</u>
Albania	15,698	14,673
China, People's Rep. of	771,717	705,054
Korea, Dem. People's Rep. of	22,511	21,262
Yugoslavia	9,397	20,878
<u>Market-Economy Countries</u>	<u>1,589,215</u>	<u>1,420,589</u>
<u>TOTAL^{a/}</u>	<u>7,019,376</u>	<u>7,016,510</u>

Source: National Bank of Cuba, Cuba, Quarterly Economic Report, December 1984.

a/ Including donations to Ethiopia, Grenada, Kampuchea, People's Democratic Republic of Yemen and World Food Programme.

products containing Cuban nickel. Japan and the Netherlands have agreed on procedures to ensure that their exports of stainless steel and other nickel-bearing products to the US do not contain Cuban material. A few countries are negotiating with Cuba for purchasing Cuban nickel, most likely in the form of a barter deal.

Table 7 presents the structure of convertible currency exports during 1983-85. Re-exports of fuels accounted for around 36 per cent of total convertible currency exports in 1985. Exports of seafood products grew by 9.4 per cent in 1984 and declined by 10 per cent in 1985. Tobacco products

recorded a growth rate of 112.7 per cent in 1985. Spain purchases about one-third of Cuba's total cigar exports. Since Spain has joined the EEC, Cuba's cigar sales to Spain could be affected. Such a loss of hard currency for Cuba would in turn affect the country's ability to import Spanish goods.

Table 7. Convertible currency exports, 1983, 1984^{a/} and 1985^{a/}
(million pesos)

	1983	1984 ^{a/}	1985 ^{a/}
Sugar	263.0	250.0	238.0
Tobacco products	74.0	46.2	98.3
Seafood products	93.8	102.6	91.0
Nickel	35.4	38.1	39.0
Coffee	39.5	17.9	20.9
Other products	230.3	195.5	280.9
Re-exports of fuels	497.7	484.4	427.8
Total	1,233.7	1,135.7	1,195.9

Source: National Bank of Cuba.

a/ Preliminary.

A large part of Cuba's imports comprises machinery, factory plants, modes of transport and fuel. As a result of import substitution policy, the relative share of foodstuff and beverages in the total value of imports declined from 26 per cent in 1970 to 17 per cent in 1980. While Cuba's exports to the USSR are restricted to 11 items, imports from Soviet Union are classified under more than 200 different items.^{1/}

According to information published by the National Bank of Cuba on convertible currency imports, intermediate goods accounted for 68 per cent of total convertible currency imports. Capital goods in convertible currency

1/ For details pertaining to origin of imports, see Appendix Table A-4.

Table 8. Manufactured imports, selected products, 1970-1984

	Unit	1970	1975	1980	1983	1984
Electric motors	thousands	43.8	30.9	21.0	47.2	87.7
Batteries	thousands	122	284	65.0	81.0	70.7
Tractors	units	5,524	3,342	9,988	8,771	8,564
Combines and threshers	units	450	298	119	165	136
Graders	units	189	177	163	132	150
Bulldozers	units	754	708	423	281	969
Lift trucks	units	279	474	1,433	1,378	1,403
Lorries	units	4,308	7,229	8,07	6,745	8,564
Buses	units	391	1,794	2,199	1,133	732
Motorcycles	units	653	360	2,918	4,567	7,033
Cast iron and steel	thousand tons	376	819	600	613	722
Aluminium, sheet and in rolls	tons	2,841	...	5,287	15,660	15,000
Caustic soda	thousand tons	22	57	49.1	42.0	35.0
Mineral fertilizers	thousand tons	975	941	1,198	369	366
Tyres	thousand units	232	1,086	514	405	616
Cement	thousand tons	81	190	112	9.0	17.6
Sheet glass	thousand sq. m.	233	...	734	616	879
Cotton fabrics	million sq. m.	58.3	74.2	74.8	44.7	62.6
Wool cloth	thousand sq. m.	741	5,641	10.4	5,191	4,626
Linen fabrics	thousand sq. m.	886	1,451	1,558	1,997	2,241
Rayon and synthetic fibre fabrics	million sq. m.	11.0	14.3	35.8	33.1	32.0
Leather footwear	thousand pairs	219	339	513	1,785	2,633
Rubber footwear	thousand pairs	257	...	459	2,525	2,786
Domestic sewing machines	thousands	29.6	30.6	58.4	56.7	49.2
Radio sets	thousands	48.1	136	128	188	...

Source: "Statistika" Statistical Yearbook, Member Countries of the Council for Mutual Economic Assistance, 1984, 1985, Moscow.

imports grew by 52.6 per cent in 1984, and imports of consumer goods increased by 23.5 per cent in the same year. Apart from steel import from the Soviet Union and Eastern Europe, Cuba buys steel from Mexico, Venezuela, Brazil and Argentina. Cuba ordered 40,000 tons of steel products from Venezuela in June 1985. Argentina is set to overtake Mexico as Cuba's largest trade partner in Latin America.

In 1985 Cuba concluded several bilateral trade agreements. In March 1985 a trade agreement was concluded with Ecuador for increasing bilateral trade. Manufactures offered by Ecuador are plywood, aluminum, cocoa liquor, plants for construction of modular structure, electrical appliances and various types of plastic utensils. Cuba offered spare parts for the sugar industry and animal feed technology. Trade agreement signed with Guyana amounts to \$2.9 million. Cuba and Bulgaria have signed trade agreements for 1986 totalling over \$32 million under which Cuba will receive industrial equipment, medicine and food products. Czechoslovakia has agreed to participate in the construction of factories which will produce nickel, cobalt and chrome. Among other export items to Cuba are buses, tools and other items. Ghana and Cuba are to engage in barter trade. Commodities will be exchanged for a Cuban pre-fab building plant, transfer of its technology and rum. An agreement has been signed with Hungary to export fruit products, candy, folklore and artisan items, while Cuba will import cosmetics, textiles and confectionary items. In November 1985 Cuba and People's Democratic Republic of Korea signed trade and payment agreements as well as a price agreement for 1986-1990. Cuba will supply sugar, nickel and other industrial products and People's Democratic Republic of Korea will supply metals and light industry products in addition to raw materials.

2.4 Ownership and investment patterns

The State controls 90 per cent of industrial production and its share has been progressively increasing with investments in new plants. Gross investment during the last five-year period reached 13 billion pesos, almost double the 1971-75 level. The 1981-85 Five-year Plan envisaged a slight drop in growth of investments which in 1982 were lower than in 1981 according to the strategy aimed at the termination of objects whose construction has already been started and particularly of those earmarked for the development of the production of sugar, nickel, oil, electricity, citrus fruits, fibers and of the engineering sector. To this end some 75 per cent of the total investments are directed to the development of industry. Investments amounted to 3,884.6 billion pesos in 1984. This was 14 per cent more than in the preceding year. During 1984 priority was accorded to the expansion of industrial capacities to produce new products for export and to substitute domestic products for imports.

Cuba plans to expand production of sugar throughout the 1980s with assistance from CMEA member countries. Aid valued at \$635 million for the 1981-85 period and a further \$540 million for the following five years will be invested in all stages of the sugar production process.

Industrial investment, which currently accounts for 42 per cent of Cuba's budget, concentrates on sugar processing, the metal industry, oil refining, and on the production of fertilizers, textiles, cement and foodstuffs. The manufacture of raw materials and producer goods based on domestic resources is also gaining importance - with a prime objective to substitute domestic products for imports and to create new export capacity. With the aid of Soviet technical and financial assistance, steel industry is set for expansion.

The Government continues to put great stress on industrialization. It has developed its computer knowledge and exports some of its specialized machinery in sugar industry. Although means of production are nationalised, the Government has recently welcomed joint-ventures with foreign companies. On 15 February 1982 Cuba enacted Legislative Decree No. 50 entitled "The Joint Venture Law".

2.5 Geographical distribution of manufacturing enterprises

The main trend in geographical distribution of industry in Cuba is lessening the significance of Havana as a principal industrial centre by considerable growth of industry in previously less developed central and eastern provinces. Accelerated development of industry in these provinces is encouraged by the availability of natural and human resources. On the other hand, industrial development of eastern provinces to some extent is hampered by the lack of qualified personnel and adequate infrastructure.

Nevertheless, Havana still remains the most industrially developed part of the country, where more than 40 per cent of the total gross industrial output is produced and almost 25 per cent of the country's labour force is concentrated. It has the most diversified industrial base with machine-building, iron and steel, engineering, etc. dominating the industrial structure.

According to the level of industrial development all provinces of the country can be divided into the following three large groups:

1. Industrially-agrarian group: It includes such relatively less developed provinces as Ciudad de la Habana, Santiago de Cuba, Villa Clara, Matanzas and Camagüey. They possess relatively poor natural resources (except Santiago de Cuba) but large potential of human resources (except Camagüey). Gross industrial output of these provinces makes up from 6 to 7.5 per cent of the country's total. Development priority sectors of industry are energy, chemicals, textiles, food processing (including sugar), and building materials.
2. Agro-industrial group: It is composed of such provinces as Pinar del Rio, Cienfuegos, Sancti Spiritus, Ciego de Avila, Holguin, Granma. Among them are provinces with a variety of natural resources. Thus, in Holguin there are nickel, cobalt and building materials, in Pinar del Rio - metallic and non-metallic minerals, forests. Provinces of this group (except Holguin and Granma) do not have considerable labour resources. The share of agro-industrial group in gross industrial output accounts for 2.2 - 4.8 per cent of the total.

There are remarkable differences between individual provinces of this group not only in growth rates of industry, but also in specialization. In Pinar del Rio, Sancti Spiritus and Ciego de Avila priorities have been accorded to such traditional branches of industry as food processing, including sugar and tobacco, building materials, wood processing. In Holguin and Cienfuegos together with development of traditional sectors, industrial bases have been created for energy production, metal processing, chemical, nickel and machine-building industries. An important distinctive feature of Holguin and Cienfuegos is concentration of industrial enterprises in a few centres - Cienfuegos, Holguin, Moa and Nicaro.

3. Agrarian group: It consists of the least developed provinces, Guantánamo, Las Tunas and Isla de la Juventud (Isle of Youth), where less than 2 per cent of the total industrial output is produced. The main reason for the low level of development is a lack of natural resources.

Industrial development in these provinces is also hindered by inadequate infrastructure, weak energy basis and negligible qualified personnel.

3. INDUSTRIAL DEVELOPMENT STRATEGIES, POLICIES, PLANS AND INSTITUTIONS

3.1 Aims of industrial policy

The industrial structure inherited by the Cuban revolution from the past was formed under the influence of physical and geographic factors, favourable conditions for the development of the sugar industry, availability of cheap labour, dependence on imported implements and means of production and industrial resources.

Within the framework of new industrial policy followed by the new regime since 1960, new sugar factories were built - designed by the Cubans themselves, using 60 per cent of Cuban-made equipment. The level of development reached in this sector enabled Cuba to begin exporting sugar production technology. Modern production facilities were erected in chemical industry to produce sulphuric and citric acids, varnishes and dyes, fertilizers, insecticides, glass, paper, etc. Expansion, reconstruction and modernization of many enterprises permitted a significant increase in the production of steel, a greater volume of capital goods, and the setting up of new sectors like the production of buses, agricultural implements, household appliances, TV and radio sets, computers, etc. The basic aim of industrial policy was to find substitutes for imports and to create exportable surplus.

When Cuba joined the CMEA in 1972, it adopted the Soviet System of economic planning. The First Five-year Plan covered the period from 1975-80.

The basic annual growth indices of the Second Five-year Plan (1981-85) envisaged a 5 per cent GSP growth rate, a 3.3 per cent increase in labour productivity, a 3.2 per cent increase in the salary fund, a 4 per cent increase in individual consumption, and a 3 per cent growth in social consumption. The actual growth rate achieved during the second plan period was 7.3 per cent for GSP and 8.8 per cent for gross industrial output.

Over the five-year period there was to be an increase in sugar production of between 15 and 20 per cent, a 50 per cent increase in electricity generation, a 10 to 15 per cent increase in the volume of fuel available, and a 4 to 4.5 per cent annual growth in production from the local food industry.

In the industrial sector, growth rates over the five years were targeted between 30 and 60 per cent.

The basic objectives of industrial policy during the Second Plan were:

- to start the construction of no less than seven new sugar refineries, extend 23 and modernize 18 of the existing ones, to reach a potential daily granulated capacity of about 690,000 tons of cane in 1985;

- to continue the development of engineering production for the sugar industry to meet the growing requirements of nationalization, instead of using imported equipment and components to produce these items for export;

- to achieve sustained growth in the production of the non-electrical machinery and metal products industries in order to meet the growing demand, to start exporting it;

- to increase the production of agricultural machinery, equipment and implements for replacing to a large extent imports;

- to increase and develop the production of new lines of transport equipment, to work on the production of diesel engines on an experimental scale;

- to increase the production of machinery and equipment for the sugar industry, including substantial parts of sugar refineries with the aim of converting this production into one of the basic export earners;

- to increase and develop the production of steel structures and technological equipment, including complete lines and plants;

- to raise the utilization of production capacities for stainless steel equipment, parts and spares;

- to encourage the production of technical means for computing to meet national needs and to create possibilities for exporting.

Recently the Government decided to reduce construction programmes to save fuel that could be exported, and to restrict material imports. As a result, there was a \$70 million reduction in hard currency expenditure in the construction sector alone. In an attempt to save hard currency, non-essential projects in the industrial sector were sacrificed. Investments which earn hard currency have been left untouched.

The draft of Cuba's Third Five-year Plan (1986-90) was released in mid-November 1985. The 20-page report stresses the need to earn more hard currency, cut oil consumption, improve efficiency and profitability and eliminate shoddy workmanship. The draft says that economic incentives must become a genuine lever in the next five years to encourage greater efficiency from the workers. Solving the problem of increasing earnings of convertible currency constitutes a fundamental objective over the next five years.

Growth of GSP during the Third Five-year Plan period is projected at 5 per cent annually. Oil extraction is expected to increase to 2 million tons per year. Nickel production would grow by 14 per cent per year. Production of pharmaceutical products would increase by 65 per cent during the plan period while exports of pharmaceutical products would double by 1990.

3.2 Recent changes in industrial policy

Cuba's economic development strategy has undergone significant changes over the years. In recent years, the main feature of industrial development policy is the shift towards diversification of the economy with a continuous clear admission of the role of the sugar industry as the principal earner of hard currency.

A broad scope of economic measures was introduced under the new Economic Management and Planning System (cálculo económico), which was aimed at achieving a significant increase of traditional and non-traditional exports of goods and services while reducing convertible currency imports. Special measures have been taken and special incentives have been offered to obtain savings in all sectors of industry, especially with respect to energy and fuel consumption.

All enterprises, with few exceptions, are now subject to financial pressures which entail that each particular productive unit meets its own expenditure from revenue.

After joining the CMEA in 1972, Cuba started participating in various multilateral co-operation programmes:

The programme for comprehensive development of sugar production was signed in 1981 by interested CMEA member countries. It is planned to expand, reconstruct and modernize Cuba's existing capacities for sugar production, and also to establish new facilities to raise sugar production to 12 million tons a year by 1990.

The programme of comprehensive development of agricultural production and industrial processing of citrus fruit provides for co-operation in the production of citrus fruits to meet the growing requirements of the interested CMEA member countries and includes all cycles: from expanding plantations to construction of industrial facilities and refrigerators. In line with the programme, citrus fruit production in Cuba will grow to 1.4 million tons in 1985 and up to 2.6 million tons in 1990.

Under the programme of co-operation in setting up new facilities for the production of nickel and cobalt products the construction of a plant with a capacity of 30,000 tons of nickel-cobalt products a year was completed in November 1985.

Cuba is also participating in the Programme of Co-operation to Intensify Geological Prospecting on the territory of Cuba and the Programme for the Accelerated Development of Science and Technology of Cuba up to 1990.

There has been a renewed emphasis on modernization and diversification of the Cuban industrial sector. Overall growth is forecast at about 5 per cent during 1986-1990. Sugar, nickel and citrus industries receive absolute priority in industrial investment. The key theme of the new economic strategy is attuned to the general search for greater efficiency in industrial activity through the introduction of a new system of incentives and tighter accounting procedures for public enterprises.

3.3 Institutional framework for industry

The Cuban economy is centrally directed in accordance with a national plan prepared by the Central Planning Board (Juceplan). Since 1976 the plan has been drawn up on a five-year basis in harmony with the rest of CMEA countries.

Economic policy, development of the economy and administration lie on the Executive Committee of the Council of Ministers.

The National Bank is the sole banking authority in Cuba. It has complete responsibility for short- and long-term credits, financing of capital investment, overseas payments and monetary resources.

The principal economic institutions are the following:

- Ministry of Food Industry;
- Ministry of Sugar Industry;
- Ministry of the Fishing Industry;
- Ministry of Agriculture;
- Ministry of Light Industry;
- Ministry of the Iron and Steel and Metallurgical Industries;
- Ministry of Heavy Industry;
- Ministry of Construction;
- Ministry of Communications;
- Ministry of Transport;
- Ministry of Foreign Trade;
- State Committee for Technical and Material Supply;
- State Committee for Economic Co-operation.

There are also provincial and municipal administrative institutions.

4. RESOURCES FOR INDUSTRIAL DEVELOPMENT

4.1 Human resources

Cuba's total labour force was estimated at 6.3 million in 1983. With 551,800 persons engaged in industrial activities, manufacturing employment accounted for 8.8 per cent of the total labour force in 1982.

Education is universal and free at all levels. The 1981-85 Five-year Plan emphasizes improvement of professional and technological education, especially in medicine, economics, accountancy and teaching. Appendix Tables 6 and 7 show the details of educational establishments and graduates by field of activity.

National pre-schools are run by the State for children of five years of age, and day nurseries are available for all children after their 45th day. Primary education, from 6 to 12 years of age, is compulsory, and secondary education lasts from 13 to 16 years of age. In 1978 an estimated 99 per cent of children aged 6 to 11 attended primary schools, while 61 per cent of those aged 12 to 17 were enrolled at secondary schools. Workers undergoing university courses receive a State subsidy to provide for their dependants. Courses at intermediate and higher levels have an emphasis on technology, agriculture and teacher training. In 1979 the estimated illiteracy among persons aged 15 to 49 was only 4.6 per cent. Adult education centres gave basic education to 342,769 people in 1981/82.

In 1980 allocations for education amounted to 1,341 million pesos or 137 pesos per capita. In the year 1981 alone 30 million textbooks and manuals were published to meet growing demand of education at all levels.

4.2 Agricultural resources

Agriculture contributes more than 10 per cent of GSP. Over 70 per cent of output is produced on the large state-owned farms which occupy more than half of the arable land. Main indicators of agricultural production are shown in Tables 9 and 10.

Cash crops

The area under sugar cultivation has grown from 1.65 million hectares in 1977 to 1.90 million hectares in 1980. Although some further expansion of the cultivated area was envisaged in the 1981-85 Plan, this would not be the principal method for raising output to the target of 11 million tons by the end of the decade.

The 1981/82 sugar crop harvest was 73.5 million tons, the second-highest since the record 79.6 million tons harvested in 1969/70. This was a 10.6 per cent increase over the 1980/81 level and far exceeded the 1979/80 crop which was so badly damaged by cane rust disease and bad weather.

Cane sowing is now fully mechanized. Mechanical harvesting is planned to cover 65 per cent of the total by 1985 as against 50 per cent in 1980. Some 30 per cent of the planted area will be irrigated. With aid from CMEA countries, Cuba plans to retain its position as the world's largest sugar exporter throughout the 1980s and to reach a target of 11 million tons by the end of the decade.

Table 9. Agricultural and food production indices, 1977-1984
(1974-76 = 100)

	1977	1978	1979	1980	1981	1982	1983	1984
Food production	111	124	133	120	126	137	133	145
Agricultural production	110	122	131	117	129	136	131	143
Food production <u>per capita</u>	109	121	128	115	124	130	125	135
Agricultural production <u>per capita</u>	107	119	126	112	123	129	123	133

Source: FAO, Production Yearbook 1984, vol.38, Rome 1985.

Agricultural production and food output increased steadily during the period 1977-82, except 1980, when drought, flood and diseases badly damaged and destroyed the main part of the country's cultivated area.

Tobacco has traditionally been the second-largest agricultural earner of foreign exchange, but this position has been challenged by the citrus sector. In 1979 the crop was ravaged by blue mould, and although tobacco planters were successful in meeting their goal of 47,000 hectares, they could reap the harvest only from 10 per cent of it. Recovery from the disease has been rapid.

A rice programme was launched in 1968, and by mid-1971 170,000 hectares of irrigated rice fields were in use. 87 drying plants and 30 mills have been established with a capacity of 20,000 tons of milled rice per day.

In line with the policy of diversifying its exports, Cuba launched a major citrus development programme with a target of 1.3 million by 1985, half of it for export. It was planned that an area of around 200,00 hectares should be planted by 1980.

Output of vegetables, fruits and coffee are all to be encouraged over the next five years. The coffee harvest in 1980 yielded 24,000 tons and production is planned to reach 46,000 tons by the end of the decade.

Animal husbandry

In 1978 there were an estimated 5.7 million head of cattle and 1.8 million pigs. In 1980 African swine fever hit the province of Guantánamo and almost all pigs in the province were destroyed.

Poultry raising was given high priority in Five-year Plans and poultry meat production and egg output increased substantially.

Fisheries

Export earnings from fish products accounted for some 400 million pesos between 1976 and 1980. There are two long-range fleets, comprising 67 vessels

Table 10. Indicators of agricultural production, 1970-1982

	1970	1975	1980	1981	1982 ^{a/}	Growth rates ^{b/}			
						1979	1980	1981	1982 ^{a/}
Crop production^{c/}									
Grains									
Rice	366	447	478	461	520	-7.1	12.4	-3.5	12.8
Maize	15	20	24	23	21	1.9	41.7	-3.7	-5.3
Beans	3	3	10	8	13	1.8	123.7	-14.3	59.3
Vegetables									
Tomatoes	53	169	207	312	222	17.5	26.2	50.7	-28.9
Onions	6	9	10	16	15	21.9	-4.0	68.7	-7.5
Peppers	-	21	45	34	36	0.4	45.5	-24.0	4.8
Roots and tubers									
Potatoes	77	121	239	273	257	1.3	19.2	14.0	-5.6
Boniato	19	82	228	202	177	46.0	141.1	-11.6	-12.4
Malanga	9	30	161	99	45	-9.2	-17.7	-38.4	-54.3
Fruits									
Citrus fruits									
Oranges	69	121	298	260	338	-0.3	61.0	-12.6	29.9
Lemons	5	12	25	30	41	46.4	29.6	20.5	35.2
Grape fruit	-	23	54	146	127	-	72.9	74.1	-13.0
Bananas	73	183	233	261	271	-6.8	1.1	11.7	3.7
Mangoes	3	33	59	50	55	245.8	-10.2	-15.9	10.9
Guavas	6	18	46	41	43	30.6	10.3	-9.8	3.6
Tobacco	32	42	8	55	45	-20.4	-74.8	564.5	-17.8
Coffee	20	20	24	23	29	73.4	-7.5	-4.2	26.1
Cocoa	1	1	1	1	3	21.3	-45.4	5.5	123.8
Fibre crops									
Kenaf	1	21	10	16	16	39.6	-35.6	61.9	-4.3
Henequen	215	276	206	133	229	3.4	-6.0	-35.3	71.7
Cultivated pasture fodder									
	36	39	43	43	-	3.6	0.8	0.9	-
Livestock									
Stocks									
Milk cows ^{d/}	309	359	398	410	414	-0.6	3.2	3.2	1.0
Swine ^{d/}	280	599	765	840	831	2.3	7.1	9.8	-1.0
Poultry ^{e/}	13	18	25	24	-	11.1	-1.0	-2.5	-
Animals slaughtered^{f/}									
Cattle	-	-	293	304	300	-7.0	4.9	3.8	-1.3
Swine	16	43	58	68	70	-1.8	-4.7	18.3	2.7
Poultry	-	57	91	103	76	4.5	13.5	13.1	-26.1
Other production									
Milk ^{g/}	380	591	889	926	926	1.0	12.4	4.3	-
Eggs ^{h/}	1 361	1 646	2 050	2 066	2 247	4.9	14.4	0.8	8.5
Honey ^{h/}	5	6	7	9	10	-8.8	12.1	20.3	13.8

Source: ECLA, Economic Survey of Latin America and the Caribbean, 1982, Santiago, 1984.

^{a/} Preliminary figures.

^{b/} The growth rates correspond to real, rather than rounded-off, figures.

^{c/} Thousands of tons, except for henequen, which is expressed in millions of units.

^{d/} Thousands of head.

^{e/} Millions of units, final stock.

^{f/} Thousands of tons.

^{g/} Tons.

^{h/} Millions of units.

(including 26 factory ships), and two medium-range fleets with a total of 298 vessels. There are also 4 canning enterprises, 9 freezing plants, 15 ice production units, 30 fish collection and distribution centres and a large transport unit.

The catch increased more than sevenfold from 27,000 tons in 1959 to 185,000 tons in 1977, and reached a record of 220,000 tons in 1978. It declined to 199,400 tons in 1984. The principal foreign exchange earners are tuna and lobster.

Since 1978 catch levels have fallen, partly as a result of the establishment of 200-mile fishing limits and also the cancellation of certain bilateral fishing agreements. The 1981-85 Plan included provision for the development of pisciculture with the construction of 10 breeding stations and 20 collecting centres.

TABLE 11. Fish catch, 1977-1984
(in thousands of metric tons, live weight)

	1977	1978	1979	1980	1981	1982	1984
Total catch	185.0	220.0	...	186.5	164.5	195.2	199.4

Source: The Europa Year Book, A World Survey, 1984 and 1985.

Forestry

Commercial forests cover only 1.5 million acres. These forests contain valuable cabinet woods, such as mahogany and cedar, besides dye-woods, fibres, gums, resins and oils. Cedar is used locally for cigar-boxes and mahogany is exported.

Annual timber output is approximately 3 million cubic yards, while imports average 9 million cubic yards. Since 1959 Cuba has carried out an

extensive reforestation programme covering mountainous areas. Thus, 1980 saplings planted included: eucalyptus 2,110; pine 34,372; Majagua 4,187; mahogany 1,729; cedar 1,722; casuarina 9,671.

4.3 Mineral resources

Cuba has the fourth largest nickel resources in the world, estimated at 19 million tons. Cuban reserves are 10 per cent of the world total. Finished product nickel output has ranged between 36,000 and 40,000 tons a year for the past 20 years.

Nickel production may increase substantially to about 60,000 tons a year with the completion of a new refinery. Production tests will be run late 1984 and full capacity will be reached later in the 1980s. A \$570 million plant has been built with Soviet financing and equipment. Completion of another new plant by the end of this decade will increase Cuban nickel output to perhaps 100,000 tons a year.

Iron ore reserves are estimated at 7 billion tons of laterite and 100 million tons of magnetite and are being exploited on a small scale for local foundries. Cuba aims to achieve self-sufficiency in iron ore using Soviet technology to recover iron from waste material left over from nickel operations.

Average copper concentrates production is 2,500 tons a year. According to 1981-85 plan it is supposed to rise to 4,000 tons a year.

Chromite and cobalt are expected to maintain their 1970 production levels.

There are also substantial deposits of manganese, lead and zinc which so far have been little exploited.

It was expected that sand and stone output would grow by 14 per cent and 40 per cent, respectively, in 1981-85 over the previous Five-year period (1975-80).

4.4 Energy resources

Cuba is heavily dependent on imported fuel for energy production. It imports about 220,000 b/d of crude and petroleum products, mostly from the USSR, but also from Mexico and Venezuela.

Cuba's petroleum industry has expanded in the past several years. Production has more than doubled, from 5,400 bbl/d in 1980 to an estimated 12,000-14,000 b/d in 1983. Further production gains appear likely. Target levels of 14,000-16,000 b/d are set for 1985.

Recent efforts have focused on the north-coast basin, immediately east of Havana. Drilling involves directional wells from coastal points to off-shore targets at depths reaching 3,000 metres. Plans for off-shore fixed platform drilling are being made. Development is being carried out with extensive Soviet financial and technical assistance.

According to the latest information new reserves of oil have been found in Cuba, which will enable the country to increase domestic crude oil production significantly in the near future.

TABLE 12. Energy production, 1977-1982

	1977	1978	1979	1980	1981	1982
Crude oil '000 m. tons	256	288	288	273	253	541
Natural gas '000 cu. metres	17,754	10,584	17,531	17,755	13,285	10,700
Electric energy million kwh	7,707	8,481	8,084	9,896	10,574	11,024

Source: The Europa Year Book, A World Survey, London, 1984 and 1985.

In spite of the fact that there are no large rivers for hydroelectric plants on a large scale, and similarly only limited quantities of natural gas,

electricity generating capacity had almost doubled since 1975 to 2,100 MW by the end of 1980. A new 330 MW thermal power station is planned at Matanzas on the north coast, to be built by a French company. During the previous five-year period the distribution network for electricity was greatly expanded. Increased use of bagasse as a fuel instead of oil in sugar production and recent selective price increases for electricity users are expected to reduce demand somewhat, particularly from non-essential domestic and institutional users. Electric power output is planned to increase by more than 50 per cent by 1985, with over 1,000 MW of additional thermal power capacity to be created by that year.

Cuba is building its first nuclear power station at Cienfuegos with USSR's technical and scientific co-operation. The schedule has been set back from its original target because of geological factors, but the station is expected to begin operating within five years and will have a capacity of 850 MW.

A UNIDO-sponsored team has identified four projects in Cuba where solar-powered water heating systems might be introduced, and Cuba is apparently interested in the possibility of harnessing solar energy for water desalination and air-conditioning.

4.5 Financial resources and technical assistance to industry

The chief sources of budgetary income are the profits from commercial and industrial enterprises run by the state, income tax and social security contributions. Cuba also receives considerable technical aid funds from the USSR and other CMEA member countries.

Furthermore, there are advantageous trade credits from the USSR; no cash payments and a 12-year repayment period at an annual interest of 4 per cent maximum. Financial credits are payable over 25 years with an interest rate of 2 per cent per annum. Moreover repayment of economic and financial credits granted before December 1972 was deferred until 1986, with no interest charged during the period of extension.

In the 1982 and 1983 budgets the share of industry and agriculture remained steady at about 33 per cent, while in previous years it was at the level of 42 per cent. In the 1982 and 1983 budgets the share of education, health and other social, cultural and scientific activities accounted for about 36 per cent of the total, while in the 1981 budget the corresponding figure was 29 per cent.

In the non-productive sphere the housing programme is to be stepped up, with 190,000 new dwellings planned to be built by 1985.

In 1984 spending on health and education was set to increase by 14.3 and 5.1 per cent, respectively, science and technology by 15.6 per cent, culture and the arts by 9.1 per cent and sports by 10.8 per cent. More money was earmarked for the social services, including an increase of 43 million pesos for retirement pensions.

The 1984 budget provided for a surplus of 221.7 million pesos on revenue of 11,471.3 million pesos and expenditure of 11,249.6 million. This represents increases of 1 per cent on revenue and 2.6 per cent on expenditure in 1983, when there was a budget surplus of 385 million pesos, compared to the targeted 196.5 million.

Technical assistance provided by UNIDO totalled \$606,443 in 1984. Appendix B presents a list of the approved and/or operational technical co-operation projects implemented under the auspices of UNIDO during 1974-85. Assistance has been provided in such areas as chemicals, agro-industries, mineral processing, as well as feasibility studies, training and management.

Future technical assistance aimed at diversifying the manufacturing sector, increasing capacity utilization, improving efficiency especially in non-sugar industries, and broadening the product composition of manufactured exports would appear to be of high priority. The main component of bilateral or multilateral technical assistance to Cuba may consist of appropriate technology, equipment and assistance for maximum utilization of installed capacity and available human resources.

Appendix A
Statistical Tables

Table A-1. Material product index, 1979-1982
(1975 = 100)

	1979	1980	1981	1982 ^{a/}	Growth rates ^{b/}			
					1979	1980	1981	1982 ^{a/}
Material product index (1975 = 100)								
Total ^{c/}	116.4	118.2	138.4	142.2	4.6	1.6	17.9	2.8
Non durable consumer goods industry	120.8	122.3	141.0	149.1	6.6	0.4	16.2	5.8
Foodstuffs (excluding sugar)	112.6	120.2	137.4	142.2	5.4	6.8	14.2	3.5
Sugar and sugar products	131.3	121.6	141.1	145.7	4.5	-7.4	16.1	3.2
Beverages and tobacco	117.5	117.0	142.6	161.9	7.3	-0.4	21.7	13.6
Ready-made clothing	149.3	143.1	171.7	165.9	12.5	-4.1	20.1	-3.4
Printed matter	122.5	129.3	153.7	119.2	6.2	5.6	18.9	-22.5
Intermediate goods industry ^{c/}	100.7	102.4	116.8	107.8	0.8	1.7	14.0	-7.7
Textiles	85.6	101.0	113.7	113.8	-7.3	18.0	12.6	0.1
Chemicals	99.2	100.1	124.9	103.5	3.1	0.9	24.8	-17.1
Fuels	98.8	96.7	100.3	102.0	0.2	-2.1	3.7	1.7
Construction materials	115.2	117.7	133.3	122.8	0.2	2.1	13.3	-7.9
Consumer durables and capital goods industry	139.6	143.2	177.7	189.2	10.1	2.6	24.1	6.4
Construction of non-electrical machinery	162.3	172.2	215.8	234.9	9.3	6.1	24.8	8.8
Electrotechnical and electronic goods	95.9	93.6	123.9	110.6	10.7	-2.5	33.4	-10.7
Metal products	137.0	130.9	150.2	165.3	12.5	-4.5	14.8	10.1
Other manufactures ^{c/d/}	107.9	116.4	142.9	144.8	-3.9	7.8	23.7	1.3
Consumption of electricity by industry ^{e/}	...	3,003	3,590	3,641	...	...	19.6	1.4
First quarter	...	698	849	932	...	...	21.6	9.8
Second quarter	...	790	909	972	...	...	15.1	6.9
Third quarter	...	745	902	888	...	...	21.0	-1.6
Fourth quarter	...	770	930	849	...	...	16.4	-8.7

Source: ECLA, Economic Survey of Latin America and the Caribbean, 1982. Santiago, 1984.

a/ Preliminary figures.

b/ The growth rates were calculated on the basis of real, rather than rounded-off, figures.

c/ Excluding basic metals.

d/ Including, inter alia, the leather, glass and pottery, paper and pulp and forestry and timber processing industries.

e/ GWh.

Table A-2. Production of raw sugar and sugar cane (milled), 1960-1984
(thousands of tons)

Year	Sugar cane milled	Raw sugar (96 polarization)
1960	47,492	5,943
1965	50,687	6,156
1970	79,678	8,538
1975	50,770	6,314
1976	51,999	6,156
1977	56,149	6,485
1978	67,043	7,351
1979	73,050	7,992
1980	61,600	6,665
1981	66,408	7,359
1982	73,500	8,210
1983	...	7,460
1984	...	7,783

Sources: ECLA, Economic Survey of Latin America and the Caribbean, 1982. Santiago, 1984.

Banco Nacional de Cuba - Comite Estatal De Estadisticas, Cuba, Quarterly Economic Report.
December 1984.

Table A-3. Exports of goods by main countries and country groupings, 1970-1982

	Millions of Cuban pesos			Percentage Share			Growth Rates			
	1979	1980	1981	1970	1979	1981	1979	1980	1981	1982 ^{a/}
Total	3,499	3,967	4,210	100.0	100.0	100.0	1.7	13.4	6.1	17.3
Socialist area	2,884	2,786	3,181	74.0	82.4	75.6	-1.1	-3.4	14.2	31.4
Market economy area	615	1,181	1,029	26.0	17.6	24.4	17.4	92.0	-12.9	-26.1
Traditional exports	3,466	3,827	3,979	99.9	99.1	94.5	1.3	10.4	4.0	...
Socialist area	2,861	2,677	2,996	...	81.8	71.2	...	-6.4	11.9	...
Market economy area	606	1,150	983	...	17.3	23.3	...	89.8	-14.5	...
Sugar industry	3,003	3,317	3,335	77.1	85.8	79.2	0.3	10.5	0.5	...
Socialist area	2,679	2,452	2,625	...	76.6	62.4	-0.8	-8.5	7.1	...
Market economy area	324	865	710	...	9.3	16.9	11.2	167.0	-17.9	...
Mining	162	193	319	16.7	4.6	7.6	-0.1	19.1	65.3	...
Socialist area	106	138	262	...	3.0	6.2	...	30.2	89.9	...
Market economy area	56	55	57	...	1.6	1.4	...	-1.8	3.6	...
Nickel	154	184	312	16.5	4.4	7.4	-0.7	19.5	69.6	...
Tobacco industry	60	36	56	3.2	1.7	1.3	-13.0	-40.0	55.5	...
Socialist area	10	2	2	...	0.3	-	-26.4	-80.0	-	...
Market economy area	50	34	54	...	1.4	1.3	-9.6	-32.0	58.8	...
Fishery products	97	90	98	1.8	2.8	2.3	14.1	-7.2	8.9	...
Socialist area	-	-	-	...	-	-	-	-	-	...
Market economy area	97	90	98	...	2.8	2.3	14.1	-7.2	8.8	...
Agricultural commodities	66	72	113	0.7	1.9	2.7	17.8	9.1	56.9	...
Socialist area	48	49	80	...	1.4	1.9	...	2.1	63.3	...
Market economy area	18	23	33	...	0.5	0.8	...	27.8	43.5	...
Citrus fruits	34	41	78	0.2	1.0	1.8	15.2	20.6	90.2	...
Coffee	22	22	28	0.5	0.6	0.7	-5.6	-	27.3	...
Other products	78	118	57	0.4	2.2	1.4	27.0	51.3	-51.7	...
Socialist area	17	36	27	...	0.5	0.6	...	111.8	-25.0	...
Market economy area	61	82	30	...	1.7	0.7	...	34.4	-63.4	...
Alcoholic beverages	19	25	16	0.2	0.5	0.4	39.9	31.6	-36.0	...
Naphta	54	72	16	...	1.5	0.4	-14.6	33.3	-77.8	...
Non-traditional exports	31	43	68	0.1	0.9	1.6	...	38.7	58.1	...
Socialist area	21	13	21	...	0.6	0.5	...	...	61.5	...
Market economy area	10	31	47	...	0.3	1.1	...	...	51.6	...
Iron and steel and machinery industry	1	6	20	-	-	0.5	...	500.0	233.3	...
Light industry and leather industry	2	3	7	-	-	0.2	...	50.0	133.3	...
Chemical industry	8	9	13	0.1	0.2	0.3	...	13.5	47.7	...
Construction materials	4	13	15	-	0.1	0.4	...	225.0	15.4	...
Re-exports	2	96	162	-	-	3.9	-88.8	...	69.8	...

Source: ECLA, on the basis of figures from the State Statistical Committee and UNCTAD.

a/ Preliminary figures estimated by ECLA.

Table A-4. Imports of goods by main countries and country groupings, 1979-1982

	Millions of Cuban pesos			Percentage Share			Growth Rates			
	1979	1980	1981	1970	1979	1981	1979	1980	1981	1982 ^{a/}
Total	3,687	4,545	5,158	100.0	100.0	100.0	-0.3	23.3	13.5	7.3
Socialist area	3,053	3,540	4,175	69.9	82.8	80.9	7.2	16.0	17.9	17.6
Market economy area	634	1,005	983	30.1	17.2	19.1	-12.6	58.5	-2.2	36.1
Foodstuffs and beverages	627	775	873	25.9	17.0	16.9	-3.8	23.6	12.6	...
Socialist area	539	539	674	...	14.6	13.1	-1.8	-	25.0	...
Market economy area	88	236	199	...	2.4	3.8	-15.2	168.2	-15.7	...
Raw materials, excluding fuels	156	197	218	6.0	4.2	4.2	1.3	26.3	10.7	...
Socialist area	131	141	177	...	3.5	3.4	-1.1	7.6	25.5	...
Market economy area	25	56	41	...	0.7	0.8	12.1	124.0	-26.8	...
Fuels and lubricants, minerals and related products	760	930	1,154	11.2	20.6	22.4	15.8	22.4	24.1	...
Socialist area	751	908	1,145	...	20.4	22.2	15.7	20.9	26.1	...
Market economy area	9	22	9	...	0.2	0.2	23.3	144.4	-59.6	...
Chemical products	238	302	337	7.7	6.5	6.5	5.4	26.9	11.6	...
Socialist area	143	183	209	...	3.9	4.0	-6.2	28.0	14.2	...
Market economy area	95	119	128	...	2.6	2.5	29.4	25.3	7.6	...
Manufactures, classified primarily by material	563	627	728	12.9	15.3	14.1	4.6	11.4	16.1	...
Socialist area	429	454	543	...	11.6	10.5	4.3	5.8	19.6	...
Market economy area	134	173	185	...	3.6	3.6	5.3	29.1	6.9	...
Machinery and equipment and their parts, components and accessories	1,259	1,598	1,723	36.3	34.2	33.4	-1.1	26.9	7.8	...
Socialist area	991	1,226	1,322	...	26.9	25.6	10.1	23.7	7.8	...
Market economy area	268	372	401	...	7.3	7.8	-2.0	38.8	7.8	...
Miscellaneous manufactures	83	116	125	0.1	2.3	2.4	13.5	39.8	7.8	...
Socialist area	69	90	104	...	1.9	2.0	24.8	30.4	15.6	...
Market economy area	14	26	21	...	0.4	0.4	-21.3	85.7	-19.2	...

Source: ECLA, on the basis of figures from the State Statistical Committee and UNCTAD.

a/ Preliminary figures estimated by ECLA.

Table A-5. Number of students in secondary and higher educational establishments, 1970-1982 (selected years)
(in thousands)

Level of Education	1970	1975	1980	1982
General secondary	171.2	382.6	677.6	612.6
Pre-university	15.5	37.7	159.7	176.7
Technical and professional	27.6	114.7	228.5	270.0
Teacher training	58.3	94.2	112.1	93.0
Higher and universities	35.1	84.7	151.7	200.0
Total	307.7	713.9	1,329.6	1,352.0

Source: CMEA Secretariat.

Table A-6. Graduates by field of study, 1980

<u>Field of study</u>	<u>Number of graduates</u>
Total	25,898
Education science and teacher training	13,691
Humanities, religion and theology	533
Fine and applied arts	152
Law	650
Social and behavioural science	383
Commercial and business administration	2,422
Mass communication and documentation	237
Natural science	623
Mathematics and computer science	104
Medical and health-related science	1,409
Engineering	2,905
Architecture and town planning	345
Transport and communications	274
Agriculture, forestry and fishery	1,739
Other and not specified	431

Source: UNESCO, Statistical Yearbook 1983.

Table A-7. Indicators of external indebtedness, 1979-1982
(millions of Cuban pesos)

	1979	1980	1981	1982
Total disbursed debt ^{a/}	3,267	3,227	3,170	2,683 ^{b/}
Bilateral official debt	1,280	1,384	1,294	1,232 ^{b/}
Multilateral official debt	-	8	15	17 ^{b/}
Suppliers	33	27	33	28 ^{b/}
Financial institutions	1,953	1,837	1,826	1,405 ^{b/}
Medium-term bilateral loans and loans for consortiums	659	563	505	443 ^{b/}
Short-term deposits	1,269	1,238	1,282	907 ^{b/}
Credits for current imports	25	36	39	55 ^{b/}
Other credits	2	1	1	1 ^{b/}
Disbursements ^{c/}	...	114	224	204
Serviced ^{d/}	403	417	619	1,036
Interest paid	176	263	338	345
Amortization payments on long-term debts	101	96	142	96
Amortization payments on short-term debts	126	58	139	595
Ratios				
Total disbursed debt/ global social products	19.3	18.3	14.0	9.9
Total debt service/exports of goods and services ^{e/}	45.3	28.7	35.9	64.7
Total debt service/disbursements	...	365.8	276.3	507.8
Total debt service/global social product	2.4	2.4	2.8	4.5

Source: ECLA, on the basis of data from the State Statistical Committee, the National Bank of Cuba and UNCTAD.

- a/ Includes commitments in freely convertible currency falling due one year or more after the date of issue.
- b/ Preliminary figures (August).
- c/ Estimated on the basis of the difference between the total disbursed debt, plus total amortization payments made during the year.
- d/ Relates to service payments included in the balance of payments.
- e/ Owing to lack of detailed information, exports of goods and services include factor services, except for interest payments on the debt.

Appendix B

The approved and/or operational technical cooperation projects of UNIDO

Republic of CUBA

Project Number	Spec. Act. Code	Project Title
DP/CUB/74/011*	IO/AGRO (31.7.C)	Development Centre for Industrial Fermentation and Nutrition (multifund to DA/CUB/74/011)
UC/CUB/78/093*	IO/CHEM (32.1.D)	Establishment of a multipurpose plant in Cuba (multifund to UD/CUB/78/093 and DP/CUB/79/004; UD/CUB/84/225 also refers)
UD/CUB/78/093*	IO/CHEM (32.1.D)	Establishment of a multipurpose plant in Cuba (multifund to UC/CUB/78/093 and DP/CUB/79/004; UD/CUB/84/225 also refers)
DP/CUB/79/004*	IO/CHEM (32.1.D)	Multipurpose plant (phase II) (multifund to UC/UD/CUB/78/093)
DP/CUB/81/003*	IO/MET (31.8.F)	Mineral beneficiation pilot plant (phase I)
DP/CUB/81/012*	IO/AGRO (31.7.E)	Asistencia al Centro Nacional de Envases y Embalajes
DF/CUB/81/013*	IO/CHEM (32.1.D)	Centre for the development of the pharmaceutical industry
DP/CUB/81/014*	IO/CHEM (32.1.G)	Establecimiento de una planta demostrativa para la formulacion de plaguicidas
DP/CUB/81/015*	IO/ENG (31.9.A)	Diseño industrial
DU/CUB/82/003	IO/CHEM (32.1.E)	Centro de investigaciones del S. Jazo (phase II of DU/CUB/73/006)
UC/CUB/84/014	IO/FEAS (31.6.A)	Pre-feasibility study on production of newsprint from bagasse
UD/CUB/84/225	IO/CHEM (32.1.D)	Establishment of a multi-purpose pilot plant (UC/UD/CUB/78/093 also refers)
SI/CUB/84/801	IO/AGRO (31.7.D)	Technical assistance in development of footwear technology
SI/CUB/84/802	IO/CHEM (32.1.D)	Technical assistance to the National Centre for Biological Investigation (CIB)
DP/CUB/85/001	IO/FEAS (31.6.A)	Introducción en Cuba del sistema COMFAR
RP/CUB/85/001	IO/TRNG (31.5.B)	Training in industrial maintenance
SI/CUB/85/801	IO/CHEM (32.1.A)	Assistance to develop gypsum and lime production
SI/CUB/85/802	IO/FCTY (31.4.C)	Improved industrial management through computer support

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

** Total allotment \$1 million or above.

SELECTED REFERENCES

- Atlas of the Third World, New York 1984.
- Banco Nacional De Cuba - Comité Estatal De Estadísticas: Quarterly Economic Report of Cuba, December 1982 and December 1984.
- Council for Mutual Economic Assistance, Secretariat: Cuba - a CMEA Member Country, Moscow 1984.
- Economic Survey of Latin America and the Caribbean, Statistical Yearbook, Latin America, Santiago, 1984.
- The Economist Intelligence Unit: Quarterly Economic Review of Cuba, Dominican Republic, Haiti and Puerto Rico, Annual Supplement, various issues.
- The Europa Year Book, A World Survey, London 1984, 1985.
- Handbook of the Nations, Third Edition, Gale Research Company, Detroit, Michigan, 1983.
- Lloyds Bank Group, Cuba Economic Report, London 1982, 1983 and 1985.
- Mining 1984, Annual Review, London 1985.
- The 1984 South American Handbook, Trade and Travel Publications, England.
- Oesterreichische Laenderbank, Abecor Country Report of Cuba, 1982 and 1984.
- Soviet Economitsheskoy Vzaimopomoshtchi: Economitsheskoe Sotrudnitchestvo Stran - Tchlenov SEV, no.7 and 10, 1984 (in Russian).
- The Statesman's Year Book, Statistical and Historical Annual of the States of the World for the Year 1984-1985.
- Statistical Yearbook of Member States of the Council for Mutual Economic Assistance, 1984 and 1985 (in Russian).
- United States Department of State, Bureau of Public Affairs, Background Notes of Cuba, April 1983.
- World Bank: World Development Report 1983, 1984 and 1985.
- World Development, "The Recent Worldwide Economic Crisis and the Welfare of Children: The Case of Cuba," 1984.
- World of Information: Latin America and Caribbean 1984, London 1984.

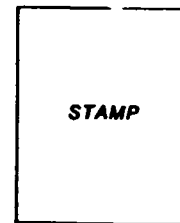


(Additional comments)

Fold 1

AEROGRAMME

Return Address:



**Regional and Country Studies Branch (D2036)
United Nations Industrial Development Organization
P.O. Box 300
A-1400 Vienna
AUSTRIA**

Fold 2



Please close with staples

Dear Reader,

Would you like to have your name included in the mailing list for the *Country Industrial Development Review Series*?

In order to make future issues more relevant and informative and to aid in the updating and revision of the *Reviews*, the staff of the Regional and Country Studies Branch solicit your comments and suggestions. We would therefore appreciate your response to the questions listed below. Please return this pre-addressed form to UNIDO (as an aerogramme—no envelope needed).

Industrial Development Review of **CUBA**

(a) Do you consider the *Industrial Development Review*:

	Check
Very important	<input type="checkbox"/>
Useful	<input type="checkbox"/>
Of little importance	<input type="checkbox"/>

(b) For which particular purpose is the *Review* useful? _____

(c) Suggest additional topics to be covered or additional emphasis on specific subject: _____

(d) Criticism of analyses and other comments. _____

(e) Which of the following activities are you involved in?

	Check
Government policy making	<input type="checkbox"/>
International aid	<input type="checkbox"/>
Business/industry	<input type="checkbox"/>
Industrial institution	<input type="checkbox"/>
Academic research	<input type="checkbox"/>
Journalism	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>

(f) Would you like to receive *Reviews* on:

	Check
Asia and Pacific countries	<input type="checkbox"/>
West Asian (Arab) countries	<input type="checkbox"/>
African countries	<input type="checkbox"/>
Latin American countries	<input type="checkbox"/>
All developing regions referred to above	<input type="checkbox"/>
Specific countries (please specify)	<input type="checkbox"/>

(g) Please send future *Reviews* to the following address:

_____ (Name)

_____ (Occupation, title)

_____ (Organization)

_____ (District, city)

_____ (P.O. Box)

_____ (Country)

Previously issued in the Industrial Development Review Series:

Indonesia	UNIDO/IS.458	1984
Kenya	UNIDO/IS.459	1984
Argentina	UNIDO/IS.460	1984
Paraguay	UNIDO/IS.461	1984
Uruguay	UNIDO/IS.462	1984
Bangladesh	UNIDO/IS.510	1985
Swaziland	UNIDO/IS.516	1985
Zambia	UNIDO/IS.520	1985
The Philippines	UNIDO/IS.527	1985
Pakistan	UNIDO/IS.535	1985
The Sudan	UNIDO/IS.541	1985
Malaysia	UNIDO/IS.545	1985
India	UNIDO/IS.547	1985
Thailand	UNIDO/IS.548	1985
Peru	UNIDO/IS.552	1985
Nigeria	UNIDO/IS.557	1985
Bolivia	UNIDO/IS.564	1985
Chile	UNIDO/IS.579	1985
The People's Republic of China	UNIDO/IS.582	1985
Bahrain	UNIDO/IS.592	1985
Sri Lanka	UNIDO/IS.613	1986