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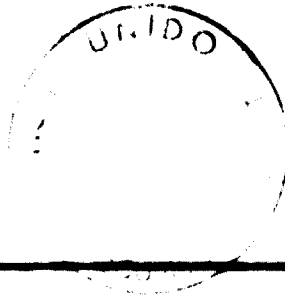
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**EXPLORATORY MISSION TO THE UNITED MEXICAN STATES  
ON PLANNING THE PROMOTION OF EXPORT-ORIENTED INDUSTRIES**

(19 January-13 February 1974)

by

P. Kardos

**Industrial Development Officer  
Export Industries Section  
Industrial Policies and Programming Division**

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## INTRODUCTION

1. The Government of Mexico requested the United Nations Industrial Development Organization (UNIDO) to assist the Secretariat of Industry and Commerce (S. I. C.) in planning the promotion of the export-oriented industries for upgrading production and productivity standards with a view to improve export performance of selected industrial sectors.

2. In accordance with the request of the Government, a short-term exploratory mission to Mexico was organized by UNIDO under Special Industrial Services Programme (Project no: TS/EX/7./001/32301). The mission took place from 19 January to 13 February 1971 including discussions with IBRD officers on 20/21 January 1971. Terms of reference for the mission were defined as follows:

- to study production conditions and export performances of different industrial branches and to analyse factors impeding the improvement of export production;
- to assist the Government in selecting industrial sectors with good export prospects and having comparative advantages and in designing a plan of action for the promotion of these areas;
- to suggest measures to improve utilization of existing capacities for export and to improve the productivity and competitiveness of production;
- to assist in formulating the terms of reference for the establishment, development and location of new export-oriented industrial sectors.

3. Having studied available documentations and background informations, discussions were carried out during the stay in Mexico with various Government officials and representatives of the business community as well as of institutions active in the field of export of manufacture. The list of persons met appears in Annex 1 attached to this report.

4. Sincere gratitude should be expressed to all Government and other officials as well as to industrialists met for the most useful information and orientation received during these discussions. It was only on this basis possible to study in depth the situation and problems of export development formulating the recommendations aiming at to improve export performance and accelerate export of manufactures as contained in chapter IV of the report.
5. Special thanks should be expressed to Lic. Guillermo Becker, Under-Secretary of Industry, and Lic. Jorge Orvañanos, Sub-Director General of Industries, S. I. C. for the orientation and advice received from them.
6. The programme of the mission was organized by Lic. J. H. Avila, Chief of Industrial Promotion and Programming Department, Secretariat of Ministry of Industry and Commerce, who acted as Government counterpart to the mission. His valuable assistance and the effective arrangements made in carrying out the programme of the mission as well as consultations with him and other staff of S.I.C. made it possible to complete the task in a comparatively short period of stay in Mexico.
7. Consultations prior to the arrival in Mexico were carried out in Washington with Prof. B. Balassa and other officers of the International Bank for Reconstruction and Development (IBRD) and thanks should be expressed for the information received on economic policy matters closely related to the scope of the mission.
8. Deep indebtedness is felt for the support given by the UNDP Resident Representative in Mexico, Mr. Luis Perez-Asteta. The preparatory work carried out prior to the arrival and the assistance extended by Mr. E. Napolitano, UNIDO Field Adviser, during the stay in Mexico as well as the consultations carried out with Mr. H. Kruidsvink, Programme Officer of UNDP Office in Mexico City largely contributed to fulfil the scope of the mission.

I. BASIC DATA

Area 1.972.547 sq.km.	<u>1970</u>	<u>1971</u>	<u>1972</u>
Population (millions)	50.4	52.2	54.3
Annual Rate of Population Growth	3.5	3.5	3.5

Gross Domestic Product

Amount at Current Market Prices (US\$ mill.)	33,520	36,400	43,700
Rate of Growth at Constant Prices (%)	7.2	3.7	7.5
Rate of Growth at Current Prices (%)	11.7	8.6	13.6
GDP per Capita at Current Market Prices(US\$)	668	697	726

Origin of GDP (in percent)

	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Agriculture	11.6	11.6	9.8
Mining	0.9	0.9	1.0
Manufacturing	27.0	27.1	29.0
Construction	4.5	4.5	3.2
Power	1.8	1.9	1.3
Commerce	32.2	31.5	31.4
Other	22.0	22.5	22.3

Exports of Goods (in mill. US\$)

	<u>1970</u>	<u>1971</u>	<u>1972</u>
Total Exports (f.o.b.)	1,373	1,474	1,663
Total Manufactured Exports (incl. basic mineral products)	517	617	880
Manufactured Exports/Total Exports (%)	37.7	41.9	52.8

BALANCE OF PAYMENTS  
(in mill. of US\$)

	1970	1971	1972
I. Balance of commodities and services	- 924.0	- 703.1	- 789.4
A. <u>Exports of commodities and services</u>	2.956.7	3.192.8	3.795.1
1. Export of commodities	1.281.3	1.363.4	1.665.3
2. Silver production	66.4	46.9	51.1
3. Tourism	415.0	461.0	562.6
4. International travel	39.3	47.3	59.5
5. Border transactions	878.9	966.9	1.057.0
6. Services for processing	80.9	101.9	164.7
7. Other schemes	194.9	205.4	234.9
B. <u>Imports of Commodities and Services</u>			
1. Imports of commodities	2.326.0	2.254.0	2.717.9
2. Tourism	169.7	172.2	220.4
3. International travel	53.9	54.3	65.7
4. Border transactions	585.0	612.5	649.3
5. Dividends, interest and other payments of enterprises with foreign investment	355.1	381.1	451.6
6. Interest on official debts	231.6	238.8	266.5
i) Nafinsa* and others (*Nacional Financiera Sociedad Anónima)	213.0	221.3	246.1
ii) Government	18.6	17.5	20.3
7. Other schemes	158.6	183.0	213.1
II. Errors and omissions in current account and in capital movement (net)	476.8	194.4	213.8
III. Long range capital transactions (net)	503.9	669.1	790.4
1. Direct foreign investments	200.7	196.1	214.9
2. Purchasing of foreign enterprises	-	-	-
3. Transactions in stocks and values	- 7.2	52.0	6.2
4. External credits (net)	324.2	450.6	557.8
a) Public sector	263.1	286.4	359.7
i) Loans	799.0	742.2	864.2
ii) Mortgages	- 535.9	- 455.8	- 504.4
b) Private sector (net)	61.1	164.2	198.1
i) Enterprises with foreign invest- ment (net)	41.7	168.0	191.3
ii) Other enterprises (net)	19.4	- 3.8	6.8
5. Government debts (net)	- 2.3	- 28.9	37.8
6. External credits	- 11.5	- 0.7	- 16.3
IV. Special drawing rights	45.4	39.6	49.9
V. Variations in the reserves of the Bank of Mexico, S. A. (Total of I, II, III and IV)	102.1	200.0	264.7

## II. BACKGROUND INFORMATION

### A. Mexico's economic structure and industrial development

9. Economic development in Mexico during the 1960's and early 1970's has shown a high rate of growth and compares favourably with the best in Latin America and in developing countries altogether.

10. GDP was generally characterized by a high rate of growth in the recent period except in certain years like in 1971, when a slackening of domestic, public and private investments as well as low rate of growth of production was mainly due to depressed economic conditions in the United States.

11. It should furthermore be noted that effect of growth in GDP is partially absorbed by the substantial increase of prices which amounted to annually 3 - 4% in most of the years and the rapid population increase of 3.5% annually consumes the other bigger part of this increase so that per capita GDP growth at current prices has been around 2.5 - 3% yearly.

12. At the beginning of the 1970's, Mexico has reached a stage where manufacturing production has a leading role in economy and output of the industrial sector is growing faster than total production. Both internal and external market demands contributed to the quick growth rate which was 4.6% annually in average during the period 1965 - 1972 and the share of the manufacturing sector in total GDP reached nearly 30% by 1972.

13. Table 1 in Annex 2 gives detailed figures of production of manufacturing industries in different branches of industry. As it is seen from these data, measured in terms of value of output, the most important sectors of industry in 1972 are a) fabricated metal products, machinery and equipment with a share of 20.1%, b) textiles, wearing apparel and leather products with 22.3%, and c) chemical industry (including rubber and plastic products) with 19% share in production.

14. On the other hand, branches having the highest average annual rate of growth in the period of 1965 through 1972 were a) wood and wood products with 6.5%, b) processed food with 5.7% and c) chemicals with 5.1%.



15. Due to the past rapid growth of the manufacturing sector, Mexico is now self-sufficient in most of the consumer goods and considerable production of various intermediate items particularly in iron and steel as well as in chemical and petroleum industry also exists. At present substantial efforts are done with the assistance of UNIDO to develop the capital goods production to enable the Mexican economy to provide for considerable part of machinery and equipment required by various economic development programmes in progress. Imports of these capital goods have caused up to date considerable strain in foreign exchange resources of the country.

16. As for the trend apparent in the structure of industry, apart of sectors such as energy, power, iron and steel as well as other basic raw materials having an essential role in fostering and stimulating economic progress in general, particular importance of branches relying on raw material supply from abundant indigenous resources should be stressed. This includes processed food and cotton textiles as well as selected items of wood, paper and leather products, while high priority is also attached to the development of the engineering and chemical sector.

17. Industrial expansion has largely taken place in the private sector, however, public investment in 1971 reached about 2,400 Mill. US\$ out of the total 7,000 Mill. US\$ and was principally invested in power, petroleum and fertilizer as well as in steel sector constituting about 40 % of all public investment.

18. Direct foreign investment has played and still plays a significant role in industrial growth, this fact resulting in foreign firms acquiring significant position in many manufacturing sectors like transport equipment (automotives), chemicals, non-electrical machinery, where round about or more than 50 % of production is coming from foreign owned subsidiaries. However, in line with the economic policy of the Government, national industry has recently strengthened its position in a number of branches.

19. Industrial development has been characterized by heavy geographical concentration of industry in and around Mexico City as well as in the urban areas of Monterrey and Guadalajara. At present, measured in terms of value more than 50% of total industrial activity is carried out in these three areas causing substantial regional imbalances in social welfare and overheads as well as in employment situation. The Government expressed increasing concern over this issue and introduced several legislative and fiscal measures to encourage industrial growth in other parts of the country. These include establishment of industrial parks and free zones, differentiation of minimum wages policies and development of new industrial complexes in underindustrialized areas.

### 3. Development and diversification of manufactured exports

20. Foreign exchange earnings from exports and exported services of Mexico represent approx. 5% of GDP and total value of exports in the recent years were unable to cope with rising costs of imports, thus causing a substantial trade deficit which amounted to approx. 500 Mill. US\$ in 1972. Export production is absolutely essential in several branches of industry to maintain the high rate of growth of production and moreover have a major influence on employment and living standards of the population.

21. While growth of total merchandise export in the past years has not kept pace with the increase of GDP, exports of manufactured goods have grown more rapidly and continuously. Between 1965 and 1972 growth rate has exceeded 13% per year in terms of current US\$. Value of manufactured exports rose from 260 Mill. US\$ in 1965 to 360 Mill. US\$ in 1972 and represents at present more than 50% of total exports.

22. Mexico's manufactured exports comprise now a large variety of products detailed figures of which are contained in table 2 attached in Annex 2 to this report. Table 3, however, shows the share of exports as percentage of total production and it is evident from these aggregated figures that export orientation in different branches of industry tend to show substantial differences. Apart from the figures related to 1972 when share of exported manufacture more than doubled compared

to the previous years, most of the branches had a comparatively even trend with major fluctuations mainly in basic metal products and textiles. Encouraging fact is the fast growing share of exports in fabricated metal, machinery and equipment as well as in wood products. The rather modest ratio of exported processed food, beverages and tobacco as well as the comparatively low increase in the chemical sector most probable due to under-investment in hydrocarbons exploration and lack of incentives in other areas of this sector are some of the striking features becoming evident from these statistics.

23. Analysing rates of growth branchwise and structural changes in 1965 - 1972 period, as shown in Annex 3, the importance of the metal-working sector becomes apparent, this being the branch which had the highest rate of growth in the past decade and at the same time, contributing 1/3 of total exports measured in value. Next best are in terms of growth rate: beverages and tobacco as well as basic metal products, however, their contribution to foreign exchange earnings, due to their modest performance in quantity, are rather unimportant, while basic metal products and chemicals contribute to another third of total manufactured exports, the rest shared by all the remaining branches.

24. Annex 4 shows distribution of Mexico's total exports by destination and it reveals that while the share of the US market has increased from 62.7 % in 1965 to 71.1 % in 1970 and started to decrease in the following year, the Mexican exports to the Latin American Free Trade Association has been steadily increasing throughout this period particularly due to the special trade arrangements Mexico has with countries of this region. With the rest of the world including the European trade and economic integrations, Mexico's total export tend to diminish.

25. On the other hand, manufactured exports show a trend of diversification as seen from Annex 5. While the share of the United States decreased from 72.5% in 1965 to 60.8 % in 1972, the share of countries outside the continent has increased by about 150 % from a share of 10.4 % to 25.7 %.

The fact that manufactured exports to Latin and Central America tend to decrease, is in contradiction with the fact that this is the total exports to this region and needs further investigation. The countries appear to be the potential markets for more sophisticated Mexican manufactures.

26. The diversification of manufactured exports and a court to the share of the US market has occurred in spite of the fact that most of the increase in manufactured exports is contributed by the so-called "maquiladoras". This special export development scheme, which was practically non-existent in 1965 and exports from manufacturing units of this type made a spectacular progress within few years. Cumulative added export performance amounted to 250 Mill. USD in 1970.

27. The scheme includes establishment of "industrial parks" which are practically entirely for foreign markets, mainly for the United States. Recently, the scheme which has earlier been limited to the border area of the United States, was extended to the interior of the country. Annex is summarizing performance of these industries showing the substantial rate of growth and the increased importance of this export development project in total manufactured exports. The production of electrical and electronic items as well as manufacture of textiles has an outstanding role within the production programmes developed in the framework of this special scheme.

### C. Government's export development policy

28. The policy of the Mexican Government has been traditionally based on stimulating import substitution and relied upon a combination of tariffs and import licensing system to provide the required protection for the infant and domestic industries.

29. The tariff structure presently existing consists of a set of ad valorem duties which, however, in practice provide for a rather modest protection as it is tempered by different factors.

30. A much more effective protection is provided for by the import licensing system. The official position of the government tends to permit domestic producers to charge a price that should not be higher by more than 20% than that of the comparable imports. Nevertheless, the level of protection provided for the import substitution industries seems to be a matter of long standing issues. This problem is, however, presently studied under a separate project implemented also with the assistance of UNIDO. **Therefore terms of reference of this mission did not include studying the questions arising from the import licensing and tariff system.**

31. It is felt, however, that when designing measures for an effective export development scheme, the high costs of certain domestic inputs required for the production of exportable goods needs still to be studied in the context of the protection system to arrive at a solution which provides sufficient safeguard for the national industry and at the same time stimulates the export orientation in branches with good export prospects.

32. **Complementary to** import control system, a large number of elaborate measures are in force for a longer time or has been introduced recently to stimulate export manufacture, promote competitiveness on external markets and provide for the necessary fiscal incentives to orient production towards exports.

33. One of the measures to generate export orientation through facilitating the import of materials and components required for export production is the temporary import system introduced recently by the Government. This system is intended to minimize hardships caused to the export industries by import restrictions and allow free imports of raw materials and components for export production, even in the case if they are available indigenously.

34. An export/import linkage system has been in force for a number of years in the automotive industry. The substance of the system is to establish quotas for the manufacturers related to their past performance and to plant capacity which will entitle them to import freely a certain

percentage of their production requirements. The system is designed in such a way that it should stimulate integration of national production by increasing the domestic content of the production year by year and efforts are also made to link the quotas with the export performance of individual companies.

35. Recently plans have been formulated to introduce similar export/import linkage systems in other sectors of machine building and metal-working industry.

36. Export incentives are also provided for in the form of tax refunds which are again linked with the domestic content of export thus stimulating integration of national production. Level of sales tax in force at present being 4%, aggregated value of the sales tax in final products amounts to 5 - 12%, depending on the number of steps to which the product is subject while it reaches its final form. According to a study made recently average share of this aggregated value of sales tax in export items amounts to 10% and the tax refund certificate, called EMI, represents an entitlement of 10% tax refund for exporters. Though exporters are usually pleased with this tax refund system, it seems that it would contribute to the stimulating effect of this system if EMI were transferable as some of the small exporters become sometimes "saturated" with this tax refund entitlements. **This fact is necessarily limiting their interest in expanding their export activities.**

37. It is partly for this reason that a branchwise analysis of the tax refund system seems justified. On the other hand, a possible solution to increase stimulating effect of the system would be to make it not only transferable, but also design it in such a way that the percentage of refund entitlement should be linked with the percentage of domestic production instead of limiting it according to the stipulations in force at present to export items having at least 50% domestic content, but not providing additional stimulation to increase indigenous share beyond this limit.

38. A special fund (Fondo para el desarrollo de la exportación de productos manufacturados - FOMEX) has been established by the Government to allow financing of manufactured exports on preferential interest rates subject to the goods being insured against commercial risks through *Compañía Mexicana de Seguros de Crédito*, being the official export credit insurance agency. FOMEX operations are efficiently organized and well managed and the interest rate charged under this system makes financing of Mexican manufactured export items competitive compared to similar arrangements existing in other countries.

39. While the Secretariat of Industry and Commerce has a pivotal role in stimulating and promoting development of export-oriented industries, action to promote exports of manufactures is also taken by a number of institutions directly or indirectly involved in export development:

- National Financiera S.A., the Government's industrial development Bank as well as Banco Nacional de Comercio Exterior have a long history of association with export promotion.
- Instituto Mexicano de Comercio Exterior has made a useful start since its constitution in export promotion through studies, market research and market development, exhibitions, seminars, training in marketing, etc. Its activities are also most useful in establishing contacts and examining advantageous export possibilities as well as in offering services to manufacturers in many other fields of trade promotion and marketing techniques.
- In 1971 the Government created the Fondo de Equipamiento Industrial (FONDI) to provide for long term assistance to medium scale industries having good export prospects or wishing to establish new or expand existing capacities with efficient import substitution possibilities. FONDI has a total funds of 75 Mill. US\$, however, requests for financing submitted hitherto tend to orient rather to import substitution than export development.

- Recently a study fund for export industries (FIDEEXPORT) has been created, the initial financing being the Executive Trust of the same. The fund may usefully complement the work done by FIDE and is trying also to establish close co-operation with FOMEC.

### III. FINDINGS AND CONCLUSIONS

#### A. Projections for manufactured exports

39. The Government makes annual estimates for export trade and these include projections of manufactured exports, but without a fully fledged information system on plant capacities, domestic and foreign prices for different products, cost structure, as well as on the exportability of specific items, these estimates are of a tentative character and modifications in domestic as well as external market conditions cause sometimes abrupt changes in export potential and in actual export performance.

40. IED carries out an extensive study including collection of detailed information on about 1600 firms being the most important exporters of the country to establish relevant information on production and export conditions and data to determine future export potential. It is expected that the result of this exercise will provide a solid basis to assess market prospects of different commodities and manufacturers.

41. The Government has recently prepared an elaborate study on possible development of balance of payments and within this analysis, an investigation was carried out trying to determine medium term projections for exports including manufactured exports which are reflected in Annexes 7 and 8 attached to this report.

42. In the meantime, a study group of IED has also made an assessment of the possible rate of export growth in various sectors of industry, the results of which are also incorporated in Annex 8.



4. Both Government and IBRD projections forecast that manufactured exports will continue to grow faster than total exports. However, the IBRD total expectation is more modest persisting an average growth rate of 15.3%, while the estimate of the government has an average growth rate of 20% for the period 1972-1976.

5. While the Government expects, that both, total merchandise trade as well as export of manufacture will grow faster in 1972-1976 than it did in the period 1967-1971, the IBRD forecast in terms of annual growth for 1972-1976 is practically the same as it was experienced in the recent past. In view of the outstanding industrial export performance achieving a growth rate as high as 19.3% and 20.7% resp. in 1971-1972, the Government estimates should not be regarded as unduly overambitious. Nevertheless, if Mexican manufactured exports can reach the projected annual growth rate of 13-20%, their contribution to foreign exchange earnings would grow to about 1400-1400 million US\$ in 1976 compared with 900 million US\$ in 1971 (including adjustments and allowance of exports coming from border industries).

6. According to both of the estimates, share of manufactured exports in total exports will further increase and will reach 50% in 1976 (about 46% according to the Government's estimate).

7. In analyzing the export development in the individual branches, the following comparison can be made:

	Average rate of growth	
	in 1966-1972	in 1972-1976
Processed food	11	10
Beverages and tobacco	27	
Textile, wearing apparel and leather products	12	17.2
Tool products	23.2	
Paper and publishing	15.1	21
Chemicals	11	20
Non-metallic mineral products	26	25
Basic metal products	8.5	7.1
Fabricated metal, machinery and equipments	12	26
Others		22
<b>Total</b>	<b>15.3</b>	<b>20</b>

It appears that oriented metal and machinery industries will continue to make the largest contribution to the growth of exports and together with non-metalliferous mineral products - make the branches having the highest average growth rates. The branches whose exports are expected to grow substantially faster than last year, are listed in the following table.

It might also be of interest to note the following characteristics of the export performance of the principal branches of the economy in the discussion respectively:

Industrial branches having a major share of the total exports in the period 1960-1967

1) Metalliferous products	2) Non-metalliferous mineral products
3) Chemicals	4) Machinery and electrical equipment

Industrial branches having the highest rate of growth in the period 1960-1967

1) Textile and clothing industry	2) Foodstuffs
3) Beverages and tobacco	4) Non-metalliferous mineral products
5) Machinery and electrical equipment	6) Chemicals

This conclusion proves once more the dynamic character and importance of manufacturing industries in the country. It is worth noting that industries emerging as second best from point of view of export growth. Similar conclusion can be drawn from the following table showing the extent of contribution from individual industrial branches to the increase achieved in manufactured exports:

	in millions of US\$ value of manufactured exports		Increase
Processed food	12.5	14.5	16.8%
Beverages and tobacco	3.0	3.5	16.7%
Textile, wearing apparel and leather products	2.0	2.3	15.0%
Food products	2.5	2.8	12.0%
Paper and publishing	2.0	2.3	15.0%
Chemicals	11.2	12.8	11.6%
Non-metalliferous mineral products	11.5	13.1	11.3%
Basic metal products	16.9	19.6	11.3%
Oriented metal machinery and equipment	21.9	25.9	11.9%
Other	11.8	13.8	11.0%
<b>Total</b>	<b>100.0</b>	<b>116.0</b>	<b>11.6%</b>

According to the above findings, 70% of increased export earnings has come from the following categories:

- fabricated products (largely iron and steel about 50%)
- chemicals
- textiles

and the remaining 30% is supposed to continue in the next 5 years.

50. It is felt, however, that Government reports when identifying export prospects of individual branches are based much more on the past performance of the prevailing situation and present production conditions than on in-depth study of new technological resources as well as requirements of the country. There seems to exist little or no doubt regarding the export prospects of the branches mentioned above, but information collected through direct contacts with representatives of the industry and different institutions indicate that other branches, such as iron, steel, coal, and products, require a very low priority and export possibilities at least in the long run, if sufficient stimulation and incentive is provided for to secure a very export oriented development in the production of selected product groups.

51. To get these potential resources materialized, an effective financing of present effective export development has to be provided and at the same time this will also require concerted efforts to carry out a series of inter-related activities which will improve production conditions in those branches to be competitive on external markets.

**3. ~~Export Marketing Activities and the Development of Exportable Goods~~**

52. Consultations with industrialists concerned the impression that there is little or no concern from the part of the manufacturers regarding the demand side and marketability of their products on foreign markets. This optimistic view is probably influenced by the vitality of the west US market and by the special trade arrangements fostered concluded with the countries of the LAFM region. In the same time a number of established exporters, however, express also their concern for the growing competition of cheap

developing countries. In their opinion, industrialists in these countries receive a good deal of the benefit of their own protection.

14. A major technical assistance project in the field of export and marketing, supported and implemented by UNCTAD, will probably, by the effect of helping manufacturers and exporters to improve their future competitive position in the world market, lead to the removal of protection, improvements received from negotiations with many countries. The industrial community indicated that manufacturers are concerned that products cannot be sold in some of their markets, and that the main reason of this is the lack of quality and competitive cost and market acceptability of their products.

15. In some cases of the protection of certain products, the importance of such protection of the Government, and of the need for such protection in the domestic market and exports, has been clearly demonstrated. In their view, it is not possible to do this. The necessity of the Government to continue themselves a force to protect certain products, and to improve the income of their producers, they will continue to make every effort to protect and to improve the competitive position of their products. Some of the products will still satisfy their own needs and services to domestic markets wherever available, and they are usually compelled to use a limited amount. The lack of consistent export orientation is reflected in import fluctuations of exports and the absence of international attention.

16. There are, however, also notable exceptions to this pattern in various fields like textiles, chemicals and even in machinery and transport. Companies have managed the well a substantial amount of production in maintaining majority of their products in domestic markets and their orientation towards export has become a necessity for these manufacturers.

56. The general situation is, however, that in spite of the supposedly favourable market prospects, opportunities in the industries are to a large extent not utilized. Capacity utilization seems to be in average around 65-70% with the most competitive companies having their capacities fully utilized, whereas high percentage of unutilized capacities exist in less competitive undertakings. This indicates the necessity to analyze production conditions prevailing in different sectors to pinpoint problem areas and concentrate on upgrading of production, where the conditions exist to utilize them for export development.

57. Factors usually involving utilization of unutilized capacities for export are excessive costs, low scale of productivity and operational efficiency and, to a much less extent, however, deficiencies in quality and presentation of export products. Due to the protection extended to the indigenous industry, costs of domestic inputs are usually substantially higher than competitive imports. To improve its competitiveness and therefore, the export industry would have to source its raw materials and components at competitive prices, having free access to import whenever indigenous sources are less competitive.

58. To identify competitiveness of export products on the international market, a thorough analysis of costs and price structures is needed for major items of manufactured exports. It has to be taken into consideration that while raw material prices and costs of other indigenous inputs are bound to increase approaching the world market level, indigenous labour costs in India are bound to increase in parallel with the efforts made by the Government to increase the living standards and improve social welfare of the low income groups of population. This fact stresses the importance of increasing the level of productivity and the operational efficiency which compares in certain areas rather unfavourably with that achieved already in some other developing countries. In the textile industry e. g. average spindle hours per year in 1964 amounted to 5250 in India, while the comparative figures are for Colombia 6130, for Brazil 5121, for Pakistan and Bangladesh above 7000. As far as working is

concerned, 76 % of the equipment in Mexico consist of automatic looms, but loom hours per year in 1965 were 5200, whereas in Columbia the sum was 6300, in Ecuador and Egypt 6000, in Hongkong and South Korea above 7000.

59. The need to improve productivity will also require careful investigation in determining the size, location and structure of new manufacturing units and the feasibility of substantial extensions of manufacturing units in the national industry. This has to be analyzed with respect to up to date technology in similar terms and conditions.

60. A number of industries are still handicapped in favour of a view of economies of scale and this constitutes serious setback on effective export production as most of the manufacturing units are of small scale and provided with obsolete or inefficient equipment. This is particularly valid for branches like production of leather articles, textile garments, etc. There seems to be need to reorganize the industrial and export structure in these sectors characterized by the existence of small and medium manufacturing unit and these measures might be complemented by providing them with facilities to promote their contacts with the international market and with information on international production standards and conditions.

61. Presently, in a number of sectors export efforts fall due to shortage of raw materials like steel, mechanical products and alumina. Though this fact is to be attributed basically to the present world market situation, particularly to the energy shortage, it indicates that more stress should be put on a balanced industrial development where supplies and services indispensable for the export production of the manufacturing sector are available indigenously in sufficient quantities, quality and at competitive costs.

52. The Government has attached high priority to export development considering the same as one of prime objectives in the industrial development policy. This calls for concerted efforts to detect factors hindering manufactured exports and to design an overall strategic plan consisting of a line of action approaching from the production side the problems prevailing in this area.

53. This integrated export development plan should also include the establishment of a machinery suitable to monitor progress towards goals determined in accordance with the Government's overall economic and social targets.

54. An essential feature of export development plan should be to optimize manufactured export structure of the country. In this respect reference is made to para 52 of this report. In exploring sectors with favourable export prospects, however, the underlying facts and figures have to be analyzed in a much more detailed manner so as to identify individual product groups and specific items which should constitute the basis for an action plan of export development. The necessity to formulate priorities and concentrate resources and efforts in these priority sectors should therefore be emphasized.

55. Studying the export structure of the individual branches should also reveal the extent of concentration of exports already achieved in the sectors concerned. Instead of having manufactured exports more or less equally distributed among manufacturers of the same branch where each of them have an unimportant share which does not provide substantial stimulation, one of the most important goals to be achieved should be to build up a comparatively small number of manufacturing units which are to a large extent dependent on exports and where production is upgraded to world market level. It is expected that these companies will also have a much better bargaining position on external market and better knowledge of market requirements as well as better access to market information.

66. It is anticipated that there will be no drastic change in the Government's export incentive system in the near future. However, to promote building up the production sectors which will be focal points of export development, it seems to be justified to review the present government measures from point of view to investigate the possibility of introducing a more selective system which will give preference to sectors well aware with the best export potential and for its exchange returns.

67. It is also indicated to streamline import entitlements and gradually introduce a system which will give freer access to inputs from abroad at competitive costs as referred to already earlier. Provisions should also be made to make better use of COMECON system in detecting and promoting viable schemes of definite export oriented character.

68. In assessing the possibilities to extend the export/import linkage system existing in the automotive industry to other areas, careful consideration should be given to the criteria, which will enable this system to operate as an effective leverage of export development and to generate export orientation. Integration of indigenous production should not be pursued beyond the extent which allows a high level of productivity and incentives provided for within these systems should be used to encourage national industry to utilize their limited resources in building up capacities for export production.

69. Among the measures to be designed to improve manufactured export performance strengthening of industrial infrastructure might probably have an important role to play. This refers to strengthening of design and research facilities which are mainly in foreign hands at present, however, there are already some very encouraging attempts undertaken by the national industry, as for instance in the case of glass making machinery.



70. Strengthening is similarly required in the case of training facilities, particularly on-job training of skilled workers, which should be established in close cooperation with the efforts to change the concentrated industries pattern prevailing now. One of several results in transplanting national export industries to areas less industrialized will be diminishing hardships caused by unemployment in these regions.

71. Another set of problems requiring investigation is closely related to individual branches or sectors of industry. Typical examples of such problems are:

- provision to make available raw materials, packaging materials or accessories which are required in comparatively low quantities, (e. g. tinned plates and other packaging material in food industry, small accessories for leather fancy items, etc.) and either are not produced in the country or supply is insufficient or quality does not meet world standards;
- diversification of production introducing the manufacture of new products for which world demand is increasing or import quota limitations are not existent;
- adaptation of products to international standards or to world market requirements in quality, design, etc.

#### IV. PROPOSAL FOR TECHNICAL ASSISTANCE AVAILABLE FROM UNIDO IN THE FIELD OF EXPORT DEVELOPMENT

72. Prior to undertaking the mission, the Government of Mexico has already submitted an official request for assistance to selected industrial sectors with export potential to be financed from Special Industrial Services. The scope of the project is to assist the Government in assessing the existing technical level and efficiency as well as possibilities for export in different branches of industry and to prepare recommendations for an export development programme in these areas. Consultations with the responsible officers of S.I.C. and informations collected during the mission made it possible to determine more exactly the areas towards which the assistance provided by the experts should be directed and their task to be fulfilled.

73. The Job Descriptions prepared during the mission and discussed with the Government counterpart are attached to this report as Annex 7.

74. It was agreed that this Special Industrial Services Trust Fund Project, while helping the Government to work out a plan of action in different sectors, should also be regarded as a preliminary action for a major project in the field of the development of export-oriented industries which should be included in the Country Programme, subject the necessary funds can be made available during the mid-term review of the same. The necessity of such an integrated action through a major development project is clearly felt in view of the ambitious targets set by the Government for the development of manufactured exports.

75. Basic objectives of this long term technical assistance project would be the following:

76. Long term objective of the project is the formulation of a strategy and the implementation of a consolidated programme for export development in selected branches of industry having the best export prospects. Furthermore, the project is aiming at to improve the structure of manufactured exports attaching high priority to sectors and product groups which comply with criteria adopted in the Government's economic policy. Most important of these criteria is employment creation, high unit and added value, strengthening the national industry and exploitation of comparative advantages related to natural resources.

77. Short term objectives of the project are the following:

- 1) Improving productivity and international competitiveness of manufactures through reducing unit costs of products and optimizing export structure with concentration on items, which have a comparative advantage in view of natural, human and social factors;

- ii) technical adaptation of products to international market requirements, and diversification of exports by introducing the production of new products with increasing demand on the world market;
- iii) promotion of international industrial cooperation and access to up-to-date technology and know-how;
- iv) progressive review of the export oriented industries incentive system to stimulate export development of branches having priority in industrial development;
- v) improving industrial export management techniques, skills as well as the organizational set up of export development machinery.

78. The total duration of the project should be three years and it will be divided in two phases. The first phase is to be implemented in 1975/1976 and the second phase immediately following the first one in 1977 included in the next Country Programme.

79. To achieve the objectives set out in paras 76 - 77, the project should include a series of interrelated and co-ordinated actions approaching the problem of export development in a practical and action-oriented manner through a chain of integrated actions in the area of production. Problems of export development in the industrial branches selected as having the best export prospects will be investigated and possible solutions sought for in a variety of forms of technical assistance and promotional activities to achieve the maximum results and benefits in an aggregated form.

80. Major part of the technical assistance provided for in the framework of this project will be tailored according to the needs and requirements of the individual branches and sectors of production. At first the project will be directed towards those branches which have been primarily investigated through the short term experts of the SIS project. In the next stage, however, additional sectors identified by the project manager as having good export prospects should also be selected and handled in a similar way.

81. Apart from the assistance provided for in the individual sectors, factors effecting the entire industrial export area will also be investigated and handled by functional experts specialised in such fields as promotion of investments, joint ventures and industrial co-operation, export programming including assistance in progressive development and implementation of export incentives, provision of training facilities in export management, etc.

82. Detailed work plan of the project including budget should be finally formulated based on the findings and consolidated report of the experts to be commissioned under the SIS project referred to in paras 75-78 of this report. However, a preliminary Draft Project Document has been prepared during the mission in co-operation with the Government counterpart. Workplan and budget of the project is attached as Annex 10 to this report.

83. According to informal communication obtained after completion of the mission, the Secretariat of Industry and Commerce has in the meantime submitted the proposal to the Ministry of Foreign Affairs requesting approval of the same by including the project in the Country Programme of Mexico.

LIST OF PERSONS METSecretariat de Industria y Comercio (S.I.C.)

Lic. Guillermo Becker, Under Secretary of Industry,  
 Lic. Jorge Orvananos, Subdirector General of Industries  
 Lic. Joaquin Echeverria S., Technical Adviser to the Director of Industries  
 Mr. Enrique Aguilar, Director General del Transferencia de Tecnologia  
 Mr. Juan de Dios Roman Rinoda, Subdirector de la industria automotriz  
 Lic. Carlos Montilla Molina, Director del Registro Nacional de Inversiones Extranjeras  
 Ing. Jorge Trevino Zapato, Subdirector de la Industria Quimica  
 Mr. Julio de Leon V., Subdirector de Industria Metalica

Instituto Mexicano de Comercio Exterior (I.M.C.E.)

Ing. Manuel Alvarez Luna, Director de promotion national  
 Ing. Bernardo Vincent L., Chief of Departamento de Industrias  
 Lic. E. Enrique Villalobos A., Departamento de Industrias  
 Ing. Ignazio Vergara, " " "  
 Mr. Lozada Miguel, " " "  
 Mr. Carlos Casas, " " "  
 Lic. Armando B. Reyes Nehia, " " "  
 Ing. Hector S. Glower y Delgado, " " "  
 Mr. Hans Dahlberg, UNCTAD expert, UNCTAD/E/C/E project

I B R D

Prof. B. Balassa, IBRD Washington  
 Mr. Francisco T. Thouni, IBRD Washington  
 Mr. Thomas L. Hatcheson, IBRD Washington

National Financiers

Mr. Castro, Capital goods project, Director  
 Mr. Swayambu, Capital goods project, UNIDO expert  
 Mr. Per Blondell, Capital goods project, UNIDO expert

Divers organizations and industrialists:

- Lic. Jesus Villaseñor S., Subadministrator, Fondo para el Fomento de las Exportaciones de Productos Manufacturados
- Mr. Francisco Sierra, Cámara Nacional de la Industria del Hierro y del Acero
- Lic. Bravo Silva, Banco Mexicano de Comercio Exterior
- Ing. Jesus Garcia Fr., Presidente, Cámara Nacional de la Industria Textil
- Lic. Carlos Jarama Ochoa, Presidente, CONCAFIN
- r. Gerardo Duque Sirion, Director General Consejo Nacional de Ciencia y Tecnología
- r. Manuel Pedellin, Presidente, Asociación Nacional de la Industria Química A.C.
- Ing. Leopoldo Rodriguez, Chief of Identification and Development, Industria Resistol S. A.
- r. Miguel Rivera Lancera, Gerente, Cámara Nacional de Manufacturas Electricas
- Lic. Matias L. Carrera, Presidente, Asociación Nacional de Fabricantes de Productos Automotrices, A. C.
- Mr. Victor Manuel Islas, President of Food processing Division, Cámara Nacional de la Industria de Transformación (CANESINTRA)
- Mr. Carlos Alvarado Ponterry, Presidente, Cámara Nacional de Manufacturas Electricas
- Mr. Carlos Ortúño Reil, Cta. Mexico.

TABLE 1

FEDCO: VALUE OF AGRICULTURAL PRODUCTIONS 1965-1972  
In Millions of US\$ (current)

	1965	1966	1967	1968	1969	1970	1971	1972	Average Annual Rate of Growth 1965-1972	Structural Composition 1972
<b>1. Domestic Food</b>										
1.1 Slaughtering and preparation of meat	165.5	155.7	169.1	179.0	230.4	250.7	270.0	342.4	17%	
1.2 Grain mill and bakery products	330.9	346.1	350.3	402.0	411.0	411.0	408.7	470.0	6%	
1.3 Other food processing	495.5	512.7	522.1	607.5	572.1	580.0	540.0	570.0	2%	
	991.9	1068.2	1097.7	1388.2	1307.4	1441.1	1318.7	1712.4	11%	
<b>2. Beverages and Tobacco</b>										
2.1 Beverages	247.5	277.4	272.3	310.4	330.0	300.1	310.0	300.7	5%	
2.2 Tobacco	100.0	100.7	130.2	107.0	154.0	153.0	150.0	140.0	1%	
	347.5	377.1	402.5	417.4	484.0	453.1	460.0	440.7	3%	











	1962	1961	1960	1959	1958	1957	1956
<b>4. Food and Feed Products</b>							
4.1 Food Products	1540	1517	1450	1417	1379	1311	1280
4.2 Other Food and Feed Products	515	530	524	514	504	481	479
Total Food and Feed Products	2055	2047	1974	1931	1883	1792	1759
<b>5. Paper and Publishing</b>							
5.1 Paper and Paper Products	112	117	110	111	110	108	108
5.2 Printing and Publishing	200	200	190	185	180	175	170
Total Paper and Publishing	312	317	300	296	290	283	278
<b>6. Chemicals, Petroleum, Rubber and Plastics Products</b>							
6.1 Inorganic Industrial Chemicals	282	287	280	275	270	265	260
6.1.1 Phosphoric Acid	282	287	280	275	270	265	260
6.1.2 Lead Oxide	2	2	2	2	2	2	2
6.1.3 Other Inorg. Chem.	2	2	2	2	2	2	2
6.2 Fertilizers and Pesticides	1572	1536	1481	1445	1410	1375	1340
6.3 Synthetic Resins and Plastic Mat.	100	100	100	100	100	100	100
6.3.1 Cellulose	100	100	100	100	100	100	100
6.3.2 Other Synthetic Resins and Plastic Materials	100	100	100	100	100	100	100
6.4 Drugs and Medicines	10	10	10	10	10	10	10
6.4.1 Inorganic	10	10	10	10	10	10	10
6.4.2 Other Drugs and Med.	10	10	10	10	10	10	10
6.5 Other Chemical Products	734	721	711	701	691	681	671
6.6 Rubber and Plastic Products not elsewhere classified	34	34	34	34	34	34	34
6.7 Petroleum Refinery Products	10	10	10	10	10	10	10
6.7.1 Gasoline	10	10	10	10	10	10	10
6.7.2 Other Petro. Ref. Prod.	10	10	10	10	10	10	10
6.8 Other Petro. and Coal Products	200	200	200	200	200	200	200
Total Chem., Petrol. and Plas. Prod.	2000	1967	1911	1870	1830	1790	1750

**7. Non-Ferrous Metal Products, except Petroleum**

	1965	1966	1967	1968	1969	1970	1971	1972
7.1 Pottery and China Products	154	112	137	300	304	377	421	412
7.2 Glass and Glass Products	563	403	314	503	712	607	482	472
7.3 Other non-ferrous min. Products	575	563	206	301	301	332	437	413
<b>Total Non-Ferrous Mineral Prod.</b>	<b>1192</b>	<b>982</b>	<b>653</b>	<b>1004</b>	<b>1317</b>	<b>1316</b>	<b>1340</b>	<b>1307</b>

**8. Basic Metal Products**

	1965	1966	1967	1968	1969	1970	1971	1972
8.1 Basic Iron and Steel Products	3952	4635	4331	4671	11447	10111	10789	11377
8.1.1 Steel Shaping and Pipe	11224	9121	7922	11907	15315	16071	17750	17462
8.1.2 Steel Sheets	30	30	30	32	34	35	36	37
8.1.3 Other Iron and Steel Products	10776	13240	11320	13112	13672	14407	15410	15978
8.2 Basic Non-Ferrous Metal Products	4163	3028	3132	3524	3705	4111	4107	3620
8.2.1 Copper, Bismuth and Lead in Bars	1169	1330	3532	1057	2406	1913	1526	2302
8.2.2 Refined Zinc, Bismuth, Lead and Cadmium	5628	5512	6596	3010	4900	10327	11737	13521
8.2.3 Other Basic Non-Ferrous Metal Products	1169	1330	3532	1057	2406	1913	1526	2302
<b>Total Basic Metal Prod.</b>	<b>56928</b>	<b>55152</b>	<b>65996</b>	<b>30102</b>	<b>49007</b>	<b>103227</b>	<b>117397</b>	<b>135721</b>

**9. Fabricated Metal Products,**  
~~Engineering and Machinery~~

	1965	1966	1967	1968	1969	1970	1971	1972
<b>9.1 Fabricated Metal products, except machinery and equipment</b>								
9.1.1 Metal boxes and tanks	110	273	1750	2095	3270	3290	5015	4530
9.1.2 Other fabricated metal products	3432	5616	6952	10320	13720	13730	14000	20550
<b>9.2 Machinery and Equipment, except electrical</b>								
9.2.1 Engines and turbines	200	56	16	336	450	1021	1084	10307
9.2.2 Spare parts for machinery	2215	2392	2352	3032	3732	3462	3970	6314
9.2.3 Office Machines	32	48	369	1456	1908	2830	4320	4010
9.2.4 Other Machinery, except electrical	5524	3936	3608	3346	5750	7416	7100	7140
<b>9.3 Electrical Machinery, Equipment and Appliances</b>								
9.3.1 Electrical Industrial Mach. and Apparatus	129	240	339	420	420	437	440	450
9.3.2 Television Receivers	-	8	4	384	10240	1110	1410	1700
9.3.3 Television and Radio Spare Parts	106	2528	3106	5340	5000	7100	17000	20110
9.3.4 Other Electrical Products and Apparatus	3070	6708	5350	18050	20300	21800	21000	20000
<b>9.4 Transport Equipment</b>								
9.4.1 Automobile Engines	10	100	1440	1800	4000	10000	7300	10000
9.4.2 Spare parts for Automobile Engines	200	100	500	800	7000	10100	11100	14000
9.4.3 Spare Parts for Automobiles, Bodies and Chassis	406	61	5	100	1000	2410	11200	13300
9.4.4 Other Transport Equipment	127	1056	1152	1900	1300	3000	4100	3810

	1965	1966	1967	1968	1969	1970	1971	1972
2536	3128	3616	512	5618	6256	13168	15682	
20872	31272	31221	50968	107616	115132	199351	275910	
2010	2101	2516	3621	8816	9532	11109	17631	
259628	292650	270518	335116	62912	515981	621327	801131	

9.5 Other fabricated Metal Products, Machinery and Equipment

Total Fabricated Metals, Machinery and Equipment

10. Other Manufactured Products not included elsewhere

Total Manufactured Exports

Source : - Dirección General de Estadística, Secretaría de Industria y Comercio and Banco de México, S. A.

TABLE 3

**MEXICO: MANUFACTURED EXPORTS AS A PERCENTAGE  
OF DOMESTIC PRODUCTION, 1965 - 1972**

	1965	1966	1967	1968	1969	1970	1971	1972
Processed food	0.8	0.4	0.7	0.8	1.0	0.7	0.3	2.7
Beverages and tobacco	0.3	0.3	0.3	0.6	0.1	0.1	0.1	0.3
Textile, wearing apparel and leather products	1.8	2.6	1.3	1.5	1.5	1.5	1.6	3.9
Wood and wood products	3.0	2.9	3.2	3.9	4.3	1.1	5.1	17.2
Paper and publishing	1.2	1.1	2.0	1.9	2.0	2.1	1.9	1.5
Chemical, petroleum, rubber and plastic products	5.6	5.5	5.3	6.0	6.6	6.3	5.2	6.6
Non-metallic mineral products	3.1	2.2	1.3	2.6	2.6	2.4	3.3	7.7
Basic metal products	13.2	10.8	7.3	8.7	9.6	9.1	10.3	27.0
Fabricated metal products machinery and equipment	1.1	1.5	1.1	2.0	3.9	1.3	5.7	10.0
Other manufactured products	1.0	0.9	1.1	2.1	2.9	2.7	3.3	8.0
<b>TOTAL</b>	<b>2.5</b>	<b>2.6</b>	<b>2.2</b>	<b>2.2</b>	<b>2.1</b>	<b>3.0</b>	<b>3.3</b>	<b>7.5</b>



## MEXICO'S MANUFACTURED EXPORTS: RATES OF GROWTH AND STRUCTURAL CHANGES, 1965 - 1972

	1965	1966	1967	1968	1969	1970	1971	1972	Average Annual Rate of Growth 1966-1972
<b>Rates of Growth of Manufactured Exports (in percentages)</b>									
Processed food	-	1.6	-5.6	17.8	32.3	-18.5	17.7	11.7	11 1/2
Beverages and Tobacco	-	14.0	26.3	28.9	9.9	14.6	22.8	6.0	27 1/2
Textile, wearing Apparel and Leather Products	-	65.1	-17.2	-13.2	-25.2	7.7	26.7	16.6	12 1/2
Wood and wood products	-	-2.0	17.3	22.9	23.7	11.0	35.9	12.7	25.5 1/2
Paper and Publishing	-	29.3	17.2	15.1	15.1	20.9	10.7	18.5	16.5 1/2
Chemical, Petroleum, Rubber and Plastic Products	-	9.2	5.1	27.7	27.3	3.7	8.1	1.9	11 1/2
Non-Metallic Mineral Products	-	-14.7	-4.4	58.7	10.6	1.7	56.1	19.1	26 1/2
Basic Metal Products	-	-2.0	-22.6	21.6	22.4	5.7	13.5	15.3	3.5 1/2
Fabricated Metal Products, Machinery and Equipment	-	37.8	-9.9	63.2	111.1	36.1	23.9	32.7	22.3
Total	-	12.7	-7.5	21.0	38.0	11.7	19.3	22.8	18.5 1/2
	====	====	====	====	====	====	====	====	====
<b>Rates of Growth of Total Exports</b>									
	-	7.1	-7.1	7.0	17.3	-1.0	7.1	23.3	
<b>Structural Changes in Manufactured Exports</b>									
Processed Food	9.5	8.6	8.8	6.3	9.0	5.3	5.6	5.7	
Beverages and Tobacco	0.8	0.8	1.1	1.1	0.9	0.9	0.9	0.3	
Textile, Wearing Apparel and Leather Products	11.3	16.6	14.8	10.7	9.7	2.1	2.7	11.5	
Wood and Food Products	2.6	2.3	2.9	2.9	2.6	2.6	2.3	3.3	
Paper and Publishing	2.7	3.1	4.9	1.2	3.5	3.8	2.3	2.9	

	1965	1966	1967	1968	1969	1970	1971	1972
Chemical, Petroleum, Rubber and Plastic Products	21.3	23.3	27.1	27.3	25.7	27.7	29.0	17.6
Non-Metallic Mineral Products	1.4	3.3	3.4	1.1	3.6	3.2	1.2	1.3
Basic Metal Products	33.5	29.1	25.1	23.9	21.2	20.0	17.1	17.7
Fabricated Metal Products, Machinery and Equipment	9.6	11.7	11.5	15.2	23.2	28.3	30.6	33.0
Other Manufactured Products	0.3	0.7	1.1	1.7	1.9	1.9	2.1	2.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

SOURCE: Dirección General de Estadística, SIC, and Banco de México

**MEXICO: TOTAL EXPORTS BY DESTINATION, 1965 - 1972**  
(in percentage)

	1965	1966	1967	1968	1969	1970	1971	1972
<b>Total Exports to:</b>								
The United States	62.7	62.5	63.0	68.2	66.5	71.1	70.0	66.7
Latin American Free Trade Areas	3.1	5.2	5.8	6.0	7.2	7.9	9.1	9.9
European Economic Community	5.1	7.7	9.5	5.9	6.6	6.0	7.7	7.9
European Free Trade Zone	3.6	1.5	5.3	5.5	5.0	2.3	3.2	2.2
Rest of the World	23.2	19.0	15.7	14.1	14.5	13.4	12.1	15.7
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Dirección General de Estadística, and SIC

**MEXICO: MANUFACTURED EXPORTS BY DESTINATION, 1965-1972**  
 (In millions of U.S. dollars)

	1965		1972	
	Amount		Amount	
The United States	183.1	70.5	13.2	50.2
Latin American Free Trade Association	31.3	12.1	67.7	10.0
Central America	13.3	7.0	23.7	3.5
Other	25.2	10.1	1.3	25.7
<b>Total</b>	<b>252.9</b>	<b>100.0</b>	<b>67.9</b>	<b>100.0</b>

SOURCE: Dirección General de Estadística and SIC

**FEDERAL CHARACTERISTICS OF POWER INDUSTRIES  
(Establishments from 1971 - 1972)**

	as of 31/12/1971 (a)	as of 31/12/1972 (b)	increase (b/a)	as of 31/12/72 (c)	increase (c/a)	increase (c/b)
Number of companies	209	297	32.1	600	139.2	55.2
Personnel occupied	29,737	35,321	28.5	72,293	192.1	52.7
Investment in machinery and equipment	21,621.3	29,854.7	124.1	10,113.6	341	110.7
Amount of salaries (annual)	37,933.2	51,751.8	36.7	30,757.0	127.3	27.3
Added value (yearly)	121,753.	168,334.5	37.3	213,65.0	123.5	55.1

**BRANCHES WITH 10% OR MORE OF POWER INDUSTRIES**

	number of companies	personnel employed	machines in mill. US\$	machines and equipment in mill. US\$	gross pro- duction in mill. US\$
Electric and electronics	203	33,165	13,735,6	39,235,7	54,207,1
Textile products	105	11,517	13,27,93	1,306,7	13,111,1
Leather and shoe products	32	1,460	2,73,5	1,591,7	6,77,6
Processed foods	19	1,705	1,421,3	2,177,1	1,122,3
Ships and ferry articles	11	3,139	1,12,1	1,17,3	1,02,0
Wood products	19	1,111	3,101,7	1,507,4	1,276,3
Div. other products	116	10,352	12,522,3	20,211,0	22,121,4
<b>TOTAL</b>	<b>500</b>	<b>60,243</b>	<b>37,737,0</b>	<b>107,449,3</b>	<b>147,337,2</b>

**TABLE: WHEAT OF CANADA EXPORTS 1971, 1972, 1976**

	1971	1972	Quantity Metric Tons	1972	1976	Quantity Metric Tons
1) Agricultural products	531	623	2,317	623	272	1,172
2) Grain products	56	151	23,000	151	230	2,000
3) Fish products	6	8	6,000	4	11	1,000
4) Extractive industries	207	200	6,000	0	1	1
5) Manufactured products	313	720	2,900	720	900	9,000
Subtotal	1206	1622	15,217	1,422	903	14,172
Adjustment for equivalents (a)	5	166		156	22	2,100
Total	1200	1787	15,217	1,577	925	16,272

**Notes:**  
 1) **Secretaría de la Presidencia: Lineamientos para el Programa de Desarrollo Económico Social, 1971-1976**  
 2) **El Banco de México estimate of the adjustment to export of manufactured goods in 1976 is as follows:**

Recorded exports of manufactured goods	15,117
Less exports of sugar, and strawberries	197
Recorded exports of manufactures	14,920
Exports of other industries	576.0
Exports of manufactures	15,496.0
Total exports of manufactured goods	15,496.0

**MEXICO. EXPORTS OF GOODS OF MANUFACTURED GOODS**

	Secretaría de la Presidencia		INEC Mission	
	1972	1975	1971	1972
	US\$ B.	US\$ B.	US\$ B.	US\$ B.
1) Processed feed	55.5	52.7	10.	51.7
2) Beverages and tobacco				
3) Textiles, clothing, leather goods	105.2	132.5	77	131
4) Wood and wood products	20.0	103.2	20	130
5) Paper and publishing				
6) Chemicals, rubber, plastic	3.2	19.5	20	150
7) Non-metallic mineral products	16.8	37.7	20	120
8) Basic metal products	21.0	120.0	73	157.5
9) Machinery and equipment	217.2	37.2	117	117
10) Other manufactured products	57.2	135.2	20	130
<b>TOTAL</b>	<b>71.7</b>	<b>1920.0</b>	<b>107</b>	<b>1170.0</b>

Sources: 1) Secretaría de la Presidencia: Lineamientos para el Programa de Comercio Exterior, 1972.  
 2) INEC Report 'Mexico's Manufacture Exports' as February 1972.

Notes: (a) Exports of sugar, and strawberries exclude in the forecast of the Secretaría de la Presidencia Value in 1972 approx. US\$ 100 MT.  
 (b) Exports of petroleum and its derivatives included in the forecast of the Secretaría de la Presidencia Value in 1972 US\$ 21.7 M.



REQUEST FROM THE GOVERNMENT FOR THE UNITED MEXICAN STATES  
FOR SPECIAL INDUSTRIAL SERVICES

RECOMMENDATIONS

- 1) POST TITLE                      Expert in Petrochemical Industry and Export Development
- 2) DEGREE                              One year
- 3) FIELD OF SPECIALIZATION              As above as possible
- 4) DATE OF ENTRY                      Maximum delay with respect to the country
- 5) Purpose of the project                      To assist the Government in reviewing and assessing the present state of future development and investment programmes of the petrochemical industry with particular emphasis on substantial development for exports.
- 6) Duties                              The expert will be attached to the General Directorate, Ministry of Industry and Commerce and will be expected to:
  - Review the present production as well as the development and investment programme of the petrochemical industry for basic as well as for secondary products;
  - Assess the export possibilities and recommend possible measures to increase the export potential to be made available in the future, taking into account the projected increase in domestic demand as well as the regional market, and the available energy resources of the country;
  - Suggest promotional measures to optimise export performances through co-ordinating development programmes in the basic and secondary sectors and exploiting possibilities offered by international co-operation arrangements;
  - Advise on possible improvements in productivity and operational efficiency through improved production processes and up-to-date technology.
- 7) Language                              Spanish
- 8) Qualifications                      Expertise in petrochemical technology and process engineering in the basic as well as in the secondary sector. Practical experience in formulating development and investment programmes in this field, with extensive knowledge of world trends in consumption and demand of petrochemical products.

1) Background Information

Based on extensive natural resources, the Mexican petrochemical industry has made substantial progress in the past years. Production of the chemical industry (excluding pharmaceuticals, cosmetics and rubber products) amounted in 1972 to approx. 14,000 million pesos, petrochemicals being the most important item within the group. Exports have increased from 1965 through 1972 by an annual average rate of 11.5% and represented 20% of total exports in 1972. While production of basic petrochemicals is reserved for the public sector, the private sector produces and markets secondary petrochemicals. In the past, development of the petrochemical production was basically planned to cater for domestic demand with a marginal surplus for the international market. The present shortage of basic petrochemicals seems to virtually prohibit exports and even substantial deficits exist in some of the products, and ambitious development plans designed and partially in process to increase production. However, substantial points in co-ordinating the development in basic and secondary sectors as well as optimising the exploitation of export possibilities particularly in view of competitiveness still need to be investigated and determined.

The natural endowments of the country and the favourable world market situation in this area justify concerted efforts to attain marked increase in export development of petrochemicals and the Government requested the assistance of an international expert for this purpose.

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REQUEST FROM THE GOVERNMENT OF THE UNITED MEXICAN STATES  
FOR SPECIAL INDUSTRIAL SERVICES  
JOB DESCRIPTION

- 1) Post Title Expert in Cotton Textile Manufacture and Export Development
- 2) Duration One month
- 3) Date required As soon as possible
- 4) Duty station Mexico City with travel within the country
- 5) Purpose of the Project  
To assist the Government in assessing the existing technical level, efficiency and possibilities of cotton textile industry, with particular emphasis on export development, and to prepare recommendations for a major operation aiming at to increase productivity, improve international competitiveness and export performance of selected areas.
- 6) Duties  
The expert will be attached to the General Directorate, Ministry of Industry and Commerce and will be expected to:
- Analyse the production and export structure of cotton textiles and visit manufacturing plants of this sector;
  - Identify bottlenecks as well as shortcomings in capacity and production process respectively, and suggest improvements in technology (particularly in finishing) operational efficiency as well as in quality and quality control;
  - Explore possibilities for diversification of production with particular reference to favourable export prospects, taking also into consideration the existing quota limitations in this sector;
  - Review and analyse development plans of this industry and recommend, if necessary, possible modifications and additional measures to achieve the targets of industrial and export development policy.
- 7) Language Spanish
- 8) Qualifications Expertise in manufacturing technology and quality control of cotton textiles with practical background in production process evaluation and costing. Extensive experience in industrial economics and particularly in export development.

9) Background information

Production of cotton textiles in 1972 amounted to approx. 8,000 million pieces. About 2/3 of the existing capacity provides for domestic demand, while exports represented 120 million pieces or 5.25% of total production. The average rate of growth of cotton textiles export from 1965 through 1972 was comparatively low, and similar progress in export growth however has been achieved in 1971 - 1972.

While a number of companies have up-dated their highly productive equipment and technology, reduced operational efficiency seems to have been responsible in some cases for inadequate productivity.

In view of the available capacity as well as the recent results and good prospects, development plan is being prepared which includes a target to double exports of cotton textiles by 1976.

The Government requested the assistance of an expert to assist in evaluating the present situation and suggest measures to encourage production and improve productivity and export competitiveness of this sector.

REQUEST FROM THE GOVERNMENT OF THE UNITED MEXICAN STATES  
FOR SPECIAL INDUSTRIAL SERVICES  
J O B   D E S C R I P T I O N

- |                                   |  |
|-----------------------------------|--|
| 1) <u>Post Title:</u>             | Expert in Manufacture of Garments for Export   |
| 2) <u>Duration:</u>               | One month  |
| 3) <u>Date required:</u>          | as soon as possible  |
| 4) <u>Duty station:</u>           | Mexico City with travel within the country   |
| 5) <u>Purpose of the Project:</u> | To assist the Government in assessing the existing technical level, efficiency and possibilities of garment manufacturing, with particular emphasis on export development, and to prepare recommendations for a major operation aiming to increase productivity, improve international competitiveness and export performance of selected areas.   |
| 6) <u>Duties:</u>                 | <p>The expert will be attached to the General Directorate, Ministry of Industry and Commerce and will be expected to:</p> <ul style="list-style-type: none"> <li>- Analyse the production and export structure of garment industry and visit manufacturing units of this sector;</li> <li>- Identify shortcomings and deficiencies in technology, quality, design and operational efficiency as well as export management and suggest possible measures to remove them;</li> <li>- Formulate recommendations to upgrade market acceptance of selected products on the international market and to enable better utilization of existing capacities (information on market requirements, close follow-up of changes in fashion, arrangements for contract manufacture, etc.) with particular emphasis on better utilization of presently unutilised import quotas;</li> <li>- Review possibilities to encourage re-grouping the industry aiming at improvements in economics of scale and export performance of small units. Recommend measures for strengthening of existing and establishment of new export associations of manufacturers;</li> </ul> |
| 7) <u>Language:</u>               | Spanish  |
| 8) <u>Qualifications:</u>         | Expertise in manufacturing technology of textile garments, with extensive experience in design development, fashion and market requirements of advanced markets. Substantial practical background also required in production and export management.   |

9) Background information:

The Mexican garment industry is characterized by the predominance of small and medium sized units, resulting in a low grade of productivity and insufficient operational efficiency. The total production of the sector amounted in 1972 to 16,000 million pesos, with an export performance of about 470 million pesos, or 3%. Virtually the entire export production comes from the border industry (maquiladoras) and is directed towards the US market. The border industry represents about 65% of the total production and mainly consists of products made of synthetics while the remaining 35% is engaged in manufacturing cotton garments and is oriented to cover domestic demand with little or no contact with foreign markets.

Encouraged by the recent results of the border-industry and in view of the favourable market possibilities, the Government intends to launch a massive export drive and requested the assistance of an international expert to analyse the possibilities and design the outlines of a comprehensive production and export development plan.

## REQUEST FROM THE GOVERNMENT OF THE UNITED MEXICAN STATES

## FOR SPECIAL INDUSTRIAL SERVICES

J O B   D E S C R I P T I O N

- 1) Post Title: Expert in export development of inorganic chemicals
- 2) Duration: One month
- 3) Date required: As soon as possible
- 4) Duty station: Mexico City with travel within the country
- 5) Purpose of the project: To assist the Government in assessing the existing capacity, technical level and efficiency as well as export possibilities of inorganic chemicals and to prepare recommendations for an export development programme in this area.
- 6) Duties: The expert will be attached to the General Directorate, Ministry of Industry and Commerce and will be expected to:
- Analyse the production and export structure of inorganic chemicals and visit manufacturing plants in this sector;
  - Identify shortcomings and deficiencies in production process and quality control and recommend measures to increase productivity and competitiveness of selected products through technological, operational and other improvements;
  - Explore possibilities for diversifications of production by introducing new products with good export prospects based on the natural endowments of the country;
  - Design guidelines for a development programme in this sector, including measures to promote and encourage new investments.
- 7) Language: Spanish
- 8) Qualifications: Expertise in production technology of inorganic chemicals, with extensive background in evaluating production factors affecting costing competitiveness and efficiency. Practical experience in industrial economics, particularly in export development with wide knowledge of world market consumption and demand trends.

9) Background information: Rate of growth in production and exports of inorganic chemicals has been one of the highest in the Mexican manufacturing industry. Production and exports amount at present to 15,700 million pesos and 635 million pesos respectively.

While the general trend of development, like in the entire manufacturing sector, was oriented towards the indigenous demand through import substitution, some important items, like nitric acid, lead oxide, sodium chloride etc. are produced for exports in a very substantial extent.

To explore the possibilities of existing exports production and introduction of new products such as sodium sulphate or sulphite, phosphoric acid etc. through encouraging and promoting new investments is still required.

Projections indicate that the export of the inorganic chemical sector will continue to have a high rate of growth and priorities have been attached to this sector in the overall industrial and export development plan of the Government, the requested technical assistance to explore future possibilities and design the outlines of a major export development operation in this field.



## REQUEST FROM THE GOVERNMENT OF THE UNITED MEXICAN STATES

## FOR SPECIAL INDUSTRIAL SERVICES

JOB DESCRIPTION

- 1) Post Title: Expert in export development of electrical products
- 2) Duration: One month
- 3) Date required: As soon as possible
- 4) Duty station: Mexico City with travel within the country
- 5) Purpose of the Project: To assist the Government in assessing the existing technical level, efficiency and quality of products as well as the unutilized capacities and possibilities for exports in electrical industry, and to prepare recommendations to strengthen the national industry and achieve substantial progress in export development in this area.
- 6) Duties: The expert will be attached to the General Directorate, Ministry of Industry and Commerce and will be expected to:
- Analyse production and export structure of electrical goods and collect information on unutilized capacities as well as quality and specifications of products through visits to manufacturing plants,
  - Identify technological and other factors responsible for excessive price structure, reduced international competitiveness and inadequate quality of individual products;
  - Formulate recommendations to upgrade quality and design and to increase productivity which will result in opening up new export prospects for selected products;
  - Study the possibility to increase capacity utilization through contract manufacturing and international co-operation arrangements;
  - Suggest organizational and institutional measures, such as establishment of design and training facilities, strengthening of export associations of manufacturers, development of standardization etc.
- 7) Language: Spanish
- 8) Qualifications: Expertise in manufacturing technology as well as in international quality and specification requirements of electrical products. Background in industrial economics particularly in export development with wide knowledge of world market requirements. Practical experience in industrial export management is regarded an asset.

9) Background information

Total production of the Mexican electrical industry in 1972 amounted to 7,000 million pesos, with an export rate of about 950 million pesos or 13.6%. Nearly 30% of exports come from the border industries (maquiladoras). Provisional figures for 1973 indicate that while production increased by 8%, growth of exports amount to 15%.

Capacity utilization in the industry is generally low, around about 50%, and shows very substantial differences according to the competitiveness of the companies and their products respectively. This is due to a very large extent to the fact that a number of products cannot cope with the requirements of the international market as the manufacturers have no access to foreign markets.

However, impressive progress, partly due to the border industries scheme, has been recently achieved in the export of different products such as electrical equipment and material, mainly conductors. This justifies the intention of the Government to explore further possibilities and to achieve considerable progress of exports through improvements in productivity, costing and quality of selected products, for which assistance of an international expert was requested.

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REQUEST FROM THE GOVERNMENT OF THE UNITED MEXICAN STATES  
FOR SPECIAL INDUSTRIAL SERVICES  
JOURNAL OF THE I.P.A.I.M.

- 1) Post duties Expert in the expert development of electrical products
- 2) Duration One month
- 3) Date required As soon as possible
- 4) Duty station Mexico City with travel within the country
- 5) Purpose of the Project To assist the Government in assessing the existing technical level, efficiency and quality of products as well as the unutilized capacities and possibilities for exports in electrical industry, and to prepare recommendations to strengthen the national industry and to achieve substantial progress in export development in this area.
- 6) Duties The expert will be attached to the General Directorate, Ministry of Industry and Commerce and will be expected to:
  - Analyse production and export structure of electrical goods and visit manufacturing units in this sector;
  - Explore possibilities of diversification of production and introduction of new items, with particular reference to favourable export prospects;
  - Suggest technological improvements or access to more up-to-date new technology suitable to improve productivity and upgrade quality of existing products or to introduce new products which meet the requirements of the world market.
  - Formulate guidelines for the preparation of an overall development plan for the electrical sector, with particular emphasis on exports, taking also into account possibilities offered through contract manufacturing and international co-operation arrangements on company level.
- 7) Language Spanish
- 8) Qualifications Expertise in manufacturing technology as well as in international quality and specification requirements of electrical products. Background in industrial economics particularly in export development with wide knowledge of world market requirements. Practical experience in industrial export management is regarded an asset.

9) Background information: Total production of the Mexican electronic industry in 1972 amounted to 5,000 million pesos with an export ratio of about 55% million pesos (11.2%). A substantial part of total electronic exports has been achieved through the border industries. Rate of growth of production and exports in electronic industry during the past years has been one among the highest in the entire sector of industry. At present, capacity utilization of existing units is next to 100%.

Characteristic features like low rate of capital output ratio and comparative advantage in low labour cost as well as easily obtainable labour force will still qualify this sector as one of the most prospective areas of export development. This will further be strengthened by the highly progressive trend of world demand, particularly in member countries of the LAFTA region having special trade agreements with Mexico, and through the experience and export traditions acquired in the recent years.

Government projections indicate that the growth rate of exports in this sector will in the future considerably exceed the average of manufacturing exports and possibly will reach 28% annually. To assist in formulating guidelines for a plan to achieve this target, the Government has requested the assistance of an international expert.

COMMITMENT FROM THE GOVERNMENT OF THE UNITED MEXICAN STATES  
FOR SPECIAL INDUSTRIAL SERVICES  
EXPERT DEVELOPMENT

- 1) Post Title                   Expert in planning expert development in metalworking industry
- 2) Duration                    One month
- 3) Date required               As soon as possible
- 4) Duty station               Mexico City with travel within the country
- 5) Purpose of the project       To assist the Government in assessing the existing technical level, efficiency and possibilities of metalworking industry, with particular emphasis on export development, and to prepare recommendations for a major operation aiming to increase productivity, improve international competitiveness and export performance of selected areas.
- 6) Duties                        The expert will be attached to the General Directorate, Ministry of Industry and Commerce, and will be expected to:
  - Analyse the production and export structure of metalworking industry and visit manufacturing plants in this field;
  - Collect information on price and cost structure of characteristic products in selected areas and investigate factors responsible for excessive costs and prices;
  - Identify product groups with possible good export prospects and formulate guidelines for an export development programme in these areas;
  - Suggest measures suitable to encourage improvements in productivity, attain higher standards in quality and eliminate factors causing excessive production costs.
- 7) Language                    Spanish
- 8) Qualifications            Expertise in manufacturing techniques of metalworking industry, with substantial experience in development, planning, costing, and export management of this sector. Practical knowledge of international requirements in quality and specifications as well as demand trends for a wide range of machinery products is required.

9) Background information.

The rate of growth of production and exports of the Mexican metalworking industry in the period from 1965 ~~and 1966~~ respectively through 1972 was 4.1% and 42% respectively, the export rate having been substantially higher than the average of manufacturing industries. In 1972 production (without electrical and electronic products) amounted to approximately 28,500 million pesos, exports having a share of 12.3% or 3,500 million pesos.

Encouraged by the results of the export-import linkage scheme having been in force in the automotive industry for a number of years similar schemes are also now being introduced in some other areas. Though the basic aim is the promotion of import substitution, these schemes may contribute to substantial import development. There are, however, a number of other products, such as electric typewriters and table calculators, glass making machinery, etc. which have emerged in the past years as being important export items on their own right and play a major role in the export performance of the sector. Some other products like diesel engines, weighing and packaging machinery etc., if progressively developed, may have an equally considerable share in future exports. Excessive costs and inadequate quality and specifications, however, often prohibit the export of these products.

The Government intends to maintain the high growth rate of production and exports in this sector by removing the impeding factors and drawing up a plan for development in this area, and requested technical assistance for this purpose.

REQUEST FROM THE GOVERNMENT OF THE UNITED MEXICAN STATES  
FOR SPECIAL INDUSTRIAL SERVICES  
JOB DESCRIPTION

- 1) Post Title: Expert in food processing and export development
- 2) Duration: One month
- 3) Date Required: As soon as possible
- 4) Duty station: Mexico City with travel within the country
- 5) Purpose of the Project:  
To assist the Government in assessing the existing capacity, technical level, efficiency and possibilities of food processing industry, with particular emphasis on export development, and to prepare recommendations for a major operation aiming to increase productivity, improve international competitiveness and export performance of selected areas.
- 6) Duties:  
The expert will be attached to the General Directorate, Ministry of Industry and Commerce and will be expected to:
- Analyse the production and export structure of processed food industry and visit manufacturing plants of this sector;
  - Investigate factors limiting export performance, such as inadequate supply of primary products and material, problems related to operational efficiency of processing, packaging or presentation, lack of market image, etc.;
  - Explore possibilities of installing new plants of the national food industry and introducing the production of new products with good export prospects;
  - Advise on upgrading of quality of selected export products according to requirements of the international market;
- 7) Language: Spanish
- 8) Qualifications: Expertise in processing and packaging technology as well as quality control of food products. Extensive experience in industrial economics particularly in export development.

3) Background information

Production of processed food and beverages amounted in 1972 to 31,500 million pesos, exports having a share of 3.2% or 1,000 million pesos without, however, production and exports rising sharply thereafter. After a modest rate of growth prevailing in exports since 1965, more encouraging results have been achieved in 1971 and 1972.

One of the most important factors in export development seems to be the inadequate supply of primary products, however, a more substantial export performance can only be expected after removing a number of other factors, such as improper technology resulting in low grade of productivity and excessive costs as well as in inadequate quality or presentation, which does not meet international market requirements.

To cater for the needs of the population at lower prices and in parallel implement an ambitious export development through improving productivity, the Government intends to draw up a plan to encourage the development of the national food industry and requested technical assistance for this purpose.



## ECON PLAN

A. Description of project activities

The project will last three years, divided into two phases. The first will be undertaken in 1973-1974 and the second in 1975. The second phase will be included in Mexico's next UNDP country programme, but it will follow on directly from the first phase, as a continuation of the original project.

The various activities will be co-ordinated and inter-connected with the aim of solving the problem of developing the export of specific branches of industry in a practical manner.

An attempt will be made to study the nature of the obstacles **impeding the** expansion of exports and to provide solutions through a wide variety of forms of technical assistance and promotion. This work will be carried out in an integrated manner, in order to provide the most detailed possible analysis as a basis for achieving the objectives.

The sectors that are particularly important for industrial exports as a whole will be studied by experts specializing in industrial promotion and co-operation, inter-industrial structure and similar matters. A general summary of the results achieved and experience gained in each branch of industry will lead to the formulation of a long-term development plan for export.

The details of the project work plan will be based on the findings and final report of the UNIDO mission of eight experts referred to in previous paragraphs, which will be submitted to the Mexican authorities for consideration in the third quarter of 1974. Nevertheless, the following general programme can be given for the project activities:

1. A thorough analysis will be made of the final report of the eight experts, including the details of the work programme recommended for specific areas of the industrial sectors investigated.
2. A project co-manager will be appointed, who will be responsible for the over-all running of the project, co-ordinating all operations with his national counterparts.

His work will be to determine which sectors of industry should be studied in the first and second phases of the project. The intention is to select five sectors in the first phase and five in the second, either taking the final report of the eight experts as a basis or selecting them from among those the project manager considers most appropriate in the light of previous investigations.

Another activity will be to summarize the findings of each expert and draw up individual reports and to prepare a general report on the results of the project at the end of the second phase.

The project manager will be assisted by three experienced experts; two of the will be engaged for six months and they will be responsible for the over-all industrial expert programme.

He will also analyze the system of export incentives with a view to revising it and getting it put into effect. He will assist the Secretariat of Industry and Trade in carrying out the general strategy for achieving the objectives.

He will be responsible for industrial co-operation, including transfer of technology and other activities, and for encouraging recommendations on quality control, production methods, the organization of export trade associations, etc., and securing their implementation in the various industrial sectors selected.

3. Promotional activities will include investigation of the possibility and necessity of establishing a body to arrange contract work, both nationally and internationally, for the manufacture of products in different branches of industry.
4. During the first phase of the project, each of the experts studying the five sectors selected will concentrate on the aspects of technology, productivity, quality control, adaptation of products to the requirements of the international market and, finally, diversification of exports through the identification of potential new exports and their introduction on to the corresponding markets. An analysis will also be made of problems of cost and competitiveness, including research into the availability, cost and quality of national imports. Recommendations will be drawn up on these matters. Finally, advice will be given on the adaptation of new technology and know-how.

This is the general programme, which will vary in accordance with the characteristics and needs of each sector analysed.

The experts analysing the five sectors in each phase will be assisted by other experts who will come to work on short missions. That is to say, when the solution of problems identified in any particular sector requires highly specialized knowledge, an expert will be engaged for a month or two to help analyse these problems and make recommendations for solving them.

5. Promotional activities will include study tours undertaken by Mexican industrialists in order to establish contacts with industrial and manufacturing circles in other countries, co-ordinate co-operation, take part in industrial seminars and learn about the principles to be applied in the adaptation of products.

Another feature of these activities will be the organization of round tables in Mexico at which representatives of the industrial community can meet and discuss the progress made in promoting the development of the country's external sector.

The project includes the provision of two fellowships for selected Mexican industrialists in each industrial branch studied, for a period of approximately twelve months, so that they can study ways of adapting new technology and know-how which it is planned to introduce in the future, in accordance with the project recommendations. Similarly, contacts will be established with commercial bodies with a view to studying the operation of the channels for marketing and distribution abroad.

6. Attention will be given to the possibility of establishing pilot plants at which demonstrations can be given to Mexican industrialists on the adaptation of technology, quality, etc.
7. The results achieved with the project will be submitted annually to the Mexican authorities and to UNIDO. At the end of the first phase, a report will be submitted on the results of the investigations, putting forward recommendations for each of the sectors studied, and at the end of the second phase there will be a general report on the project as a whole.

## B. Description of UNDP inputs

### 1. Assignment of international staff

The execution of this project requires the technical assistance services of a multi-disciplinary team of twenty-eight experts from the United Nations Industrial Development Organization. The fields from which they should be drawn are to be determined in the course of its implementation.

**PROJECT BUDGET COVERING GOVERNMENT COUNTERPART CONTRIBUTION (IN LOCAL CURRENCY)**

Country: Mexico  
 Project No.:  
 Title: Promotion of exports by the manufacturing sector

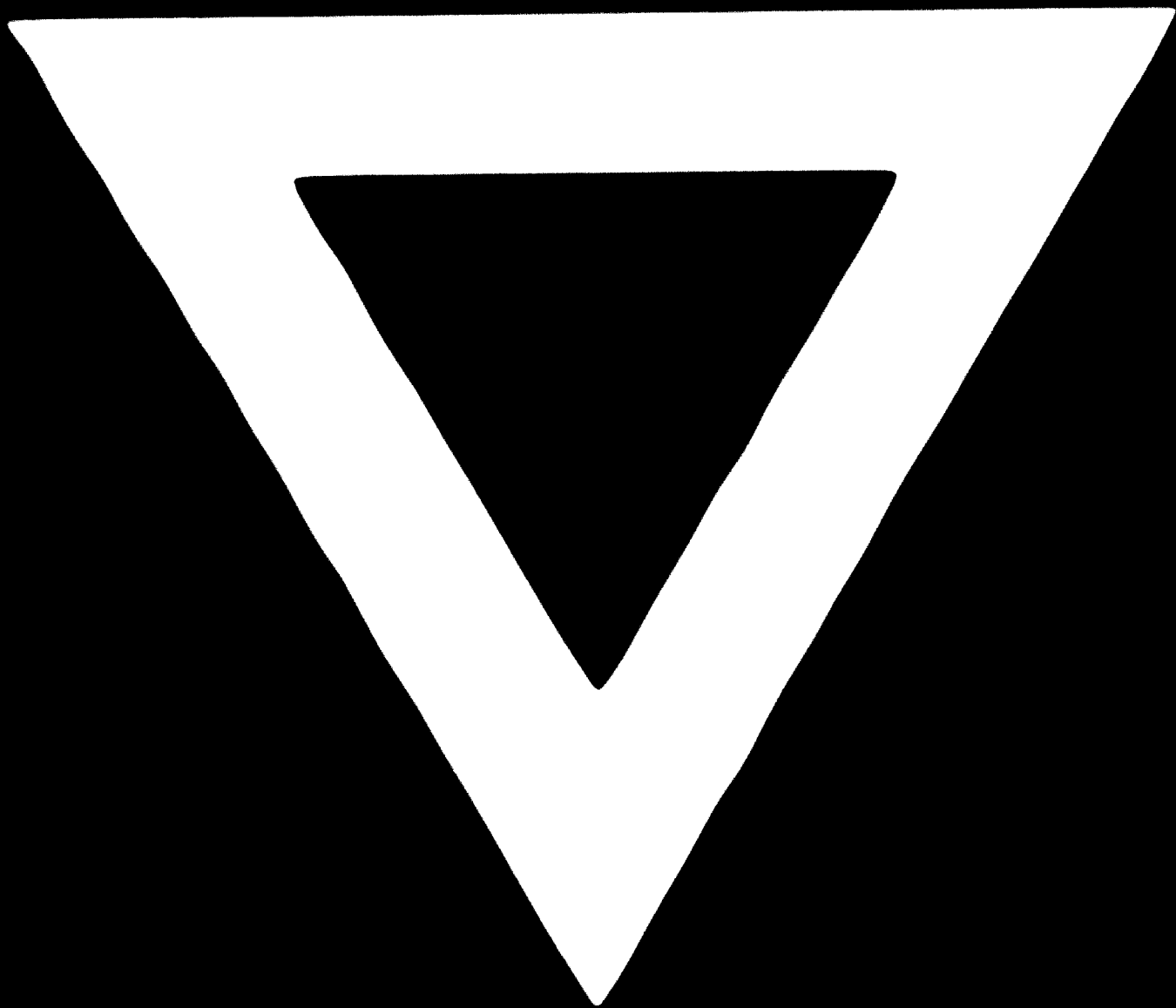
	Phase 1		Phase 2	
	1975		1976	
	m/m	Pesos	m/m	Pesos
<b>1. Project personnel</b>				
1. Project co-manager	12	180,000	12	180,000
2. Five experts	60	600,000	60	600,000
3. Three secretaries	36	108,000	36	108,000
Sub-total	<u>108</u>	<u>888,000</u>	<u>108</u>	<u>888,000</u>
<b>2. Equipment</b>				
1. Expendable equipment	-	60,000	-	60,000
2. Non-expendable equipment	-	1,000,000	-	1,000,000
3. Premises	-	120,000	-	120,000
Sub-total	-	<u>1,180,000</u>	-	<u>1,180,000</u>
<b>3. Training</b>				
1. Training courses	-	-	30	169,000
Sub-total	-	-	<u>30</u>	<u>169,000</u>
<b>4. Promotional activities</b>				
1. Travel costs	-	38,000	-	62,500
2. Organization of round tables, seminars, etc.	-	-	-	250,000
3. Establishment of pilot plant	-	-	-	200,000
Sub-total	-	<u>38,000</u>	-	<u>312,500</u>
<b>TOTAL</b>	<u>108</u>	<u>2,106,000</u>	<u>138</u>	<u>2,449,500</u>

PROJECT BUDGET COVERING UNDP CONTRIBUTION (IN US DOLLARS)

Country: Mexico  
 Project No.:  
 Title: Promotion of exports by the manufacturing sector

	Phase 1 1975		1976		Phase 2 1977	
	m/m	Thousands of dollars	m/m	Thousands of dollars	m/m	Thousands of dollars
<b>1. International experts</b>						
(a) Project manager	12	30	12	30	12	30
(b) Three specialist advisers, each for 6 months	9	22.5	9	22.5	-	-
(c) Ten sectoral experts, each for 6 months	18	45	12	30	30	75
(d) Experts on short-term missions (each for 1-5 months)	10	25	15	37.5	25	62.5
(e) Advisers on training	-	-	3	7.5	3	7.5
Sub-total	49	122.5	51	127.5	70	175.0
<b>2. Training</b>						
(a) Two fellowships in each of the 10 sectors, each for 3 months	-	-	30	13.5	30	13.5
(b) Study tours, participation in international seminars and conferences on product adaptation	-	-	-	20	-	20
Sub-total	-	-	-	33.5	-	33.5

<b>3. <u>Equipment</u></b>						
(a)	Transport costs -					
	pilot plant instal-					
	lation and					
	demonstration	-	40	-	-	40
	Sub-total	-	40	-	-	40
<b>4. <u>Miscellaneous expenditure</u></b>						
(a)	Promotional activities					
	(seminars, round					
	tables, etc.)	-	20	-	-	20
(b)	Transport costs,					
	testing of samples for					
	products needing adap-					
	tation, revision of					
	project and reports					
(c)	Travel costs	-	10	-	-	10
(d)	Others	-	10	-	-	5
	Sub-total	-	20	-	-	5
	Total	-	246.0	45	-	40
	Total for phase 1	132.5				288.5
	<b>GRAND TOTAL</b>	378.5				667.0



**76. 06. 30**