

Republic of Yemen

Institutional and Policy Environment for Industrial Development

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Industry and Energy Operations Division
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CURRENCY AND EQUIVALENTS

Currency Units - Yemen Rial (YR) and Yemen Dinar (YD)

US\$1 = YR 12 (since February 19, 1990)

YD1 = YR 26 (since mid-1990)

ABBREVIATIONS

CACB	Cooperative and Agricultural Credit Bank
CBY	Central Bank of Yemen
CGO	Credit Guarantee Organization
CPO	Central Planning Organization
CSO	Central Statistical Organization
DRC	Domestic Resource Cost
GDP	Gross Domestic Product at Market Prices
GNP	Gross National Product
HCB	Housing Credit Bank
IBY	Industrial Bank of Yemen
IMF	International Monetary Fund
IPA	Investment Promotion Agency
MEST	Ministry of Economy, Supply and Trade (YAR)
MIST	Ministry of Trade, Industry and Domestic Supply (PDRY)
MOF	Ministry of Finance
MOI	Ministry of Industry (Republic of Yemen)
NBY	National Bank of Yemen
PDRY	Peoples' Democratic Republic of Yemen
PE	Public Enterprise
PSDC	Private Sector Development Corporation
ROY	Republic of Yemen
SME	Small and Medium Scale Enterprise
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
YAR	Yemen Arab Republic
YBRD	Yemen Bank for Reconstruction and Development
YCIF	Yemen Company for Investment and Finance
YD	Yemeni Dinar
YR	Yemeni Rial

FISCAL YEAR

January 1-December 31

REPUBLIC OF YEMEN
INSTITUTIONAL AND POLICY ENVIRONMENT
FOR
INDUSTRIAL DEVELOPMENT

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This report is based on the findings of two missions to Yemen in October 1989 and March 1990 and on reports previously prepared by the World Bank. Draft report was discussed with the Government in June 1991. The mission members were as follows: J. Maweni (Senior Financial Analyst and Task Manager); S. Brajovic-Bratanovic (Senior Management Specialist); S. Hisakawa (Industrial Development Officer-UNIDO); and World Bank consultants V. Bhatt, N. Sukkar, V. Prakash, H. Kraske, B. Cunradi, and G. Bigatello.

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EXECUTIVE SUMMARY

1. The purpose of this report is to assist the Government of the Republic of Yemen (ROY) in analyzing the performance of the manufacturing sector in the northern and southern regions (formerly the Yemen Arab Republic and the Peoples' Democratic Republic of Yemen). The report analyzes and recommends policies and institutions for attracting foreign direct investment, promoting exports, expanding private sector activities, reforming public sector enterprises, and developing financial sector institutions. The report is based on data collected by two World Bank missions to Aden in October 1989 and March 1990 and on the following reports:¹

- (a) Yemen Arab Republic: The Manufacturing Sector Working Paper (December 1988).
- (b) The Manufacturing Sector of the Yemen Arab Republic: Effective Protection and Domestic Resource Costs, UNDP/World Bank (December 1989).
- (c) The Requirements for Extension and Technical Assistance Services for Small- and Medium-Scale Enterprises in the Yemen Arab Republic (December 1989).
- (d) Note on Industrial Public and Mixed Enterprises Sector in YAR (1988).

2. The Executive Summary follows the outline of the report. Section A describes the macroeconomic setting, the problems caused by the current structural imbalances and the potential for growth as a result of unification. Sections B and C provide an overview of the manufacturing sector and review its structure, performance, and growth potential. Section D, E, and F deal with industrial strategy, the policy framework, and the institutional structure. The final section recommends an action plan to implement the recommended sector strategy.

A. MACROECONOMIC SETTING AND THE MANUFACTURING SECTOR

3. As a result of a sharp decline in remittances from migrant workers and in concessional external financing, the macroeconomic situation in the North and the South has deteriorated substantially in recent years. GDP, which had grown at average annual rates of more than 9 percent in both economies had declined to only 4.3 percent in the Yemen Arab Republic (YAR) by 1989, while in the People's Democratic Republic of Yemen (PDRY) the real rate of GDP growth declined after 1985. By 1989, severe economic imbalances had emerged. The combined macroeconomic indicators for the YAR and the PDRY at the end of 1989 showed: an external debt-to-GDP ratio of 74 percent, a debt service ratio of 34 percent, a current account deficit-to-GDP ratio of 12.8 percent, an overall fiscal deficit-to-GDP ratio of 17.4 percent and international reserves of only 2.8 months of imports. An apparent deterioration in the economic situation since unification is suggested by the following preliminary indicators: (a) decline in GDP of about 3% in real

^{1/} Copies of these reports are available to the Government.

terms in 1990; (b) a decline in imports of about 17 percent in 1990 due to shortages of foreign exchange; (c) inflation of about 34 percent in 1990; and the Government's increasing inability to fully service its debts. Without implementation of urgent stabilization measures, these imbalances are likely to worsen with the decline in remittances because of the return of migrant workers from the Gulf countries.

4. The Role of the Manufacturing Sector. In 1990, the manufacturing sector's share in GDP was about 10.8 percent, its share in investment and employment was about 7.3 percent and 4.1 percent respectively. Before 1985 the manufacturing sector was growing faster than GDP, but its rate of growth has been lower and its contribution to GDP has remained more or less constant at about 11 to 12 percent. The slower growth in manufacturing value added since 1985 is attributable to lower investment and problems in obtaining raw materials and spare parts because of the payment imbalances. The manufacturing sector's 11 percent contribution to GDP compares with about 48 percent for services (including Government), 20 percent for agriculture, and 5 percent for mining, quarrying, and other industrial activities. This sector has the potential to increase its contribution to income growth and employment, given conditions of macroeconomic stability with respect to inflation, the exchange rate, and interest rates. In addition it is necessary to develop a viable industrial strategy and to formulate and implement a policy and institutional framework consistent with that strategy.

5. New Prospects for the Manufacturing Sector. With unification the enlarged resource base and internal market create opportunities to increase competition and productive efficiency by (a) raising the capacity utilization of efficient firms; (b) developing linkages in the industrial sector and with other sectors; and (c) increasing competition among financial sector institutions. A related opportunity exists since returning migrants may wish to invest in manufacturing enterprises, thus facilitating privatization of public sector enterprises. Others may wish to use skills acquired abroad by starting small-scale enterprises. The possible release of senior and middle-level professionals from government agencies may provide opportunities to develop new private or mixed sector institutions to improve management and technical consultancy services, entrepreneurial development programs; and vocational and technical training programs; all of which are currently underprovided.

B. OVERVIEW OF THE MANUFACTURING SECTOR

6. Sector Performance. Both North (YAR) and South (PDRY) adopted an import substitution strategy for industrialization. The approach, however, did not take into account the linkages within the manufacturing sector and with other sectors. The resulting inefficiencies were reflected in high domestic prices for manufactured goods, particularly in the South, and domestic resources costs above unity in many subsectors. The main factors contributing to the high cost of the import substitution process include: the capital and import intensity of production, low levels of capacity utilization, dependence on imported skills, neglect of small enterprise

development, and a failure to develop the linkages mentioned above. Imported inputs account for more than 70 percent of total manufacturing inputs, skilled and professional personnel account for at least 8 percent of sector employment, and the average level of capacity utilization is about 50 percent. The neglect of small enterprise development is evident from the lack of data regarding this subsector as well as the lack of any clear policy for its development.

C. STRUCTURE, PERFORMANCE, AND GROWTH POTENTIAL

7. Ownership Structure. Figures 1 and 2 show the relative importance of various enterprises in terms of production and employment for the Republic of Yemen based on 1986 data. There are 21 public enterprises engaged in manufacturing, thousands of private sector enterprises and several enterprises in the mixed and cooperative sectors. In terms of manufacturing value added, the private sector accounts for about 70 percent, the public sector for about 20 percent, and the mixed and cooperative sectors for the remaining 10 percent. The relative contributions to employment are 80 percent for the private sector, 16 percent for the public sector, and 4 percent for the mixed and cooperative sectors.

8. Relative Ranking of Various Subsectors. Food processing and fisheries dominate the manufacturing sector with 50 percent of value added and 34 percent of employment (Figures 3 and 4). The relative ranking of other subsectors in terms of value added is: building materials (12 percent), chemicals and plastics (12 percent), textiles and clothing (9 percent), and others (including metals and equipment, 17 percent). In terms of employment the relative ranking is: textiles and clothing (16 percent), building materials (14 percent), chemicals and plastics (12 percent), metals and equipment (12 percent) and others (12 percent).

9. Other Subsector Characteristics. Labor productivity in the North (reflecting capital intensity) is highest in chemicals and plastics, followed by building materials (because of cement), food processing, metals and equipment, and textiles. In the South food products and fisheries are ranked first, followed by metals and equipment, leather and wood, and paper products. The ratio of imported inputs to total inputs is highest in food processing. Chemicals, plastics and metals and equipment are more import intensive and have a higher share of foreign personnel than textiles and clothing, building materials, and leather.

REPUBLIC OF YEMEN

Ownership and Structure of Manufacturing Sector

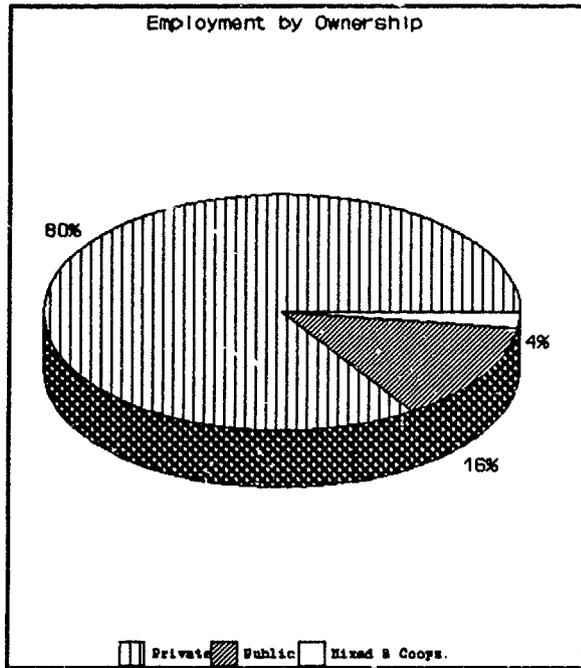


Figure 2

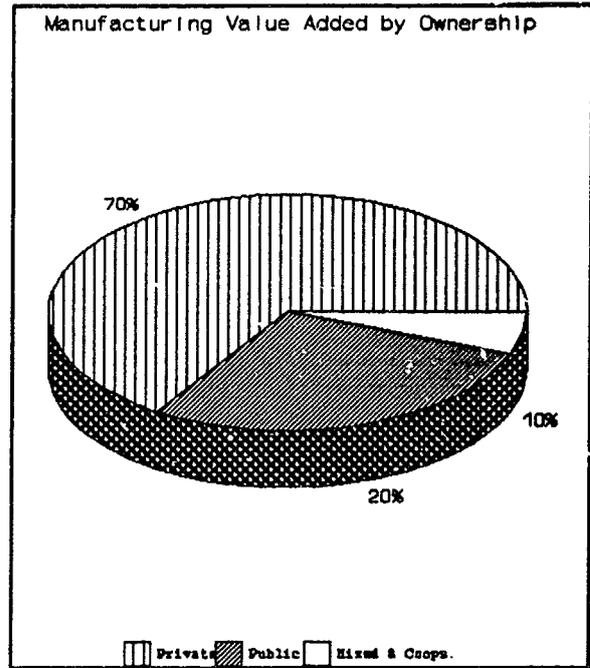


Figure 1

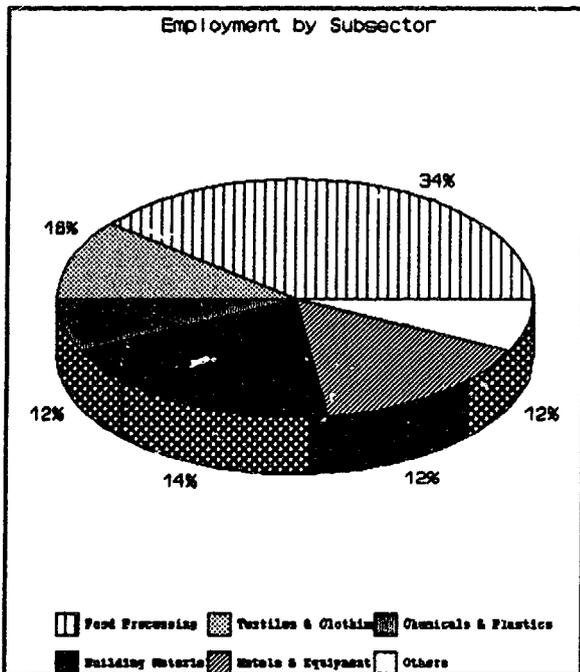


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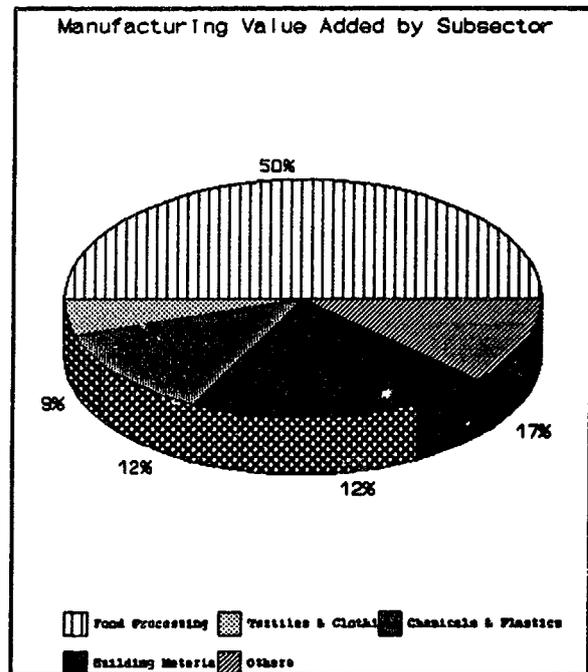


Figure 3

D. A NEW INDUSTRIAL DEVELOPMENT STRATEGY

10. Objectives of the Proposed Strategy. The manufacturing sector in both regions is inefficient as reflected in high production costs, low capacity utilization, poor product quality, and high import intensity. These weaknesses reflect the lack of a coherent industrial development strategy and an institutional and policy framework that is in tune with that strategy. Such a strategy should aim at expanding the industrial sector in line with the country's comparative advantage. It will be essential as well to tackle the country's structural imbalances through efficient import substitution and export promotion.

11. The role of the Government should be confined to policy analysis, and the formulation of industrial development strategies (paras. 12, 18-29). To facilitate private sector development, the Government should provide technical and extension services in partnership with the private sector, carry out research and development activities and provide information to entrepreneurs.

12. Elements of the Proposed Strategy. The report recommends that the Ministry of Industry take the opportunity arising from unification to formulate an industrial sector strategy aimed at (a) creating a competitive environment; (b) promoting intersectoral and intrasectoral linkages; (c) attracting foreign direct investment; (d) promoting private sector development; and (e) improving managerial and technical skills. These elements group together the twelve components considered by the Government (para. 4.03) to constitute the core of a strategy for self-sustaining industrial development (paras. 13 through 17).

13. Competitive Environment. A competitive environment is essential to foster a process of efficient import substitution and export promotion as well as managerial and technological development. Currently, many firms are sheltered from competition in domestic markets by investment and import licensing restrictions and foreign exchange controls. The results of a study of effective rates of protection and domestic resource costs (DRCs) showed an average effective rate of protection of 142 percent for a sample of enterprises from 12 manufacturing subsectors in the North. The findings reported a strong negative correlation between the level of protection and the level of efficiency as measured by DRCs. A competitive strategy should include measures to lower the overall level of protection, remove the remaining subsidies, and reform industrial public enterprises (IPEs), either to enable them to operate commercially and competitively or to privatize them.

14. Emphasis on Linkages. The strategy should be oriented toward developing subsectors that have links with local resources. These industries can reduce the import intensity of manufacturing operations and increase capacity utilization (para. 6). The intersectoral linkages that could be emphasized are: food processing with agriculture, construction with local building materials, leather with livestock development, and fish processing with fisheries. Intra-industry linkages could be strengthened if the local private sector develops the capacity to produce spare parts, tools, and

machinery. The Government's role should be limited to providing technical and extension services to farmers and assisting them in producing products required by manufacturers, developing product standards and providing information to market participants.

15 Attracting Foreign Direct Investment. Because of its current high level of external indebtedness (75 percent of GDP) and debt service ratio (35 percent of GDP), Yemen is unlikely to attract substantial debt capital flows for investment financing. If Yemen is to maintain the current level of investment (15 percent of GDP), the Government urgently needs to devise an action plan to attract foreign investment, particularly from Yemeni migrants abroad. The experience of many developing countries that have succeeded in attracting foreign direct investment has been that stable and consistent macroeconomic policies and adequate infrastructure provide the right economic environment for foreign investment. In addition the plan should also include reforms of investment licensing and incentive policies, and development of Aden as a free port.

16. Private Sector Development. Further development of industry would be encouraged by an institutional structure that provides industrial support services, including technical and extension services, management consultancy services, product standardization and quality control, adaptive and technological research, and entrepreneurial development training services. Some of these services (technical and extension services, and management consulting) are thinly distributed in several organizations, while others are virtually unavailable at present. Technical and extension services, management consulting and entrepreneurial training services should be developed quickly to help improve project and technology selection, development of intersectoral and intrasectoral linkages, and to facilitate private sector investments in manufacturing.

17. Improvement of Managerial and Technical Skills. Studies on the employment destination of graduates of technical institutes show that shortages in the supply of skilled manpower are likely to persist for some years.² Efforts to improve the provision and quality of training, such as the proposed National Technical Training Board that would develop national policies for training and monitor implementation plans, should be encouraged. The private sector should also be encouraged through tax and other incentives to provide training to their employees and to employees of other organizations.

2/ See, for example, World Bank, Republic of Yemen: Human Resources: Development, Issues and Prospects, June 1990.

E. POLICIES for GROWTH AND EFFICIENCY

18. Yemen's inefficient industrial structure is a result of a distorted policy framework. Inappropriate exchange rate policies, import and investment controls, a distortionary tariff structure and the direct involvement in production activities by public sector companies are the policies which have constrained the development of industry most. The Government recognizes the importance of policy reforms to realize the industrial strategy outlined above and has already (1991) taken measures to: relax the restrictions on the parallel foreign exchange market; liberalize import licensing; and eliminate most of the price controls. However, additional measures are required to deepen reforms in these areas as well as to implement other new reforms in the areas of export promotion and investment incentives.

19. Of all the policies that affect the manufacturing sector, exchange rate, import licensing and tariffs are macroeconomic policies that have a pervasive impact throughout the economy. These policies (together with industrial policies) are also critical aspects of a policy framework necessary for efficient and viable industrial development.³ The conclusions and recommendations in paras. 21 through 23 indicate the general direction and goal for these macroeconomic policy reforms from the perspective of their impact on the industrial sector.

(a) Urgent Policy Reforms

20. The report suggests that the Government adopt a flexible exchange rate policy, abolish import licensing, rationalize and reduce tariffs, discontinue investment licensing, and develop and implement a reform program of the industrial public sector enterprises.

21. Exchange Rate Policy. Additional measures are required to move all transactions onto the parallel market exchange rate and adopt it as the official rate and to remove all hindrances on the operations of the exchange dealers. Such a policy would facilitate the flow of foreign exchange resources to subsectors that have comparative advantage.

22. Eliminate Import Licensing. Instead of merely simplifying the process of import licensing, the Government should consider abolishing import licensing. Manufacturing enterprises would benefit from (a) the elimination of all costs of obtaining import licenses for the enterprises; (b) improvement in their capacity to adapt to changing situations by diversifying their product mix; and (c) the improvement in capacity utilization. The Government would also benefit from the elimination of the costs of administering a complex process of import licensing.

^{3/} These policies are more fully addressed in the medium-term macroframework paper prepared by the Bank in 1991.

23. Rationalize and Reduce Tariffs. In YAR the burden of tariffs on imported goods was relatively moderate, averaging about 25 percent. In PDRY, high rates were imposed on imports that competed against domestically produced items, and tariff levels varied widely among different subsectors. As import licensing is abolished the effective protection afforded to various subsectors by differential tariffs becomes even more important. Hence, the present distortionary and discriminating structure of tariffs should be replaced by lower tariffs. Such a policy would restore the signaling function of the price system and thus provide an incentive for the industries with comparative advantage to expand and export.

24. Discontinue Investment Licensing. Yemen has inherited stringent investment licensing policies from both PDRY and YAR. PDRY maintained rigid control over investments by requiring enterprises to obtain clearances from various ministries and local authorities. Once the above changes in the trade and exchange rate regime are implemented, there will be no need for investment licensing, except for statistical purposes, as the policy environment itself will induce investment on rational lines in subsectors with comparative advantage. It is, therefore, recommended that licensing of investments be discontinued; only registration should be required for statistical purposes.

25. Develop and Implement a Reform Program for IPEs. At present the Government is tackling the problems of the IPEs through a case-by-case approach. It is recommended that the Government should formulate a systematic approach for reforming the IPEs with specific objectives of improving the efficiency and productivity of these enterprises through a variety of options such as commercialization/restructuring and privatization. The policy of IPEs should be publicly announced to avoid uncertainty regarding the Government's intentions on the part of IPEs themselves and the private sector.

(b) Other Policy Reforms

26. Some other reforms required to promote industrial development include export promotion policies such as duty drawback schemes, retention of foreign exchange earnings and export financing facilities; and removing any remaining price controls. The report recommends (a) formulating and implementing export promotion policies; and (b) developing explicit quantitative criteria for award of investment incentives.

27. Formulate and Implement Export Promotion Policies. The weak export performance of the manufacturing sector in both North and South is in part attributable to the absence of export promotion policies, procedures, and institutions. The North and South export only about 1.6 percent and 2.8 percent respectively of manufacturing sector output. Exporters have seldom taken advantage of the duty drawback exemption schemes entitling them to refunds of import duties on inputs for exported production and the retention of export earnings schemes because of the cumbersome procedures involved. Further, there is a general lack of short-term financing facilities and export credits. The report recommends that duty drawback rules be simplified; policies and procedures relating to the retention of earnings should be clarified to exporters, and the possibilities of improving availability of export financing through refinancing of export credits with the Central Bank

(or through an insurance scheme or credit guarantee organization) should be carefully studied. These studies should investigate how to structure such schemes so that they do not create disincentives for the financial institutions to lend prudently and so that they do not become a financial burden to the Government.

28. Quantitative Criteria for Award of Investment Incentives. The major weaknesses of the new Law for Encouragement of Investment are the lack of explicit and quantitative criteria for awarding incentives and the dependence of the incentives on project size, sector, and location. It is recommended: (a) that decisions on award of incentives be based on quantitative criteria, such as the economic rate of return, to discourage investments that are viable only under high protection; and (b) that the Government adopt a neutral incentive structure among sectors and with respect to size and location, so that cost and demand factors determine the appropriate size and location of industries.

F. INSTITUTIONAL IMPROVEMENTS

29. Institutional improvements are needed to implement the recommended industrial sector strategy and the associated policy framework. Specifically improvements are needed to: (a) limit the role of the Ministry of Industry to formulating industrial strategies and carrying out policy analysis; (b) provide MOI's Department of Mixed and Public Enterprises (DMP) with the capability to develop and implement a reform program for the IPEs (para. 25); (c) strengthen the provision of industrial support services; and (d) strengthen the capacity of financial sector institutions to expand the availability of services, appraise projects and develop instruments for resource mobilization and export promotion.

(a) Redefine the Role of the Ministry of Industry

30. Prior to unification the Ministry of Economy, Supply and Trade (MEST) and the Ministry of Industry, Trade, and Supply (MIST) in the North and South respectively both implemented regulatory measures that were instrumental in creating a highly protected and inefficient industrial structure. Once these regulatory measures are discontinued, the Ministry of Industry's (MOI) role should be reduced and limited to defining industrial policies, conducting policy analysis, and promoting private sector development (para. 11). MOI should not compete with the private sector or control the activities of the sector. Further, consideration should be given to establishing the General Investment Authority (GIA) envisaged under the new Investment Law as an autonomous organization outside the civil service regime to promote private sector investment along the lines of the Ireland Development Authority, the Economic Development Board of Singapore, and many other countries. Such an institutional arrangement would enable the GIA to hire more qualified staff than would be possible under civil service conditions. MOI could also contract out research and policy studies to GIA and private sector organizations, while retaining the responsibility for industrial strategy and policies. However, the GIA should be carefully structured to avoid creating a huge and ineffective bureaucracy.

(b) Capacity to Implement IPE Reform Program

31. To develop and implement an IPE reform program (para. 25), the Ministry of Industry's DMP needs to acquire specialized skills which it currently does not possess. The Government may wish to consider obtaining technical assistance to assist the DMP in carrying out these tasks.

(c) Strengthen Industrial Support Services

32. Industrial support services in the form of technical and extension services, management consulting services, entrepreneurial development programs, training for managerial and technical skills, product testing and quality control, and adaptive technological research need to be either established or strengthened. The report recommends that: (a) a feasibility study should be commissioned to investigate establishing an organization (private sector development corporation) to provide technical and extension services, management consulting services, and entrepreneurial development training services to the private sector; and (b) consideration should be given to establishing an organization for product standardization and quality control.

33. Private Sector Development Corporation (PSDC). The feasibility study should explore whether, the PSDC could be an autonomous private or mixed sector organization, structured appropriately to operate as a commercial venture, deriving its income from charging fees for its consulting, advising and training services. The PSDC should be established only if it is demonstrated in the feasibility study that it could operate on a self-financing basis within two to three years. To facilitate the study and the possible establishment of the PSDC, the Government could designate a leading financial institution--possibly the Central Bank--to take the lead role in following up on this recommendation. There should be no restrictions on the activities of private-sector consulting companies or individuals. Competitive pressures help to ensure the efficiency of the consulting industry. For this purpose the Ministry of Industry or Chamber of Commerce should maintain a register of private sector consultants and should operate a referral service for industrial customers wishing to obtain services.

34. Product Standards and Quality Control. Product standards and quality control procedures are required to improve the quality of manufactured products for the domestic and export markets. Both MEST and MITS established Standardization and Quality Control Departments, but they lacked the skills and facilities for establishing product specifications and for quality control testing. It is recommended that an organization be established for standards and quality control procedures for manufactured products.

35. The Government has established a free zone authority to develop the port of Aden as a free-trade zone. In some countries, free-trade zones have been instrumental in attracting significant amounts of foreign capital. The Free Zone Authority should be carefully staffed to provide it with the expertise necessary to enable the port of Aden to regain its competitiveness.

(d) Strengthening Financial Institutions

36. Financial institutions should be strengthened to enable them to (a) expand their services throughout the country; and (b) increase their capacity to appraise projects and develop instruments for resource mobilization and export promotion. Financial institutions in Yemen are reluctant to lend in the absence of collateral that amounts to as much as 125 percent of the loan amount. Further, the interest rate structure limits profitable lending opportunities, and the legal framework for recovery of loans constrains the institutions' lending activity. Thus, it is proposed that these constraints be removed by improving the effectiveness of the legal and institutional framework for recovery of debts and adjusting interest rates to positive levels and gradually moving to market-driven rates. Further, consideration should be given to establishing a credit guarantee organization (para. 27) to guarantee the loans of the small and medium-scale enterprises (SMEs) and thus encourage the financial institutions to lend to them. The financial institutions also need to strengthen their capabilities to appraise and supervise projects so they can lend on the basis of project viability rather than merely on the basis of collateral. These proposals should be considered as part of an overall financial sector development strategy.

G. ELEMENTS OF A PLAN OF ACTION

37. During technical discussions in June 1991, the Government agreed with the recommended strategic objectives for industrial development (paras. 10 through 17). The Government has already implemented some of the policy measures recommended by the report (para. 18). However, to fully accomplish the recommended strategic objectives, the Government needs to adopt the recommendations for additional policy and institutional measures (paras. 20 through 36). Once the additional policy, and institutional goals are endorsed, it is recommended that the Government should: (a) issue a broad statement of industrial policy encompassing the strategic elements suggested above; and (b) task forces should be established to draw up detailed action programs on each key element of strategy. It would be useful to announce the formation of these task forces in the proposed policy statement and to include representatives of the private sector, Chambers of Commerce and financial institutions. The Bank would be ready to assist in this work as requested.

38. The Government should also consider forming a Presidential Commission on Industry and Trade including inter alia, private sector, industry representatives and exporters. The Commission would serve as a permanent forum for discussion by the various parties of key industrial policy issues and thus would contribute to Government policymaking. The Commission would act in an advisory capacity in providing its views to the Government on various industrial sector issues.

CHAPTER I

MACROECONOMIC SETTING AND THE MANUFACTURING SECTOR

A. OVERVIEW

1.01 The Republic of Yemen (ROY) came into existence on May 22, 1990 as a result of the unification of the Yemen Arab Republic (YAR) and the People's Democratic Republic of Yemen (PDRY). Unification has brought together YAR and PDRY's populations of about 8.8 million and 2.4 million respectively and has created a larger production base and consumer market. In 1989, the year preceding unification, YAR's GDP at market prices was about YR 66,069 million while that of PDRY was about YR 10,712 million (YD 412 million). The corresponding per capita GNP were about US\$670 for YAR and about US\$540 for PDRY. In its first year, the Republic of Yemen's gross domestic product at market prices (GDP) was YR 98,124 million (or US\$8,305 million) and its population was about 11.6 million. Its gross investment to GDP ratio was about 13.6 percent.

1.02 YAR's economy was managed along liberal market principles whereas PDRY pursued socialist doctrines and assigned the leading role to the Government and the public sector. The Republic is adopting market economy principles and encouraging greater private sector participation in the economy.

1.03 Role of the Manufacturing Sector in the Economy. In YAR, manufacturing value added as a percentage of GDP increased from about 7.9 percent in 1980 to about 11.2 percent in 1985, and to about 12.3 percent in 1989. In PDRY, manufacturing value added had increased to about 8.9 percent of GDP in 1985, but had declined since then to about 5.5 percent of GDP in 1989. The reasons for the recent lack of substantial growth in manufacturing value added in YAR and the decline in its relative contribution to GDP in PDRY since 1985, are the scarcity of foreign exchange resources to support the sector's import requirements for new investments and inputs. The reluctance of migrant workers to convert their foreign exchange earnings through the formal financial system under conditions of a restrictive investment climate contributed to the scarcity of foreign exchange resources.

1.04 In 1990, the first year of unification, the manufacturing industry's share in GDP, investment and employment was about 10.8 percent, 7.3 percent and 4.1 percent, respectively (Table 1.1). Since the performance of the sector has been constrained by shortages of foreign exchange resources to meet its import requirements for inputs and investments, a stable macroeconomic environment and a well-conceived strategy as well as consistent policy and institutional environment, could help the sector to play a more significant role in the economy.

Table 1:1 - Key GDP and Manufacturing Sector Indicators

	1985	1986	1987	1988	1989
A. YAR					
GDP (YR Million)	30,969	37,505	43,519	53,766	66,069
Population	7,661	7,919	8,190	8,474	8,771
Gross Investment (YR Million)	4,459	4,988	6,354	7,420	8,060
Gross Investment/GDP (%)	14.4	13.3	14.6	13.8	12.2
Manufacturing Value Added (YR Million)	3,465	4,467	5,919	6,728	8,126
Manufacturing Value Added/GDP (%)	11.2	11.9	13.6	12.5	12.3
Gross Investment in Manufacturing (YR M)	578	451	490		
Manufacturing Investment/Gross Invest.	13.0	9.0	7.7		
B. PDRY					
GDP (YD Million)	382.3	339.2	376.4	395.6	412
Population	2,150	2,216	2,285	2,356	2,429
Gross Investment (YD Million)	131.9	102.8	114.8	165.4	187
Gross Investment/GDP (%)	34.5	30.3	30.5	41.8	45.4
Manufacturing Value Added (YD Million)	34	22	20	20	23
Manufacturing Value Added/GDP (%)	8.9	6.4	5.3	5.0	5.5
C. ROY					
GDP (YR Million)	39,905	46,436	53,572	62,080	74,068
Population	9,811	10,135	10,475	10,830	11,200
Gross Investment (YR Million)	7,972	7,623	9,030	11,342	11,511
Gross Investment/GDP (%)	20.0	16.4	16.9	18.3	15.5
Manufacturing Value Added (YR Million)	4,352	5,034	6,440	7,239	8,713
Manufacturing Value Added/GDP (%)	10.9	10.8	12.0	11.7	11.8

Source: Ministry of Planning and Development and Central Statistical Organization.

B. MACROECONOMIC DEVELOPMENTS UNTIL 1982

1.05 Both YAR and PDRY experienced remarkable growth and development in the late seventies and early eighties. From subsistence and fragmented economies based on primitive agriculture till the late sixties, by unification, both had emerged as integrated, developing economies as a result of infra-structural development by the public sector with a view to integrating the national economies through improved transport and communications and the construction of an electricity network. As a result, the GDP in both economies grew at an average annual rate exceeding 9 percent during 1975-82, and the share of the manufacturing sector in GDP rose to about 9 percent in YAR and to about 7 percent in PDRY by 1982.

1.06 In PDRY this growth was achieved as a result of a high rate of investment (38-40 percent of GDP) financed entirely through external resources; the domestic saving rate was in fact negative. Investment, a part of consumption, and overall fiscal deficits were financed by migrants' remittances, official transfers and external assistance on concessional terms. (Annex E)

C. EMERGENCE OF STRUCTURAL IMBALANCES

1.07 In recent years there has been a sharp decline in workers' remittances in both YAR and PDRY. In the case of YAR the most important explanatory factor was the sharp real appreciation of the Yemeni Rial vis-a-vis the Saudi currency in which most Yemenis earned their incomes. Thus, workers were motivated to remit their funds through unofficial channels. In the case of PDRY, the shortage of goods and the lack of private investment opportunities gave expatriate workers the incentive to remit earnings in goods and minimize cash remittances. At the same time, external assistance on concessionary terms also declined. Further, there were natural calamities -- earthquake in Dhamar (YAR) in late 1982, severe flooding in PDRY in 1982 and prolonged drought in 1983-84 in YAR and in 1984-86 in PDRY. In early 1986, there were civil disturbances in PDRY.

1.08 As a result of these factors, the absolute level of investment has been declining since 1982-83. In YAR, the real GDP growth rate declined to 4.3 percent in 1989 while there was an absolute decline in GDP since 1985 in PDRY in real terms.

1.09 By 1989, Gross Investment/GDP ratio declined from about 14.4 percent in 1985 to 12.2 percent in YAR, while the share of investment in GDP was maintained at a high level in PDRY, in spite of a decline in GNP (Table 1.1). These levels of investment were partly financed by resorting to commercial borrowing from abroad since 1987 and by the use of foreign exchange reserves. Internally, government fiscal deficits were financed through borrowing from the central banks; in 1989, bank financing to fiscal deficit ratio was 62 percent in YAR and 35 percent in PDRY. This inflationary financing of fiscal deficits led to a rise in prices at an annual rate of more than 20 percent in YAR since 1985 (except in 1988 when the increase was 16.4 percent) and repressed inflationary pressures in PDRY. (Table 1.2 and Annex E)

1.10 The continuing external payment imbalances had increased the external debt to GDP ratio to 49 percent in YAR and 190 percent in PDRY by end of 1989 (Table 1.2); the debt service ratio had risen to 30-35 percent in both economies by the end of 1989. The foreign exchange reserves stood at only 2.8 months' imports in YAR and 2.7 months' imports in PDRY.

Table 1.2 YAR and PDRY Indicators of Structural Imbalances

	1985	1986	1987	1988	1989
A. YAR					
GDP (YR Million)	30,969	37,505	43,519	53,766	66,069
Overall Government Fiscal Deficit YR Million	5,698	5,701	10,358	9,033	6,078
Fiscal Deficit/GDP (%)	18.4	15.2	23.8	16.8	9.2
Bank Financing/GDP (%)	72.4	58.0	64.0	61.7	62.4
Current Account Deficit	3,066	3,338	6,789	7,689	4,955
Current Account Deficit/GDP (%)	9.9	8.9	15.6	14.3	7.5
External Debt (US\$ Million)	2,032	2,366	2,636	3,034	3,324
External Debt/GDP (%)	47.7	59.4	61.8	55.1	49.1
Debt Service (US\$ Million)	72	104	179	186	160
B. PDRY					
GDP (YD Million)	390	382	339	376	396
Overall Government Fiscal Deficit YD Million	145	158	105	164	179
Fiscal Deficit/GDP (%)	37.3	41.4	30.9	43.7	45.3
Bank Financing/GDP (%)	60	58.3	37.3	43.6	34.8
Current Account Deficit	89	81	56	144	160
Current Account Deficit/GDP (%)	22.9	21.1	16.5	38.3	40.5
External Debt (US\$ Million)	1,418	1,583	1,805	1,838	2,177
External Debt/GDP (%)	125.5	142.8	183.5	168.5	189.8
Debt Service (US\$ Million)	85	105	130	158	211

Source: Ministry of Planning and Development and the Central Statistical Organization.

D. CURRENT PROBLEMS AND URGENCY FOR A GROWTH-ORIENTED STABILIZATION STRATEGY

1.11 The Republic of Yemen inherited the two sets of structural imbalances (Table 1.2) from YAR and PDRY. Thus, in 1990, ROY had pronounced imbalances (Table 1.3) as indicated in a fiscal deficit to GDP ratio of 15.5 percent; an inflationary financing (through the banking system) to GDP ratio of 59.2 percent; an external debt to GDP ratio of 75 percent; a debt service to exports ratio of 34 percent; an exports to imports ratio of 42 percent; and a rate of inflation of more than 30 percent. With such severe imbalances ROY's capacity to borrow from abroad on commercial terms and to continue financing fiscal deficits from the financial system may be seriously limited. The current account position improved markedly in 1990 because of the more than doubling in workers remittances (including an estimate of unrecorded transfers repatriated through unofficial channels) as returnees from the Gulf countries repatriated their earnings, and as oil imports and external project financing plummeted during the last five months of the year because of the Gulf Crisis. The balance of payments effects of the Gulf Crisis are likely to worsen since the sharp increase in remittances during 1990 was a one time event as workers returned to Yemen. Other effects of the Gulf Crisis which are already being felt are pressures on Government spending to meet the increased demand for infrastructure and services, and rising unemployment. Unemployment is estimated to have increased to the rate of about 25 percent as a result of the returnees.

Table 1.3 Republic of Yemen - Indicators of Structural Imbalances

	1987	1988	1989	1990
GDP (YR Million)	53,572	62,080	74,068	98,124
Overall Government Fiscal Deficit (YR Million)	13,844	13,709	12,861	15,239
Fiscal Deficit/GDP (%)	25.8	22.1	17.4	15.5
Bank Financing/Fiscal Deficit (%)	56.9	55.2	49.2	59.2
External Debt (US\$ Million)	4,496	5,134	5,611	6,112
External Debt/GDP (%)	85.7	80.7	75.90	74.7
Exports (US Million)	-	877	1,090	926
Imports (US\$ Million)	-	2,670	2,665	2,223
Exports/Imports (%)	-	32.9	40.9	41.7

Source: Ministry of Planning and the Central Statistical Organization

1.12 With such structural imbalances, it would be difficult to maintain the current level of investment, and yet it is essential to raise the level of investment and improve its efficiency so as to increase the rate of GDP growth and create more employment opportunities as well as raise living standards. Therefore, it is imperative for Yemen to formulate and implement a growth-oriented stabilization strategy aimed at restoring and maintaining macroeconomic stability. A stable macroeconomic environment is essential to provide enabling conditions for efficient, viable and sustainable industrial development.

E. INTEGRATION OF INSTITUTIONAL AND POLICY FRAMEWORK

1.13 The immediate task of integrating the institutional and policy frameworks of the erstwhile YAR and PDRY has been largely completed. The policy framework relating to interest rates, taxes and tariffs, monetary and credit policies, investment and import licensing and investment incentives has been broadly harmonized. For example a new investment law has been passed, and the lower interest rates in the South are being adjusted to match those of the North. The Government is now concentrating on reforming this policy framework in order to achieve macroeconomic stability, growth and development.

F. NEW POSSIBILITIES WITH UNIFICATION

1.14 The manufacturing sector has the potential to play an important role in reviving the economy, particularly through private sector development. However, for this to happen requires a stable macroeconomic environment, a well-articulated strategy for efficient and sustainable industrial/development supported by a consistent policy and institutional framework. Provided a stable macroeconomic environment is created the ROY can take advantage of the following opportunities arising from unification of YAR (North) and PDRY (South) to formulate and implement a new strategy for industrial development:

- (a) Increased Capacity Utilization: Although the structure of the manufacturing sector is similar in North and South, thus providing more scope for domestic competition, the larger internal market offers opportunities for efficient enterprises producing better quality products, whose capacity utilization has been constrained by a limited domestic market and lack of international competitiveness to increase capacity utilization. At present, the overall level of capacity utilization is about 50 percent in the North and slightly lower in the South.
- (b) Linkages: Because of a larger resource base as well as larger internal market, there are new possibilities of developing linkages - between industry and local resources like fisheries, building materials, leather and animal husbandry, and between industry and agriculture, and possibly intra-industry linkages between light engineering and the rest of the industrial sector. Since these linkages are currently not developed, the industrial sector has become highly import- and capital-intensive and internationally uncompetitive.
- (c) Competitive Structure: Since the structure of manufacturing industry is similar in both the regions and production capacities are underutilized, there could be internal competition and improvement in productive efficiency, induced by competitive pressures, even in the public sector enterprises, particularly in the South.
- (d) Direct Foreign Investment and Remittances: In the light of these new possibilities, it may be possible to attract direct foreign investment, particularly by expatriate Yemenis, and also the remittances by Yemenis abroad, who may be attracted back home to start new small sector enterprises, based on their skills and capital acquired abroad, as some of them have done in both North and the South. If the free port project at Aden is successfully implemented, it may attract some multi-national companies from the developed countries as well.
- (e) Reform of Public Enterprises: With an improvement in the business environment, it may be possible to attract expatriate Yemenis and others to invest in the manufacturing sector. This, together with the possibilities of developing a local capital market may help to mobilize resources and thus facilitate partial or full privatization of some of the public enterprises in both regions. It may also be possible to increase the role of mixed enterprises in some subsectors, since, these have performed better than the purely public enterprises.

- (f) Development of the Financial Sector: The North already has a number of commercial banks and specialized financial institutions in the field of agriculture, industry and housing. These institutions now have an opportunity to diversify by opening branches in the South and introducing new financial instruments to create demand for their services as well as mobilizing domestic resources in the form of financial instruments. It may be possible to introduce competitive pressures in the financial system to improve its efficiency and create opportunities for its further development.
- (g) Development of New Institutions: There may also be, as a result, release of high and middle level professional and technical personnel, who could be employed to create and develop new development institutions to improve the provision of industrial support services in the areas of management and technical consultancy services; business advisory services; project formulation, evaluation and technology choice; entrepreneurial development programs and improvement of existing vocational and technical training programs to increase the supply of technical skills in the various subsectors or the industrial sector.

CHAPTER II

OVERVIEW OF THE MANUFACTURING SECTOR

A. GROWTH OF THE MANUFACTURING SECTOR

2.01 As a result of substantial investment expenditures, made possible by a high level of remittances from Yemeni migrants and external aid, the manufacturing sector's growth from 1979 to 1985 was higher than the growth of GDP in both North and South. (Figures 5 and 6) Thus, investment in the manufacturing sector rose sharply from 6.4 percent of the total investment in 1980 to 13 percent in 1985 in the North and from 5.8 percent to 9.6 percent in the South. Value added in manufacturing increased at the average annual rate of more than 15 percent in the North and more than 10 percent in the South. The share in GDP consequently rose from 7.9 percent in 1980 to 11.2 percent in 1985 in the North; in the South, however, having reached 8.9 percent in 1985, it had declined to 5.5 percent by 1989. This growth in manufacturing sector, however, did not have much impact on employment; in both regions the proportion of employment in manufacturing to total employment in the organized sector declined somewhat.

2.02 Since 1985, because of the intensity of the payments problem, the sector's growth rate slackened and the share of value added in manufacturing to GDP declined in both regions. In the South, there was an absolute decline in the manufacturing output since 1985; even in 1989, it did not reach the 1985 level. In 1989, the share of value added in manufacturing in GDP was higher in the North at about 11.2 percent than in the South at 5.5 percent.

REPUBLIC OF YEMEN
Recent GDP and Manufacturing Value Growth Rates

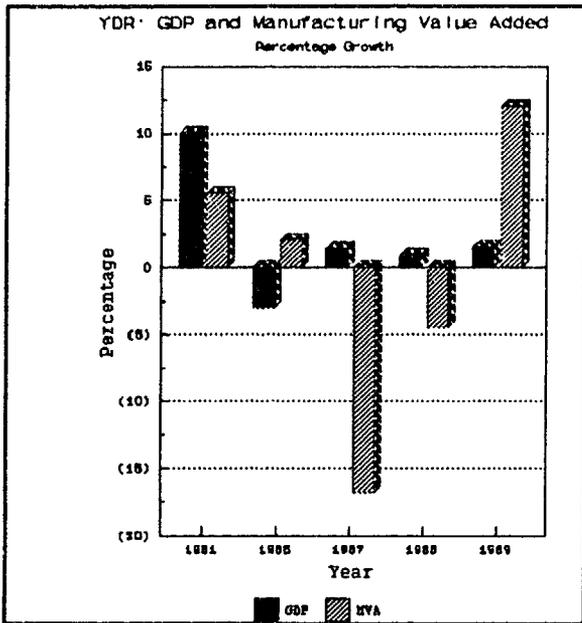


Figure 6

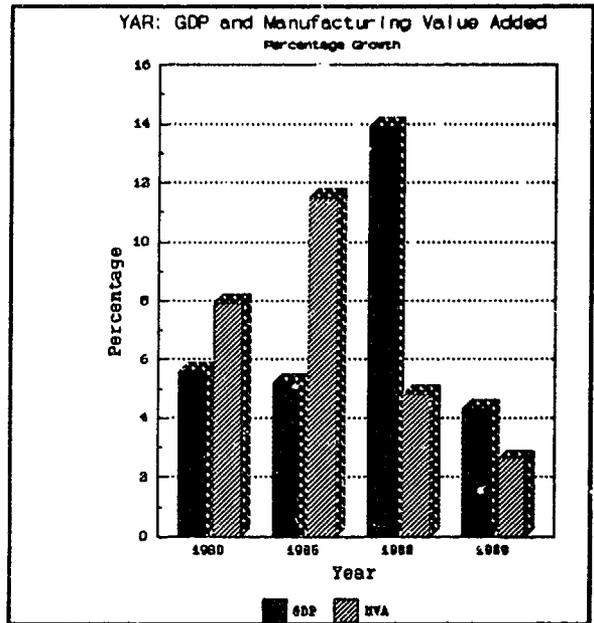


Figure 5

B. ROLE OF PRIVATE SECTOR

2.03 In the development of the manufacturing sector, the private sector played a major role in YAR, while the public sector was dominant in the PDRY. Investment in manufacturing in the private sector was more than 60 percent of total investment in the sector during 1979-86 in YAR. Thus, in 1986, the private sector accounted for about 88 percent of total manufacturing value added and the public and mixed sector enterprises accounted for about 6 percent each. In terms of employment the private sector accounted for about 92.5 percent of manufacturing sector employment, and the public and mixed sectors accounted for about 5 percent and 2.5 percent respectively. In the South, the public sector dominates the manufacturing sector, contributing about 70 percent of its total output and employing about 80 percent of its

employment respectively. The dominance of the public sector in the South is a reflection of past Government policies, particularly in the 1970's and early 1980's, which aimed to achieve industrialization on the basis of collective ownership of the means of production. Since the early 1980's, the Government had endeavored to attract private sector investment into the manufacturing sector, however, by then the deterioration in macroeconomic conditions and in the business environment, precluded any significant private sector participation in manufacturing.

2.04 The public sector in both regions is not as efficient as the mixed sector or the pure private sector. In the South, for example, labor productivity has been higher in the private sector and the mixed sector than in the public sector. The average number of employees per enterprise is much higher in the public sector (about 199) than in the private sector (about 17).

C. CHARACTERISTICS OF THE MANUFACTURING SECTOR

2.05 The development strategy adopted in YAR and PDRY emphasized import substitution; however, this strategy was pursued on a project-by-project basis and did not take into account the interrelationship between sectors or between subsectors of the manufacturing sector itself. As a result, import substitution process has not been very sound or efficient. The efficiency in PDRY, however, was much less than in YAR. For example, labor productivity in YAR was two times that of PDRY, while the average size of an enterprise was less than one-third that of PDRY; that is, it was less capital intensive than that in PDRY. (Table 1.4)

2.06 The inefficiency of the import substitution process is reflected in the domestic prices of manufactured goods, particularly in the South, which are 50 to 100 percent higher than the import c.i.f. prices. The average domestic resource cost of saving one U.S. dollar has been estimated to be about 22.6 rials in the manufacturing sector of the North, while the official exchange rate is 12 rials to a dollar. The share of manufactured exports in total exports was only 1.6 percent in YAR and 2.1 percent in PDRY in 1989. (Table 2.1)

Table 2.1 Overview of the Manufacturing Sector

Indicator	YAR (1984)	PDRY (1988)
Manufacturing Exports/Output (%)	1.6	2.8
Value added/Output (%)	40.7	33.0
Inputs/Total Costs (%)	95.0	90.0
Imports/Inputs (%)	70.5	80.0
Investment/Value Added	2.93:1	5-7:1
Skilled & Professional Foreign Personnel/Total Employment	8.5	8.0
Productivity:Value Added/Per Employee (YR)	107,000	50,000
Ave. Domestic Resource Cost of Earning/saving 1US\$ (1989)	22.0	---
Capacity Utilization (%)	49.0	40.0

Source: Estimates based on data provided by CPO and MEST in Sana'a and by CSO and MITS in Aden.

2.07 This high cost of import substitution process is due to the following factors: (Table 2.1).

- (a) Capital Intensity: A sample of new investments in both North and South revealed incremental capital output ratios of about 3:1 and 5:1--7:1 respectively, suggesting a relatively high level of capital intensity. Another indicator of capital intensity in manufacturing is that value added has consistently grown at rates far exceeding those of manufacturing sector employment. For the North, the cause of this capital intensity lies in the wage rates that are among the highest in a developing country and which have in recent times risen at rates exceeding the rate of inflation without any evident increases in productivity.⁴ In the South and to a lesser extent in the North, capital intensity in manufacturing has also resulted from inadequate project preparation, importation of technology and equipment without adapting them to the actual conditions in the country with regard to the nature of local resources and management and technical skills, and lack of skills in project evaluation and technology choice.
- (b) Import Intensity with Regard to Inputs: The value added to production ratio is very low (about 40 percent in YAR and 33 percent in PDRY) because of the input intensity of output (more than 80 percent in total cost). Again, there is much less reliance on local inputs with the result that the ratio of imported inputs to total inputs is very high (more than 70 percent). This is the result of a lack of intra-industry linkages or inter-sector linkages. There is no coherent, well conceived strategy of developing clusters of interdependent

⁴/ Yemen Arab Republic: The Manufacturing Sector Working Paper, World Bank, June 1988.

enterprises or linking the industrial development to agricultural development or to the potential availability of local resources.

- (c) Low Capacity Utilization: In both regions, about 50 percent of capacity is under-utilized. This is the result of import dependence for spare parts as well as inputs. With the growing intensity of the payments problem and rigidity in the import licensing process, enterprises are unable to import, in time, spare parts or required inputs. Further, since adequate data on installed capacities in various subsectors are not available, there has been over-expansion of capacities in some subsectors in the North, and because of lack of international competitiveness, the surplus capacities could not be used for generating exports. This lack of data affects the planning set-up as well as enterprise managers in identifying potentially profitable projects.
- (d) Dependence on Imported Skills: Because of a lack of trained manpower and adequate training facilities relating to vocational, technical and managerial skills, the enterprises in both regions are relying on foreign technical, professional and managerial skills. In the North, for example, the share of skilled and professional personnel in employment in the organized sector is 8 to 9 percent and the situation is not different in the South. Even in one of the largest business group - Hayel Saeed Group - in the North, 10 percent of production supervisors and 19 percent of quality control teams are foreigners due to the shortage of locally trained technical staff and the unsuitability of local training.
- (e) Neglect of Small Enterprise Development: The Ministry of Economy, Supply and Trade (MEST) in the North, considered enterprises employing less than 5 workers as small, those employing 5-9 as medium and those employing more than 9 as large. The ministry of Industry, Trade and Supply (MITS), in the South had no formal size classification of enterprises. A World Bank/UNDP Study⁵ had for the purpose of assessing the needs for technical and extension services of the SME sector classified enterprises with investments of up to US\$ 100,000 as small and those with investments of up to US\$ 1 million as large. For the purpose of this report this size classification is assumed. However, it is important that the Ministry of Industry of the Republic of Yemen and other agencies concerned with industry in the country should agree on a standard size classification of enterprises. There is practically no data available for this sector and the official

World Bank/UNDP, "The Requirements for Extension and Technical Services for Small- and Medium-Scale Enterprises in the Yemen Arab Republic," December 1989.

data include only the organized sector. According to the very rough estimates, employment in the small enterprise sector is four to five times that of the organized sector. These enterprises are largely in the fields of textiles and clothing, construction materials, food processing, leather, wood and wood products, carpentry, metal working, etc. In some fields like bakeries, construction materials, tailoring, they do compete with the organized sector; however, the quality of their products is poor because of lack of training, infra-structural facilities, credit and technical assistance.

2.08 For encouraging the development of latent entrepreneurship, employment and technical skills, the small and medium-scale subsector is extremely important. Further, if it can be organically linked with the organized sector, it has the potential of supplying inputs based on local resources and also spare parts and repair and maintenance services to the organized sector. There are, in fact, small enterprises in both regions in the field of vehicle repair, repair of electrical appliances and the manufacture of spare parts. These workshops can develop into ancillaries for the organized sector and reduce its import dependence for inputs and spare parts if they are provided technical assistance and training.

2.09 The industrial development strategy should be oriented at removing these constraints on the efficient functioning and development of the industrial sector.

CHAPTER III

STRUCTURE, PERFORMANCE AND GROWTH POTENTIAL

3.01 In both regions, manufacturing enterprises produce final or consumer products, based mainly on imported inputs, equipment and technology. The only intermediate products produced are in the building materials sub-sector. There is hardly any production of machinery and equipment.

A. STRUCTURE

3.02 In both regions, the share of food processing and fisheries sub-sector is the largest in value added, employment and investment. In YAR, the relative ranking of other subsectors in terms of share in value added and employment is: building materials, chemicals and plastics, textiles and clothing, and metal and equipment. In PDRY, the relative ranking is somewhat different. In terms of share in value added, it is: chemicals and plastics, metal and equipment, textiles and clothing, wood products and leather. In terms of share in employment, the relative ranking is: textiles, wood products, metal and equipment, chemicals and plastics, and building materials. The relative importance of the subsectors in the manufacturing of the new Republic is indicated in Figures 3 and 4.

3.03 In terms of labor productivity (reflecting capital intensity), the highest productivity is in chemicals and plastics in YAR; the relative ranking in terms of labor productivity in other subsectors is: building materials (because of cement), food processing, metal and equipment, and textiles. While in PDRY the relative ranking is: chemicals and plastics, food products and fisheries, metal and equipment, leather and wood, and paper products.

3.04 The capital intensity in YAR is higher in textiles and clothing, metal and equipment, and chemicals and plastics than in building materials, food processing and fisheries, and leather. The ratio of imported inputs to total inputs is surprisingly highest in food processing; it is higher in chemicals and plastics and metal and equipment than in textiles and clothing, building materials and leather. The share of foreign personnel in total employment is higher in metal and equipment and chemical and plastics than in textiles, food processing and building materials.

B. PERFORMANCE OF SUBSECTORS

3.05 The performance of the manufacturing sector can be judged on the basis of the efficiency with which import substitution has been attained; for, a process of viable and efficient import substitution would also generate the potential for exports of manufactured goods. The indicator of such efficiency is the domestic resource cost of saving one U.S. dollar worth of imports or the exchange rate of enterprises in each sub-sector as compared to the official exchange rate.

3.06 It is possible to estimate the exchange rates of the subsectors of the manufacturing sector only for the North on the basis of a previous study of production and domestic resources costs.⁶ These estimates are given in Table 3.1. On the basis of available comparative data on labor productivity in each sub-sector for both regions, it appears that the manufacturing sector as a whole is less efficient in the South than in the North.

Table 3:1 YAR-Domestic Resource Costs of Manufacturing Sector
(Rials/One US Dollar)

Sector	Resource Cost
Food Processing	16.0
Beverages	16.5
Poultry	15.0
Tobacco	28.8
Textiles & Clothing	22.4
Chemicals & Plastics	
Soaps, Paints and Pharmaceuticals	19.0
Soaps and cosmetics	10.9
Oil refinery	30.7
Plastics	16.7
Metal products	16.7
Building Materials	
Cement	45.9
Other Building Materials	12.6
Rubber Products	12.6
Leather Products	8.6

Source: The Manufacturing Sector of the Yemen Arab Republic:
Effective Protection and Domestic Resource Costs, UNDP/World
Bank (December 1989)

3.07 The estimated exchange rates for the manufacturing indicate a wide dispersion among as well as within subsectors. Overall, the exchange rates for most of the subsectors were higher than the official exchange rate of about US\$ 1=YR 12. Only leather products and some part of the soap and cosmetic subsector have exchange rates that are lower than the official exchange rate (US\$1 = YR12), thus, clearly indicating their high level of efficiency. Since then the Government has allowed most transactions to take place at the parallel market exchange rate which is currently about twice the official rate.

3.08 The study classified the subsectors in terms of those enjoying very high levels of protection--cement, plastics, tobacco and pharmaceuticals; those enjoying high levels of protection--textiles and clothing, paints, soaps and cosmetics, and light engineering; those enjoying intermediate levels of protection--oil refining, food and beverages and metal products; those which are relatively unprotected--non-metal products (with the exception of cement)

6/ The Manufacturing Sector of the Yemen Arab Republic: Effective Protection and Domestic Resource Costs, UNDP/World Bank, (December, 1988)

and rubber; and those negatively protected-leather. The estimated exchange rates indicate a negative correlation between the level of protection and the degree of efficiency. Thus the most inefficient subsectors are: cement, plastics, tobacco, and textiles and clothing and the most efficient are leather and some parts of the soap and cosmetics subsector.

3.09 Caution should be exercised in interpreting the results of the DRC analysis in view of: the limited samples included in the study for some subsectors; the existence of a wide dispersion of values within some subsectors; and the fact DRC analysis is static and therefore does not measure dynamic efficiency. However, some broad conclusions can be drawn from the exchange rates, the most important of which is the apparent negative correlation between the degree of protection and efficiency. This finding suggests that the level of protection which is afforded to some subsectors through import and investment licensing and through the foreign exchange allocation procedures has resulted in substantial inefficiencies. Thus, reducing the level of protection by abolishing import and investment licensing and foreign exchange allocation would result in a restructuring of the manufacturing sector activities; contraction of inefficient activities and expansion of the efficient ones; thus improving overall sector efficiency.

C. SUBSECTORS WITH COMPARATIVE ADVANTAGE

3.10 A second implication from the DRC analysis is that the subsectors which appear to have comparative advantage or to be marginal cases are those with the potential of developing on the basis of local inputs, materials, and skills, though currently most of them (except fisheries and building materials) are highly import intensive. These subsectors are as follows:

<u>Subsectors</u>	<u>Exchange Rate</u> <u>(YR per U.S.\$)</u>
Leather Products	8.6
Soaps, Cosmetics & Perfumes	10.9
Building Materials (other than Cement)	12.6
Rubber Products	12.6
Food Processing	16.0
Fisheries	16.0
Light Metal Products	16.7
Oil Refining	19.0

3.11 Thus if the linkages of these subsectors can be established through an integrated development program with local resources, their import intensity would decline and their exchange rates would become lower than what they currently are.

3.12 Further, with improved capacity utilization and partly by diversification of the product mix, improvement of managerial and technical skills through appropriate training, wise selection of relevant technology and equipment, and technical support for the repair and maintenance of machinery and equipment, their productivity and efficiency could considerably increase

and their exchange rates could be reduced to a reasonable level. And in that case, they would be competitive even in the export markets and would be able to export their products initially to the neighboring markets and then world-wide. Even at present, the principal exports of both regions originate from some of these sectors like food processing, fisheries, metal work, building materials and soaps, cosmetics and perfumes and of course crude oil, which will be a principal export item for some years.

3.13 This is the potential for industrial development that needs to be actualized by an appropriate industrial development strategy and institutional and policy framework.

CHAPTER IV

INDUSTRIAL DEVELOPMENT STRATEGY FOR THE NEW REPUBLIC

A. OVERVIEW

4.01 Objectives of Industrial Development Strategy: The Government of the Republic of Yemen should formulate a coherent and well integrated strategy for industrial development aimed at improving efficiency and expanding the country's industrial base in accordance with the its comparative advantage. Such a strategy should further be aimed at tackling the country's structural imbalances and therefore should be oriented towards viable and efficient import substitution as well as export promotion. For purposes of improving efficiency, the strategy should seek to address the problems of high import and capital intensity of manufacturing operations; low levels of capacity utilization; excessive reliance on foreign skilled workers; a weak private sector; negligible development of exports; restrictive investment climate; and low economic efficiency and poor product quality (para. 2.07). So far, neither in the North nor in the South, has there been such a strategy; the emphasis has been on isolated projects rather than on the development of a cluster of enterprises or industries that are inter-linked and have a comparative advantage in the light of the local natural and human resources.

4.02 Role of the Government. The role of the Government should be to provide overall leadership and to act as a catalyst for industrial development. In its leadership role, the government should formulate an industrial development strategy and policies which are consistent with the chosen strategy so as to provide market signal to which the private sector can respond by selecting appropriate industrial activities. As a catalyst, the Government should provide infrastructure and market information to the private sector; conduct research and development on issues of technology, product development, productivity and markets; as well as participate with the private sector in the provision of extension services. The Government should not seek to direct the flow of investments and other resources into particular activities, or to administer the prices of resources and outputs; neither should it be a competitor against the private sector. Experience in both North and South has shown the high costs associated with Government attempts to direct the flow of resources to particular activities and to participate in production and marketing industrial products (paras. 5.07 through 5.13, and 5.19).

4.03 During technical discussions of this report, the Government authorities agreed with the report's recommendation for a coherent strategy for industrial development. The Government considers that such a strategy should encompass the following twelve essential elements: (a) creation of a competitive environment; (b) measures to improve economic efficiency; (c) promotion of small scale enterprises; (d) promotion and participation of the private sector; (e) attraction of foreign direct investment; (f) measures to attract immigrant remittances into the sector; (g) incentives for foreign

direct investment; (h) measures to improve managerial and technical skills; (i) improvement of financial sector operating efficiency; (j) promotion of inter-sectoral and intrasectoral linkages; (k) development of local resources; and (l) provision of technical assistance to industrial sector enterprises. These proposed elements of sector development strategy are consistent with the report's recommended strategy and are summarized and grouped under five broad categories as follows: creation of a competitive environment; an emphasis on linkages; promotion of foreign investment; promotion of private sector activities and improvement of management and technical skills. The relationship between these strategic elements and the problems facing the manufacturing sector is given in Table 4:1 below.

4.04 After careful consideration of the industrial strategy suggested below, the Government should prepare a broad statement of industrial policy which should be made available to the public so as to inform existing and potential investors of the government's policies in key areas.

Table 4:1 Relationship Between Recommended Elements of Strategy and Problems in the Manufacturing Sector

Element of Strategy	Problem Addressed
Competitive Environment	<ul style="list-style-type: none"><li data-bbox="733 415 1289 445">— Restrictive Investment Climate<li data-bbox="733 445 1289 475">— Low economic efficiency<li data-bbox="733 475 1289 506">— Low level of export development<li data-bbox="733 506 1289 536">— Inadequate management skills<li data-bbox="733 536 1289 600">— Low level of technology and poor quality of products
Emphasis on Linkages	<ul style="list-style-type: none"><li data-bbox="733 701 1320 762">— High import intensity with regard to imports<li data-bbox="733 762 1320 792">— Low level of capacity utilization<li data-bbox="733 792 1320 852">— Inadequate development of small and medium scale enterprises
Attract Foreign Investment	<ul style="list-style-type: none"><li data-bbox="747 953 1254 983">— Weak private sector<li data-bbox="747 983 1254 1014">— Inadequate management skills<li data-bbox="747 1014 1254 1044">— Low level of technology
Private Sector Development	<ul style="list-style-type: none"><li data-bbox="747 1145 1317 1175">— Inadequate development of SMEs<li data-bbox="747 1175 1317 1205">— High level of capital intensity<li data-bbox="747 1205 1317 1235">— Weak private sector<li data-bbox="747 1235 1317 1266">— Low economic efficiency<li data-bbox="747 1266 1317 1296">— Poor quality of products
Managerial Skills	<ul style="list-style-type: none"><li data-bbox="747 1397 1187 1427">— Low economic efficiency<li data-bbox="747 1427 1187 1457">— Weak export development<li data-bbox="747 1457 1187 1487">— Capital intensity

B. COMPETITIVE ENVIRONMENT

4.05 A competitive environment is one in which firms are induced to allocate resources efficiently by the presence of competitive pressures among domestic firms and between domestic and foreign firms in both domestic and international markets. The experience of many developed and developing countries has been that a competitive environment is essential to encourage firms to allocate resources more efficiently, reduce costs and improve technology. Since both North and South have similar structures in the manufacturing sector, there are possibilities for increasing competition among domestic firms. To realize these possibilities, it is necessary to reform the regulatory environment so as to ease entry and exit of firms into the manufacturing sector. Further decontrol of prices, removal of subsidies and privatization of the many public sector enterprises, particularly in the South would enhance the scope for internal competition among domestic firms. Also removal of import licensing and foreign exchange allocation would help to reduce the effective rate of protection of the manufacturing sector, increase resource mobility and expose domestic firms to import competition. In international markets, a system of incentives may need to be worked out and maintained for a defined period of time after which neutrality between domestic and international sales would be restored. Such a temporary pro-export bias is required to reverse the past and present anti-export bias created by a high level of protection for domestic manufacturing. Thus, an essential ingredient of the strategy for industrial development should be to create a competitive environment which is necessary to foster a process of efficient import substitution and export promotion, both of which are of vital significance for correcting the structural payment imbalance.

C. EMPHASIS ON LINKAGES

4.06 The strategy should be oriented towards the development of subsectors/enterprises that have linkages with local resources and/or have intra-sectoral linkages with a view to improving investment and productive efficiency by reducing their import intensity and promoting the development of local resources and skills. Such a strategy would have a pervasive impact on the whole economy as it would promote not only industrial development but also the development of sectors like agriculture, fisheries, building materials, livestock, and animal husbandry, with which the industrial sector would be organically linked as they have the potential of supplying local inputs to the industrial sector as indicated in the previous chapter.

4.07 Inter-sectoral Linkages: The inter-sectoral linkages that could be emphasized are: (a) food processing industry with agriculture, (b) construction industry with local building materials, (c) leather industry with livestock development, (d) fish processing industry with fisheries. There is considerable scope for establishing inter-sectoral linkages; however, such linkages need to emphasize the simultaneous and well integrated effort to develop the sectors like agriculture, livestock, fisheries, and building materials in harmony with the development of the relevant industrial subsectors. Some attempts have been made in recent years to develop linkages

between agriculture and the industrial sector. For example, in 1988, the Bilqus Company for Marketing and Agricultural Services was formed to store, package and market agricultural products to the industrial sector and there have also been some efforts by sesame mills to enter into contracts with farmers for the supply of sesame seeds. However, in some cases the failure to establish strong links with producers of inputs have resulted in complete or partial closures of industrial facilities (e.g. the Edible Oil Mill and Refinery at Al-Khod, and the National Tannery, both in the South).

4.08 The role of the Government should be to facilitate the development of such linkages through activities such as:

- (i) provision of extension services to farmers to assist them in providing agricultural products required by manufacturers;
- (ii) developing standards for production of local building materials and for their use by the construction subsector;
- (iii) hosting exhibitions and trade fairs to bring suppliers and potential consumers together, or supporting such efforts by the Chambers of Commerce, and
- (iv) provision of technical assistance to improve technical processes and quality of the products of small scale enterprises in partnership with the private sector;

These activities could help improve the linkages between small scale enterprises and large enterprises, thus helping small enterprises to become profitable with significant impact on income and employment as well as on development of local skills and human resources.

4.09 Intra-Industry Linkages: Many enterprises in both North and South are operating their plants at less than full capacity partly due to severe shortages of spare parts and tools which are caused by import licensing and foreign exchange constraints. The capacity to manufacture spare parts is currently limited to some small scale private entrepreneurs and to the Revometal enterprise (started in 1972 in the South) which produces low technology cast ironing and spare parts on request. The long term competitiveness of the Revometal enterprise should be reviewed and if confirmed, this enterprise could provide an important linkage with metal scrap companies as sources of its inputs and other manufacturing enterprises as users of its output.

D. ATTRACTING FOREIGN INVESTMENT

4.10 Because of its current high level of external indebtedness and debt service ratio (para. 1.08), Yemen is unlikely to be able to attract substantial debt capital inflows for financing investment, and yet, without substantial external financing, it would not be possible to maintain the current level of investment. It is necessary to increase the level of investment in order to increase the GDP growth rate and raise the standard of living. Thus, the Government needs to devise an urgent plan for attracting foreign investment, particularly from Yemeni migrants abroad. Apart from the constraint that the current high level of external debt imposes on ROY's ability to attract substantial debt capital flows, foreign direct investment has its own advantages. These relate to the fact that service payments on foreign direct investment are more closely related to the country's economic performance than service payments on external debt; and that foreign direct investments are usually associated with provision of management expertise and technology, which if procured separately could be more costly.

4.11 Experience in many other countries has shown that the ability of a country to attract foreign direct investment is closely related to its choice of general economic policies; policies and institutions relating to screening of investments, award and amounts of investment incentives as well as the provision of infrastructure and facilities.

4.12 General economic policies relating to trade, exchange rate and foreign exchange allocation, and interest rate are particularly important. The general policies that are most effective in attracting foreign direct investment are those that do not discriminate between production for domestic from production for export markets, and require for their implementation that market prices reflect demand and supply situation in the country. In some South East Asian countries, where these policies have been implemented, tariffs are relatively low, prices of local resources such as labor reflect the availability and productivity in other activities, and real interest rates are positive reflecting the general scarcity of capital. These policies consistently applied provide the right economic signals for direct investors, while establishing an environment of stability that is necessary for them to even consider investment opportunities. Details of current trade, exchange rate and pricing policies as well as suggestions for changes are made in Chapter V.

4.13 Policies and institutions relating to screening of investments, award and amount of incentives and promotion efforts to attract investment may also affect the amount and character of investment that a country is able to obtain. Under competitive market conditions (para. 5.25), investment licensing or screening should not be necessary as the market should ensure that investment resources are attracted into activities where they are efficiently used. Both YAR and PDRY employed cumbersome investment screening procedures and awards incentives on the basis of criteria that were not

transparent. Details of these licensing policies, reform efforts under the new investment law as well as the bank's recommendations are described in Chapter V.

4.14 Currently, the Government is considering developing the port of Aden as a free trade zone. In some countries, the creation of free trade zones has been instrumental in attracting significant amounts of foreign capital. Thus, there is potential that Aden could recover its historical importance as a free trade port. However, the recently formed Free Zone Authority needs to be appropriately staffed to provide it with the required expertise to make the port of Aden competitive against other ports which have risen in the region since Aden's decline.

4.15 Thus, an action plan to increase foreign direct investment should include reforms of general economic policies, and policies related to screening of investments and award of incentives as well as development of the port of Aden as a free port. Further, to attract Yemeni migrants, efforts should be made to facilitate their investing in small scale enterprises through provision of technical and extension services and entrepreneurial development training (para. 4.18 and 4.22).

E. PRIVATE SECTOR DEVELOPMENT

4.16 The private sector, particularly, small and medium-scale enterprises (SMEs) has been relatively successful in responding to changes in demand and in serving small or scattered domestic markets, despite the constraints arising from bureaucratic import and investment licensing policies and procedures, pricing policies and foreign exchange allocation practices. The organized private sector (enterprises registered with the Government Ministries) dominates the manufacturing sector accounting for about 70 percent of its value added and 80 percent of its employment. The unorganized private sector consists of unregistered enterprises SMEs. There is no precise data on the numbers of these enterprises, their output or contribution to employment, but their economic impact is thought to be significant.

4.17 The problems facing the manufacturing sector (paras. 2.07) affect the private sector as well as the public sector. In addition to the other four elements of the suggested strategy; competitive environment; attracting foreign investment; emphasis on linkages; and managerial and technical skills, it is necessary to provide industrial support services aimed at improving the efficiency and growth perspectives of the private sector. These industrial support services should include: provision of technical and extension services, management consultancy services, product standardization and quality control, adaptive and technological research as well as entrepreneurial development training services.

4.18 Technical and Extension Services. The range of technical and extension services required to support rapid growth and efficiency of the private sector include: technical services for preparation of feasibility studies, selection of machinery and process technology, erection and

commissioning of plants, maintenance, process and product innovation; and extension services for provision of technical and economic information, assistance in marketing and securing finance, research and development centers, prototype design and training centers, and skill and technology improvement programs. For Yemen to develop an adequate institutional framework for delivery of these services is a major undertaking which could only be accomplished over a period of time. The strategy to develop such an institutional framework should, therefore, be selective and concentrate on the most urgent forms of services which are to provide essential management consultancy and advisory services to both SMEs and larger enterprises as well as entrepreneurial development training to prospective entrepreneurs, particularly to returning migrants who might wish to set up small and medium-scale enterprises. More sophisticated forms of services such as research and development centers, prototype development and training centers and labor productivity enhancement centers could be undertaken in the long-term following an evaluation of the experience gained in the delivery of the basic management consulting and advisory services and entrepreneurial development programs.

4.19 Entrepreneurial Development Programs. A country's development vitally depends on the magnitude and quality of its entrepreneurs. An essential part of the development process is, therefore, to raise the entrepreneurial skills of the population. The rate at which this can be done can normally be speeded up by providing adequate infra-structural facilities for small enterprises and an appropriate result-oriented training program for potential entrepreneurs.

4.20 For the Republic of Yemen, returning immigrants with skills and expertise acquired abroad present a valuable opportunity for raising the country's entrepreneurial skills. These could be provided with training and advisory services necessary for them to start and operate small enterprises. A survey of 896 firms working in the construction and construction materials sector in Sana'a in 1982 revealed that two-thirds of the proprietors had worked abroad and more than half the total capital invested had been earned abroad.⁷ Another survey of 105 enterprises in Sana'a established in the 5 years to 1983, reported that 55 percent were established by returning migrants. Many of these enterprises were engaged in manufacturing.⁸

4.21 While these surveys confirm that many migrants have taken an active role in the promotion of industry, the level of participation is insignificant when compared with the total number of returning migrants and the value of their remittances. Even before the recent Gulf crisis which precipitated the return to Yemen of substantial numbers of migrants, long-term trends were indicating a lessening demand for Yemeni workers in the Gulf countries. This trend meant the need to create more employment opportunities at home for

7/ G. Meyer, "Labor Emigration and Internal Migration in the Yemen Arab Republic -- the Urban Building Sector", p. 155 in B.R. Pridham (Ed.), Economy, Society and Culture in Contemporary Yemen, 1985.

8/ A. Al-Kasir, "The Impact of Emigration on Social Structure in the Yemen Arab Republic", p. 128, in B. R. Pridham (ed), op cit.

returning migrants. The sudden return of large numbers of migrants makes the problem of employment creation more urgent. On the other hand the returning migrants may help to lessen the skills shortages in the country as well as to provide some short-term relief to foreign exchange constraints since they will have brought back their life savings. The ROY should move quickly to address the employment problem by providing support services and entrepreneurial development training to enable the returnees to invest their funds in small-scale enterprises. Further, the public-dominated industrial sector of the south is expected to undergo major structural changes and shrinkage resulting in the release of its surplus labor. Entrepreneurial development programs should be developed to assist returning migrants and others in starting small-scale enterprises.

4.22 The provision of technical and extension services, management consulting and advisory services and entrepreneurial development training should be on a demand-driven basis, and should be led by the private sector in partnership with the Government. Other aspects of industrial support services such as product standardization and quality control, research and development productivity enhancement centers will need to be funded by the Government.

F. MANAGERIAL AND TECHNICAL SKILLS

4.23 In the ultimate analysis, industrial development as well as economic development in general depends on the quality and competence of the managerial and technical cadres. It is essential, therefore, to emphasize the development of training facilities in the field of management and technical skills. The new Republic could start a business school or a management institution with the assistance of a reputable business school abroad, preferably in a developing country which has faced similar problems; the government and the private sector could jointly take the initiative in this field.

4.24 A World Bank report on vocational and technical training had assessed the prospective demand for technically trained manpower and the supply from the education and training system and had concluded that quantitative as well as qualitative deficits in most technical occupations were likely to persist for many years to come.⁹ The aggregate annual supply of technicians and skilled workers would represent no more than 17 percent of demand in 1992 even taking into account proposed new institutions. In the South, a tracer study carried out to locate the employment taken up by graduates of technical institutes had revealed that only a small proportion ended up taking jobs for which they were trained, an apparent indication of the poor quality of the training. Thus, efforts to increase the output as well as to improve the quality of technical training, such as the proposed establishment of a National Technical Training Board under IDA Credit 1645-YAR should be encouraged. At the same time, some large enterprises should be induced by tax and other incentives to provide training facilities to their

^{9/} YAR: Special Study on Vocational Training and Technical Education, World Bank, (August 1985).

own employees as well as to the employees of other enterprises. For example, the Hayel Saeed Group, based in Taiz, has a private technical training institute, which has an excellent reputation and is used by a number of other companies on a fee paying basis.

4.25 The private sector, through the Chambers of Commerce or other such cooperative institutions, should be induced with minimum participation by the Government, if necessary, to start and develop training institutes, to provide training not only to existing employees but also to others who want to start small enterprises or seek employment in the industrial sector.

4.26 YAR's industrial sector objectives under its Third Five Year Plan (1987-91) included promotion of import substitution and increasing exports, improving capacity utilization and product quality to enhance competitiveness, and diversifying the country's industrial base. To meet these objectives, the Government's industrial strategy was to promote forward and backward linkages, develop SME sector, accelerate development of skilled manpower, and develop local consulting capacity. Little progress has so been made in meeting these objectives largely because of the absence of supportive competition policies and the lack of detailed action programs for implementation. The above recommended strategy is broadly along these lines, but emphasizes the need to create a competitive environment and to attract foreign investment. Prior to unification, PDRY had initiated a reform program aimed at revitalizing the economy through increasing the role of the private sector in economic activities and was targeting investment in manufacturing from Yemeni migrants abroad. This element of strategy is particularly important in view of the current imbalances and the need to at least maintain a level of investment necessary for growth.

4.27 Such, then, are the strategic or basic elements of the industrial development strategy which is needed to improve efficiency and expand the country's industrial base in accordance with its comparative advantage. This development strategy should be implemented through an appropriate policy and institutional framework (Chapter V and VI).

CHAPTER V

THE POLICY FRAMEWORK

5.01 At unification ROY's policy framework comprised strict import and investment licensing, a discretionary and arbitrary process of granting investment incentives, overvalued currency, a pervasive system of price controls (particularly in the South), and financial sector policies that were not designed to encourage efficient resource allocation and saving.

A. THE EXISTING POLICY FRAMEWORK

5.02 Import and Investment Licensing. The Republic of Yemen inherited stringent import and investment licensing policies from both YAR and PDRY. In both countries, import licensing was used as a means of allocating scarce foreign exchange resources and licensing restrictions were considerably tightened since the mid-1980's when remittances and external aid started to decline. PDRY maintained a rigid control over investments by requiring enterprises to obtain clearances from various ministries and local authorities prior to establishing new projects or expanding existing ones. Under a 1976 law YAR required enterprises with fixed assets of over YR 30, 000 to obtain licenses for both new projects and expansion of existing capacity. In both countries investment licensing was aimed at avoiding excess capacity, restricting demand for imported goods, allocating physical and financial resources to perceived priority sectors and stimulating regional development. For both import and investment licensing the criteria for Government decisions was not transparent and the administrative procedures were perceived by the manufacturers and others as both complex and inefficient. While retaining the practice of licensing investments, the Government has recently issued a new investment law which simplifies the administrative procedures. It has also taken steps to simplify the procedures for obtaining import licenses.

5.03 Investment Incentives. The investment codes of YAR (1975) and PDRY (1990) offered several fiscal incentives including tax holidays, exemption from duties and taxes on imported equipment, spare parts and raw materials. Decisions on granting investment incentives were based on a case-by-case review by Government officials of project proposals and were considered by investors to be highly discretionary. Under the new investment law, the decisions for award of incentives remain discretionary since the criteria for award of incentives are not spelt out clearly in quantitative terms. (paras. 5.38 through 5.40).

5.04 Pricing Policies. The Republic inherited a system of pervasive price controls from PDRY and on a lesser scale some form of pricing controls from YAR. Until recently almost all prices of manufactured goods were fixed by the Government in PDRY. Thus ex-factory prices were set to cover production costs plus specified profit margins. A price stabilization fund was used to subsidize prices of a whole range of products and to unify prices throughout the country. In YAR price controls were exercised for petroleum products,

foodstuffs and some locally produced items. In both countries the aims of pricing policies were to redistribute income and minimize political disruptions by maintaining stable and low prices for the main consumer goods; encourage investment by ensuring adequate financial returns; protect consumers from rent-seekers and control inflation. The Government's policy is to allow all prices to be determined by the market with the exception of petroleum products produced and marketed by public enterprises and the prices of three basic commodities (wheat, rice, and flour) which are imported at preferential exchange rates and their prices controlled through fixed trade margins.

5.05 Financial Sector Policies. The financial system is characterized by inflexible and negative interest rates; conservative lending policies; limited availability of lending instruments and of term-finance particularly to SME sector.

5.06 This policy framework has resulted in a rigid and pervasive regulation and control of the private sector which stifles its initiative and entrepreneurial impulses, and creates disincentives for improving investment and productive efficiency. The industrial sector, hence, has not been able to generate a process of viable and efficient import substitution and export promotion.

B. IMPACT OF THE CURRENT POLICY FRAMEWORK

5.07 Increases Government and Private Costs: Import and investment licensing, tariffs and other controls on industrial activity have resulted in a high degree of protection to domestic enterprises from both internal and external competition and hence enterprises have no incentive to improve productive and investment efficiency. The impact of protectionist policies can be captured in measures of nominal and effective rates of protection. Nominal rates of protection (NRP) measure the extent to which actual domestic prices exceed the prices of equivalent products imported under free trade conditions. Effective rates of protection (ERP) on the other hand measure, the excess of the valued added of a product over its potential value added, if it were produced under free trade conditions. The results of the "Effective Protection and Domestic Resources Costs" study provide some indication of the overall level of protection of the industrial sector of the North. Under this study NRP, ERP and DRC ratios were calculated for 60 enterprises in 12 broad industrial subsectors. The results are shown in Table 5:1 below:

**Table 5:1 Northern Region NRP, ERP AND DRC Estimates
(1988/1989)**

Subsector	NRP(%)	ERP(%)	DRC ^a
Poultry	50.0	53.8	1.22
Food	50.0	63.8	1.28
Beverages	58.0	71.3	1.31
Tobacco	108.0	238.3	2.29
Textiles & Clothing	65.0	133.8	1.78
Leather	0.0	-13.0	0.69
Non-Metallic Products	126.0	310.1	3.18
Soaps, Paints & Pharm.	52.0	98.4	1.52
Oil Refining	8.0	104.4	1.53
Rubber	43.0	25.1	0.99
Plastics	85.0	284.2	2.44
Metal Products	56.0	71.8	1.33
Average for Sample	65.0	141.6	1.80

Source: The Manufacturing Sector of the Yemen Arab Republic: Effective Protection and Domestic Resource Costs, UNDP/World Bank (December 1989).

^a Domestic Resource Cost ratios above 1 suggest inefficiency as the activity consumes more foreign exchange than it earns or saves.

5.08 The mean level of the ERP for the manufacturing sector is an important indicator of the extent to which protective arrangements misallocate resources into manufacturing and away from other sectors. The above results indicate a very large degree of protection and a close relationship between protection and the level of efficiency. Thus, high levels of protection have resulted in misdirection and misallocation of resources such that the domestic resource cost of saving/earning a unit of foreign exchange is much higher than the official exchange rate (paras. 3.07 through 3.10). The manufacturing sector has been unable to generate exports, so essential for its own expansion and for tackling the structural payments problem faced by the economy.

5.09 The dispersion of the ERP within the manufacturing sector is an indicator of the extent to which the protective system misallocates resources within the sector itself. Table 5.2 shows that the average ERP for the survey sample was 142 and the standard deviation was 96. The statistics indicate that the allocative inefficiencies caused by the protective arrangements are very large.

Table 5:2 Northern Region Size Weighted Measures of the Dispersion of Protection (Output in Yemen Rials) (1988/89)

Level of Protection	% of Output	
	NRP	ERP
-10% to 0%	0	1.3
0% to 10%	24	0.0
10% to 20%	0	0.0
20% to 30%	0	2.4
30% to 40%	0	2.7
40% to 50%	42	6.5
50% to 60%	27.1	5.3
60% to 70%	1.8	13.9
70% to 80%	1.3	0.5
80% to 90%	9.9	13.6
90% to 100%	0	4
100% to 110%	22.4	9.5
> 110%	9.9	40.3
Mean	64.9	141.6
Standard Deviation	41.5	96

Source: The Manufacturing Sector of the Yemen Arab Republic: Effective Protection and Domestic Resource Costs, UNDP/World Bank (December 1989)

5.10 The licensing structure and policies require a large and complex administrative set-up, and thus increases administrative costs. It also increases private costs in several ways. The enterprises, public or private, have to use their high level managerial resources in obtaining investment and import licenses through a complex arbitrary and time consuming process and thus are unable to concentrate on the real managerial task of improving efficiency. From the above mentioned survey, import licensing emerged as the single most important feature of Government economic policy about which manufacturing firms complained most strongly. Importers must make two applications, first to obtain an import quota before the start of the year in which the importation must take place, and second to obtain the actual license. If granted a license, the importer must then open a letter of credit with a commercial bank which in turn applies to the Central Bank for permission to issue the letter of credit. The documentation requirements, time required at each interval and the delays are such that many firms indicated that they have to devote the full time of a senior employee to handle procurement of imports. In some cases licenses have to be foregone because the time during which they must be used (within 30 days of issue) is not adequate to complete the procurement process.

5.11 An indication of the costs of complying with Government regulations obtained from that survey is provided in Table 5:3 below. Firms were asked to estimate the costs of complying with Government regulations; their answers were scaled from 0 (negligible compliance costs) to 5 (very high compliance costs). The results show relatively high costs of compliance for the private sector at 3.3 and lower costs for the public sector companies at 1.5. The lower costs of compliance for the public sector may be based by the sample size of only two PEs, but may also be indicative of the preferential treatment accorded to PEs in allocation of import licenses. Because of import restrictions, many enterprises are unable to obtain import licenses for essential spare parts and inputs in time and the result has been under-utilization of production capacity (para. 2.07 (c)). All firms reporting less than 95 percent capacity utilization were asked to select one the three explanations listed in Table 5:3; if a firm selected more than one explanation it was asked to weigh the explanations given. About 79 percent of the firms indicated that import restrictions were the main reason behind the low level of capacity utilization.

Table 5:3 Reported Costs of Compliance with Government Regulations and Capacity Utilization in Manufacturing Sector

Indicator	Private Sector	Public & Mixed Sector	Total
Average Cost of Complying with Government Regulations	3.3	1.5	3.2
Rate of Capacity Utilization	47	100	49
Reasons for Low Utilization			
Deficient Demand	17	--	17
Import Restrictions	79	--	79
Liquidity Constraints	4	--	4
Total	100	--	100

Source: The Manufacturing Sector of the Yemen Arab Republic: Effective Protection and Domestic Resource Costs, UNDP/World Bank (December 1989)

5.12 Weakens the Financial System: Because of the weakness and inefficiency of enterprises, they are unable to repay their loans to the financial system, whose viability thus gets adversely affected. Further, because of controls on lending rates, the financial system is unable to perform its function of mobilizing resources and their efficient allocation, while remaining financially viable. In these circumstances, it is not surprising that the financial system has no incentive to introduce innovative financial instruments for efficient resource mobilization and financing viable small enterprises or new enterprises other than those set up by the established and well entrenched large business houses. Inefficient operation

of the legal framework essential for facilitating financial contracts and their enforcement further aggravates the problems faced by the financial system.

5.13 Encourages Smuggling and Migrants' Remittances Through Unofficial Channels: This framework by creating large difference between import CIF prices of products and their domestic prices provides a fertile ground for smuggling of foreign goods. At the same time, it tends to provide foreign exchange resources to the smuggling trade. Since the smugglers have a high profit margin, they can afford to provide migrants a more favorable exchange rate as well as other services for remitting their earnings to Yemen. Thus, migrants' remittances take place through the so-called unorganized market and provide resources for the smugglers. The decline in migrants' remittances through the official channels is partly due to this policy framework as well as the poor customer service provided by the financial system. The money lenders or changers provide door-to-door service to migrants; they collect their remittances and send them to their families even in distant villages and at the same time, they offer a more favorable exchange rate. This aggravates the structural payments problem.

C. RECOMMENDED TRADE AND EXCHANGE RATE POLICIES

5.14 Fiscal and monetary policies, trade and exchange rate issues as well as policies relating to financial sector operations are general macroeconomic issues with a pervasive impact throughout the economy, but are (together with industrial policies) also critical aspects of a policy framework necessary for efficient and viable industrial development. These policies demand carefully designed reforms which are not the main subject of this study¹⁰. The conclusions and recommendations presented in paras. 5.16 through 5.23 indicate the general direction and goal of these macroeconomic policy reforms from the perspective of their impact on the industrial sector.

5.15 Restoration of macroeconomic stability by reducing current account and fiscal imbalances is essential if the Republic of Yemen is to achieve sustainable economic growth. Reduction of the current account deficit requires reforms of the trade regime supported by significant decreases in the Government's fiscal deficits to levels that can be sustained without resorting to inflationary increases in the money supply. On the basis of the analysis of the impact of the current policy framework on the performance of the manufacturing sector, the key trade policies which need urgent reform are those relating to the exchange rate, import licensing, and tariffs. The following reforms of these policies are recommended:

^{10/} These policies are to be more fully addressed in the medium-term macroframework paper to be prepared by the Bank for discussion with Government in early 1991.

- (i) Adopt a flexible exchange rate policy;
- (ii) Abolish import licensing; and
- (iii) Rationalize and reduce tariffs;

5.16 Adopt a Flexible Exchange Rate Policy: The Government recognizes the importance of a flexible exchange rate policy based on demand and supply for foreign exchange, in addressing the current account problems; and resolving the problem of foreign exchange allocation. A flexible exchange rate policy would also facilitate the flow of foreign exchange resources to subsectors that have comparative advantage. The Government has, therefore, already relaxed restrictions on the parallel foreign exchange market and legalized foreign exchange dealers. However, the Government needs to take further measures to fully liberalize the foreign exchange market by adopting the market determined rate as the official rate; adopting the market rate for all transactions including the essential commodities (para. 5.04) and allowing exchange dealers to operate without hindrance.

5.17 Abolish Import Licensing: The use of a flexible exchange rate policy as an instrument for foreign exchange allocation will also enable the Government to abolish import licensing. The Government recognizes the benefits that would accrue from abolishing import licensing in the form of: improved resource allocation; elimination of all the costs of obtaining import licenses for the enterprises; improvement in enterprises capacity to adapt to changing situations by diversifying their product mix, and capacity utilization; and elimination of the government costs of administering a complex process of import licensing. While the Government's recent measures to simplify the process of obtaining licensing including the provision under the new Investment Law to make the issuance of import licenses automatic for projects licensed by the Government Investment Agency (GIA) are an improvement, these measures are not adequate to enable full realization of the benefits that would accrue from abolishing import licensing.

5.18 The Government may wish to provide protection to infant industries; this could be done through tariffs (rather than through import licensing or restrictions), which should be reduced according to a time-bound preannounced schedule of tariff reduction, so as to generate incentives for progressive improvement in efficiency and international competitiveness.

5.19 Rationalize and Reduce Tariffs: In YAR, the burden of tariffs on imported goods was relatively moderate averaging about 25 percent in recent years. For the PDRY, Table 5.4 provides a sample of tariff rates for a number of manufacturing subsectors. A number of prominent features of this tariff system are the high dispersion of tariffs relative to the average tariff, relatively low rates (5-10 percent) for capital goods and raw materials not domestically produced and very high rates of tariffs for luxuries (e.g automobiles- up to 300 percent) and on imports that compete against domestically produced goods. The main effects of this system of tariffs has been to shift production into sectors with high levels of protection, and since capital goods are made relatively cheaper by this tariff pattern, there has

also been a tendency to shift production into more capital intensive sectors. Further the variation in tariffs across sectors creates different rates of protection so that resource pulls are induced by levels of protection rather than efficiency. Therefore, it is essential to rationalize and streamline the structure of tariffs so as to improve resource allocation based on efficiency rather than on levels of protection. As import licensing is abolished, the effective protection afforded to various subsectors by differential tariffs becomes even more important. Hence, the present distortionary and discriminating structure of tariffs should be replaced by lower tariffs. Such a policy would restore the signaling function of the price system and thus provide an incentive for the subsectors with comparative advantage to expand and thus improve their capacity to export.

Table 5:4 Customs Duties for Selected Imports
PDRY-1989

Subsector	Duty
Food Processing	
Flour	5%
Powdered milk	5%
Vegetable shortening	5% to 10%
Packaging Materials	15% to 25%
Textiles & Apparel	
Chemicals for Textiles	5% to 20%
Mens Shirts	75%
Ladies dresses	50% to 75%
Tobacco	
Tobacco	10% to 15%
Tobacco pack. material	10% to 20%
Cigarettes	222%
Other	
Machinery	5%
Cars	110% to 300%
Electric Tools	20% to 30%
Chemicals	
Raw materials	5% to 10%
Plastics	5%
Mat for batteries	10%
Final products	50% to 100%
Metalworking	
Aluminum Sheet	20%
Iron Sheet	15.0% to 20%
Other Raw Materials	5.0% to 15%
Leather	
Natural Leather	15.0%
Shoes	20.0%

Source: Customs Head Office, Aden

5.20 Other trade policies which are important for export promotion are the duty drawback scheme, retention of export earnings and provision of export financing. The recommended reforms relating to these policies and as follows:

- (i) Simplify procedures for the duty drawback scheme;
- (ii) Clarify rules relating to retention of export earnings; and
- (iii) Improve availability of export financing facilities.

5.21 Simplify Procedures for the Duty Drawback Scheme. Both YAR and PDRY had a duty drawback exemption scheme which entitled exporters to obtain refunds of import duties on inputs for exported production. In the case of YAR, exporters seldom availed themselves of this incentive presumably because of the cumbersome procedures involved. In the South, obtaining duty refunds under the drawback scheme involved the Customs Office, the National Bank of Yemen and the Ministry of Finance and took on average three to six months to obtain a refund.

5.22 Clarify Rules Relating to Retention of Export Earnings. In YAR retention of export earnings up to 100 percent was allowed and there were more or less similar provisions in PDRY and yet enterprise managers in both communities had no clear knowledge of these schemes. Enterprises could take advantage of such schemes to secure foreign exchange financing of inputs for production and thus could be powerfully induced to increase exports. It is, therefore, recommended that the policy relating to retention of earnings be clarified.

5.23 Improve Availability of Export Financing Facilities. There is a general lack of short term financing facilities and export credits. The banks should formulate and implement appropriate credit instruments for export financing. As in the other countries, pre-shipment and post-shipment credit needs to be provided along with the working capital financing required for production. To encourage financial institutions to provide export financing, it is necessary to devise schemes to reduce the risks associated with these transactions. This could be achieved through a program for automatic refinancing of such credits by the Central bank or an insurance scheme to guarantee the credit, possibly through a credit guarantee organization. Studies should be carried out to determine the feasibility of such schemes, particularly to investigate how the schemes could be structured so as to avoid creating disincentives for prudent lending and to ensure that the schemes do not become a financial burden to the Government. These facilities could be combined with export incentives as part of a temporary pro-export bias in incentive policies. Such export incentives could be justified as a means of reversing the existing anti-export bias created by policies which have effectively protected domestic firms from competition and discouraged them from competing in export markets (para. 5.07). However, these policies would need to be for a limited duration after which complete neutrality between domestic and international sales would be restored.

D. RECOMMENDED CHANGES IN INDUSTRIAL AND INVESTMENT POLICIES

5.24 The main industrial policies that have had a critical impact on the performance of the manufacturing sector and on which urgent action is required are investment licensing the prominent role of the public sector in manufacturing activities (especially in the South). Other industrial and investment policy reforms which are also necessary for efficient and sustainable industrial development relate to pricing, investment incentives and financial sector policies.

5.25 Investment Licensing: With the above recommended changes in the trade and exchange rate regime and pricing policies, there would indeed be no need for investment licensing, except for statistical purposes, as the policy environment itself will induce investment on rational lines in subsectors with comparative advantage. It is, therefore, recommended that licensing of investments be discontinued; only registration should be required for statistical purposes.

5.26 Eliminate Price Controls: Price controls distort the signaling functions of the price system; provide a disincentive to increase the output of scarce commodities whose prices are controlled, induce over consumption of those products and lead to the development of a black market. They also increase the unproductive government expenditure in maintaining and administering a price control system and thus misdirect and misallocate scarce government human and financial resources. The simplest and most effective way of controlling prices is to establish macroeconomic stability by reducing government budget deficits and limiting government resort to bank financing of its deficits as well as creating a competitive environment for the efficient functioning of enterprises. The Government has made progress in eliminating price controls, particularly in the South and the remaining controls are on petroleum products produced by public sector enterprises and on the three imported basic commodities; wheat, wheat flour and rice. It is, therefore, recommended that remaining controls should be removed and if the Government wishes to monitor pricing decisions of firms so as to avoid excessive abuse, this should be done through an ex-post monitoring system.

5.27 Industrial Enterprises Reform Program. The IPEs suffer from or are a cause of the following major problems: (a) more than a third of them are in precarious financial condition; (b) their management requirements include cumbersome and resource intensive processes and controls which tend to increase the size of the government and therefore of its budget; (c) absorb skilled manpower which could be used more productively elsewhere in the economy; and (d) require substantial investments to update their technology and strengthen their competitive positions in product markets. Many of those that are profitable could become loss-making in a fully competitive environment in which they would not be able to benefit from subsidized inputs or cost-plus pricing of their products. For all these reasons, the Government needs to develop a IPE reform program with the objectives of: (a) improving IPE efficiency and productivity; (b) ensuring that IPEs become financially self-sufficient and operate commercially and competitively; (c) reducing the burden of IPEs on the Government's scarce financial, managerial and

administrative resources; and (d) expanding the role of the private sector in industrial activities of a commercial nature so that the Government can concentrate its efforts on more strategic areas. A diverse range of options exist for attaining these objectives. The options include: privatization, commercialization and restructuring, leasing facilities and equipment to the private sector; and contracting out management of the enterprises while retaining ownership in the hands of the Government.

5.28 The Government has already initiated measures to address the problem of the IPEs. These measures include case by case studies to provide the basis for the choice of options for reforming individual IPEs, removal of price controls affecting the enterprises, and sales of shares in some of the enterprises to private sector shareholders. However, the Government has not publicly announced its policy objectives and program for reforming the IPEs. The risk of the Government's ad hoc approach is that conflicting signals may be given to the private sector and that the lack of a systematic approach may lead to the introduction of conflicting measures. The report, therefore, recommends that the Government develop and publicly announce a systematic reform program for the IPEs based on well-articulated policy objectives.

Investment Incentives

5.29 Purpose and Nature of Investment Incentives: Both the YAR and PDRY have tried to encourage private sector investment and foreign investment in particular by providing incentives in terms of their respective investment laws (1975 Law in the YAR and the 1981 Law in the PDRY). These incentives relate only to medium and large projects; for example, in the YAR the invested capital should be YR250,000 or more for domestic enterprises, \$125,000 or more for joint enterprises and \$250,000 or more for foreign enterprises.

5.30 The incentives relate to (i) exemption from company taxes for 5 years from the start of production; (ii) exemptions from customs duties on capital investments for 5 years (2 years in PDRY) from the initiation of the project; (iii) reduction of up to 25 percent on customs duties on raw materials for 5 years (exemption or reduction for 3 years in PDRY) beginning from the start of production, a concession that was withdrawn in 1986; and (iv) free repatriation of profits and of capital after five years in three equal annual installments in YAR and more or less similar provisions for PDRY.

5.31 Eligibility for Incentives: To qualify for these incentives, the projects have to meet certain criteria. These include the following requirements: the project must be supported by a feasibility study which demonstrates its viability; it must produce exports or import substitutes; it must use modern scientific methods and equipment; it must employ the largest possible number of Yemeni administrative and technical personnel; and it must arrange to train them so that they eventually replace most expatriate personnel. An additional criterion later added is that the project be an intensive user of domestically produced inputs. Preference is also given to projects located outside the main industrial centers.

5.32 Impact of Past Incentives: These incentives failed to attract any substantial foreign capital in the form of direct investment or portfolio investment for the following reasons:

- (i) absence of clear and precise quantitative criteria for granting incentives;
- (ii) bureaucratic processes for obtaining incentives which are complex, cumbersome, time consuming and costly to potential investors; and
- (iii) limited promotional efforts.

5.33 To eliminate the weaknesses in the administration of incentives and investment licensing policies and create a more favorable investment climate, a new law has been recently passed. The main changes in the law relate to institutional arrangements for administration of the law, the scope of sector activities eligible for investment incentives, duration of exemptions, introduction of new incentives and removal of some restrictive practices.

5.34 Institutional Arrangements for Administration of the Law: The law would be implemented by a new institution called the General Investment Authority (GIA), an independent agency with corporate status, professional competence and its own Board of Directors. It would be empowered to adopt policies and measures necessary for attaining its objective: to promote, encourage and facilitate Yemeni, Arab and foreign capital investments in the light of the State's socio-economic development objectives and plan with the active assistance and support of all other government organizations and officials.

5.35 Scope of the Law: The new law provides investment incentives also for sectors not covered in the YAR 1975 Law. The 1975 Law covered projects only in industry, agriculture, animal resource or any other field of significance to the Yemeni economy; the draft law especially mentions projects in industry, agriculture, tourism, education, health, housing and construction or any other sector which will lead to increased exports, domestic production, employment opportunities, and technological advancement, and which will add real value to the national economy. The law applies to all such projects regardless of whether they are in public, private or mixed sector and regardless of whether the invested capital is Yemeni, Arab, foreign or a combination thereof.

5.36 Duration of Exemptions: The incentives relate, as in the earlier law, to (i) exemption from business profits tax, and (ii) exemption from custom duties on imports of capital equipment, spare parts and maintenance supplies. The basic change in the draft law relates to the duration of exemption from profit tax and real estate taxes; the exemption period varies with the location, economic sector, capital employed, size and certain other characteristics of what is called a Licensed Project.

5.37 New Incentives and Removal of Past Restrictions: Exemptions, which appear to be new and are explicitly stated relate to real estate taxes and stamp duties. The incentives provided in the law thus are more generous and liberal than in the 1975 law.

5.38 Evaluation of the New Investment Law: Investment incentives could serve as an important instrument for implementing an essential element of the recommended strategy for industrial development which is to attract foreign investment, particularly from Yemen migrants abroad (paras. 4.13 through 4.18). However, the Bank's experience in many other countries has been that investment laws, to be effective, must be based on the following guiding principles:

- (i) must be clearly stated and be readily available to existing and potential investors;
- (ii) must be simple and easy to administer;
- (iii) incentives awarded must be based on explicit, quantitative criteria thereby minimizing the discretionary element;
- (iv) exemptions must time-bound and performance related; and
- (v) incentives should be neutral among sectors with respect to type and size of investment.

5.39 The new law does represent a substantial improvement over the previous YAR and PDRY laws, but also retains some significant weaknesses. The positive features include the removal of restrictions on pricing, salaries and profits.

5.40 In some cases, however the design of the law has not followed the above guidelines, particularly, those relating to use of explicit and quantitative criteria for awarding incentives and to the need for neutrality of incentives among sectors with respect to size and location of investment. It is necessary to base decisions on award of incentives on quantitative criteria, such as the economic rate of return in order to discourage investments that are viable only under high protection. It is also essential to make promotional incentives neutral among sectors and with respect to size and location so as to allow cost and demand factors to determine the appropriate size and location of industries. Differentiation of incentives based on size and location of investments would introduce biases towards capital intensity and high cost-location of industries. Availability of infrastructure and raw materials should be more effective in decentralizing industry than additional fiscal incentives for location in outlying areas. It is, therefore, recommended that consideration be given to incorporating these suggestions by way of amendments to the law. Further, the new law envisages continuation of investment and import licensing. As recommended in paras. 5.17 and 5.25, these procedures should be abolished.

Financial Sector Policies

5.41 The financial system has a critical role in promoting a viable and efficient process of industrial development. The main needs are for the institutions to improve:

- (i) the criteria and procedures for projects selection;
- (ii) availability of term finance particularly for SMEs; and
- (iii) provision of export finance.

5.42 Improve the criteria for selection of projects: The institutions specializing in medium- to long-term lending like IBY, and YCIF need to develop explicit criteria for selecting projects for financing. One of the reasons for low loan recovery ratio and high rate of loans in arrears for IBY relates to deficiencies in their appraisal and supervision processes and lack of explicit project selection criteria. The selection criteria should be the same for both public and private enterprises. The efficiency of public enterprises would improve if they are financed by the financial institutions instead of by the government, which is unlikely to have the accumulated expertise and experience, available with the financial institutions.

5.43 The project selection process would be facilitated if the project formulation and technology choice are sound; the establishment of the PSDC, suggested in Chapter IV, and similar institutions would help improve the soundness of the process of project formulation and technology choice. The financial institutions thus require PSDC type of institutions for their own viable functioning as argued in Chapter IV.

5.44 Improve Availability of Term Finance: At present, the only institution providing long-term financing to small enterprises is IBY; but its role in this field is negligible. Further, the IBY does not have adequate number of branches and is unlikely to be familiar with small entrepreneurs spread throughout the country without incurring high transaction costs and risk. To improve availability of term finance it is, therefore, necessary to:

- (i) expand the banking facilities;
- (ii) consider establishing a Credit Guarantee type of Organization to guarantee loans of SMEs;
- (iii) allow integration of informal and with formal financial markets;
- (iv) improve legal framework for recovery of loans;
- (v) improve provision of technical and extension services to SMEs;
- (vi) improve availability of export financing; and
- (vii) gradually remove interest rate ceilings.

5.45 Expand Banking Facilities: The commercial banks and CACB have a large number of branches in different parts of the country and in fact need to open even more branches for the provision of banking facilities to rural and semi-rural areas. The National Bank of Yemen (NBY) has 30 branches, the Yemen Bank for Reconstruction and Development (YBRD) has 38 branches and the Cooperative and Agriculture Credit Bank has 17 branches and 4 sub-branches. Thus, these institutions are closer to SME environment than IBY. Such proximity to the customers' operating environment is essential for reducing administrative costs and lending risk. Thus, these institutions could also serve the SME sector.

5.46 Credit Guarantee Scheme: The lending risk can be further reduced if a Credit Guarantee Organization (CGO) is set up by the central bank for guaranteeing loans given by the financial institutions, particularly to small enterprises, up to a certain proportion of their loans; it can raise resources by charging a fee to the financial institutions, based on their loan portfolio for small enterprises (para. 5.23).

5.47 Allow Integration of Formal with Informal Financial Markets: Another way of reducing lending risk, particularly in areas where there are no branches of the financial institutions, is to use the services of the informal market; the money lenders and the money changers, along with their agents, are likely to have close familiarity with the potential borrowers and can provide loans and ensure repayment at much less transaction cost and risk than the formal institutions. The commercial banks and the CACB can lend money to these informal dealers for on-lending to small enterprises. The lending risk should be borne by the informal dealers, who should repay in full the amounts lent to them by the formal institutions according to a mutually agreed repayment schedule. Such integration of formal and informal financial institutions has succeeded in its objectives in several countries like Indonesia, Philippines and Taiwan (a part of China).

5.48 Improve Legal Framework for Financial Contracts: The loan recovery rate of several institutions is less than 80 percent as they are unable to take charge of collateral or security against which loans are given to the borrowers, because of inefficiencies in the operation of the legal framework with regard to contractual financial transactions. Unless this legal framework is improved, the financial institutions are likely to continue their conservative lending policy and will not be able to play the promotional developmental role expected from them for accelerating the growth of industry.

5.49 In addition to the legal framework, it is essential to develop the habit of financial discipline and honoring financial contracts through various training and other such educational programs. The suggested entrepreneurial development program and managerial and technical assistance through institutions like the proposed PSDC would be useful also for developing this habit in borrowers.

5.50 Improve Provision of Technical and Extension Services: The profitability of small enterprises could improve with Entrepreneurship

Development Programs suggested in Chapter IV and technical assistance to small enterprises.

5.51 With the type of policies suggested, it would indeed be profitable for these institutions to finance small enterprises. Of course, there should be no ceiling on their lending rates. Thus, these institutions would be able to expand the market for their services, and improve their financial viability, while at the same time performing a developmental function.

5.52 Improve Availability of Export Financing: In a trade-dependent economy like the Republic of Yemen, trade financing obviously becomes one of the major functions of the financial system. The commercial banks do perform this role in the Republic; however, their emphasis so far has been largely on financing of imports.

5.53 Once the financial institutions formulate and implement sound criteria for project appraisal and evaluation and with the exchange rate and incentive policies suggested earlier in this chapter, the industrial sector will have an export orientation, as it should have to tackle the country's structural payment problem. This export orientation can be further promoted by the banks if they formulate and implement appropriate credit instruments for export financing. As in other countries export financing especially pre-shipment financing needs to be provided along with the working capital financing required for production. To encourage financial institutions to provide export financing, it is necessary to devise schemes to reduce the risks associated with these transactions. This could be achieved through a program for automatic refinancing of such credits by the Central Bank or an insurance scheme to guarantee the credit, possibly through a credit guarantee organization (para. 5.23). The banks would need to acquire adequate expertise for this purpose by sending their staff for training in commercial banks in developing countries like India or South Korea.

5.54 Raise Interest Rates to Positive Real Levels: and allow the market to determine interest rates. Existing interest rates, varying between 10.5 percent for deposit rates and 17 percent maximum lending rates, are negative in real terms and have the impact of discouraging long term lending and deposit mobilization by the financial institutions. Interest rates should thus be raised to positive real levels to improve deposit mobilization and rationalize credit allocation.

5.55 Viable export orientation of the industrial sector would improve the efficiency of enterprises and would create a favorable environment for industrial development. The demand for the services provided by the financial institutions would thus increase as would be their profitability. Thus, provisions of export finance will have a favorable impact on the growth and development of the financial sector.

CHAPTER VI

INSTITUTIONAL FRAMEWORK

A. OVERVIEW

6.01 Institutions involved in the industrial sector exist at the Government level, and in the public and private sectors as well as in the financial sector. At the Government level, the main institutions/agencies are the Ministries of Industry, Planning, and Finance; the Industrial Estates Development Authority, and the central audit organizations. In the public sector, there are several public and mixed sector corporations engaged in manufacturing. The institutional arrangements for management of industrial public enterprises (IPEs), the deficiencies in these arrangements as well as recommendations for overcoming them are described in paras. 6.06 through 6.18. In the private sector the Chambers of Commerce of the South and North play an active role in the industrial sector.

6.02 Overall, the role of Government ministries in industrial planning, strategy and policy formulation was similar in both YAR and PDRY, except that the role of ministries in PDRY, as a centrally planned economy was more diverse and pervasive. In both economies, the industry ministries were engaged in industrial investment promotion, licensing and granting of incentives; designing investment programs and monitoring performance of public and mixed sector enterprises; regulating prices, standardization and quality control of industrial products. Both ministries suffered critically from a weak empirical data base for strategy and policy formulation, a shortage of analytical capacity to design coherent and sustainable industrial development strategies. In the South, there was no attempt to develop a deliberate strategy for promoting small scale enterprises and efforts to that effect have so far not yielded significant results in the North. Also efforts to develop industrial support services in the form of training facilities for improving technical, professional and managerial skills, providing business advisory services for small-scale entrepreneurs, procurement and marketing assistance to SMEs and adaptive technological research need to be either established or strengthened.

B. MINISTRY OF INDUSTRY

6.03 The role of the Ministry of Industry should be reduced and limited to defining industrial strategies, conducting policy analysis and formulating industrial policies as well as facilitating private sector development through a variety of promotional activities. MOI should not be involved in regulating industrial investments or pricing products, as both functions should be carried out by the investors on the basis of market signals. Since public enterprises involved in activities of a commercial nature need to be privatized (para. 5.27), MOI should not be a competitor against the private sector and therefore should also not undertake the task of detailed project planning as happened in both YAR and PDRY. These tasks should be performed by

the promoters of enterprises with the assistance of institutions like the proposed Private Sector Development Corporation (PSDC) (paras. 6.24 and 6.27).

6.04 The function of promoting private sector investment (both local and foreign) could be undertaken by a separate independent organization. It is envisaged under the recently passed Investment Law that a Government Investment Agency would be established as an autonomous body to conduct a variety of investment promotional activities. The investment promotion function is similar to activities normally undertaken by the private sector than to normal government business. Thus, the required skills are usually difficult to obtain under civil service hiring conditions. For this reason, many countries have opted for investment promotion to be undertaken by flexible, adaptive and autonomous organizations operating outside the civil service regime. Examples of such organizations are the Industrial Development Authority of Ireland and the Economic Development Board of Singapore. The Government should consider establishing the GIA along the same lines as these organizations, particularly allowing it to operate outside the civil service regulations. The Government also plans to transfer the investment licensing function from the Ministry of Industry to the GIA.

6.05 MOI will have inherited from its predecessors (MEST and MIST) weaknesses related to inadequate empirical data base for strategy and policy as well as a shortage of analytical capacity to design coherent and sustainable industrial development strategies. The problem of empirical data for strategy and policy analysis is being addressed through a UNDP technical assistance project aimed at improving MOI's capacity to collect data. With regard to MOI's analytical capacity for strategy and policy work, consideration should be given to establishing a separate policy analysis department. In view of the similarity of the work involved in policy and research studies with some of the tasks undertaken in the private sector, MOI should consider contracting out some of this work to the private sector, instead of trying to build in-house capacity.

C. MANAGEMENT OF PUBLIC SECTOR ENTERPRISES

6.06 In the South, the industrial public sector enterprises dominate the manufacturing sector accounting for about 70 percent of its total production, 80 percent of its employment and about 31 percent of the number of enterprises (para. 2.03). In the North, the public enterprises, although few in number, are large in size and contribute about 6 percent of the manufacturing sector's value added and about 5 percent of its total employment. Overall, for the Republic of Yemen, the wholly State-owned industrial enterprises account for about 20 percent of manufacturing value added and 16 percent of employment. Further virtually all of them are engaged in activities which could be profitably managed by the private sector. However, the operating and financial performance of these enterprises have been weak and they have exacerbated the fiscal imbalances of the Central Governments' budget.

6.07 Legal Framework. In the North, public and mixed sector enterprises operate under two separate laws; law No. 30 of 1981 and law No. 106 of 1976

respectively. Any enterprise in which the Government's shareholding is at least 75 percent is defined as a public enterprise while enterprises in which the Government has shareholdings of less than 75 percent are termed mixed sector enterprises. Public sector enterprises are subject to more Government control than mixed sector enterprises; their budgets are treated as part of the Government budget and are subject to a lengthy approval process. Generally the IPEs investment decisions are closely controlled by the planning agency and they need prior approval from their sector ministries for operating plans and pricing decisions. Mixed sector enterprises on the other hand have the same legal status as private sector companies and are able to decide on their corporate structures, budgets and to make most operational decisions with the exception of decisions relating to foreign borrowing, investment plans and choice of auditors. In the South, the legal framework for public sector enterprises operations is provided by the Law on Regulation of Public Enterprises, referring to establishments set up on the basis of collective ownership and wholly-owned by the Government. This Law recently replaced Law No. 13 of 1979. In execution of their functions, IPEs were governed by the programs and resolutions of the Yemen Socialist Party, resolutions of the People's Supreme Council, ordinances and decrees of the Presidential Council, decrees and directives of the Council of Ministers and of relevant Ministries. It is expected that the legal framework for management of public and mixed enterprises will now be revised and be applicable to enterprises in both North and South.

Institutional Framework

6.08 In both North and South, the institutional framework for IPE management, control and oversight was too complex to be effective. The oversight structure consisted of a three-tier level; at the Government, enterprise and IPE Board levels. In the South, additional management authority existed in the form of local and Economic Authorities and labor organized through trade unions. These institutional arrangements are being modified and to become uniformly applicable to IPEs throughout the country.

6.09 At the Government level, in both North and South, an IPE was subject to oversight of a number of specialized ministries, each focusing on particular aspects of IPE operations. Thus, MEST and MITS as parent ministries of most of the industrial sector were responsible for assisting the IPEs in preparing plans, supervising preparation of feasibility studies of some investment projects and providing feedback to the Government regarding sectoral problems. MEST also monitored financial and operating performance of the enterprises whereas this function was undertaken by both MITS and the Ministry of Finance (MOF) in the South. The specialized ministries/agencies involved in the oversight function included:

- (i) CPO in the North and MOP in the South --- exercised control in the area of investment planning and external finance and approval of projects for modernization/restructuring/rehabilitation;

- (ii) Ministries of Finance (MOF) --- exercised control over IPE budgets and their integration into the central Government's budget;
- (iii) Ministries of Civil Service and Administrative Reform (MCSAR) in the North and Labor (MOL) in the South --- set wages and salaries of PE employees and management, controlled employment of PEs, monitored conditions of employment and application of labor laws, and approved PE organizational structures;
- (iv) Central Bureau of Pricing which had the responsibility for setting prices of industrial products;
- (v) central auditing organizations which were mandated to audit IPE budgets, operations and financial results; and
- (vi) Central Statistical involved in annual evaluation of IPE operational plans in IPE performance evaluation in the South.

6.10 MEST and MITS as well as other ministries with administrative control over industrial enterprises typically had a number of specialized departments established to exercise control or manage IPE operations. For example, the MITS tutelage structure involved: Planning, Investments, Financial Control, Industrial Corporations and Cost and Pricing Departments. Broadly similar departments existed in MEST to enable it to manage IPE operations.

6.11 In the South, IPEs established by local authorities to meet the needs of specific (geographical) regions were also subject to supervision of the Executive Bureau of the People's Local Council, in addition to being controlled at the Government level.

6.12 Another layer of authority which existed only in the South is that of Economic Authorities (EAs). EAs were in many ways similar to the concept of holding companies. They were established by a decree of the Council of Ministers, and enjoyed corporate status and financial and administrative autonomy. They covered most functional areas normally entrusted to holding companies, but did not act as holders of Government's shares and were not accountable for liabilities of their constituent IPEs, except for liabilities underwritten by themselves. EAs were managed by the EA Board of Directors, appointed by a decree of the Prime Minister and their major functions included to: (i) organize, control and direct business of all constituent IPEs; (ii) approve annual budgets of its IPEs before submission to the government level clearance; (iii) draw up detailed financial, technical, management and accounting regulations for its IPEs, which were then subject to approval at the government level; and (iv) establish programs for current activities and investments and draw up financing (e.g., loan policies), subject to approval at the governmental level.

6.13 The rationale for establishing EAs, given their scope of activities, is difficult to understand. Their Boards appeared too large and, therefore,

likely ineffective. They introduced yet another layer of authority further limiting managerial autonomy, without saving IPEs from seeking government level approvals for all matters related to their strategic and operational decisions. At the same time, EAs introduced increasing opportunities for bureaucratic bargaining and political influence. Since they were associations of IPEs operating in the same or similar markets, they may also have stifled competitive behavior through fostering the same modus operandi for all IPEs under their auspices.

6.14 IPE Board of Directors. IPE oversight structure also includes IPE Board of Directors. In the North, IPE Boards are established at the corporate level and operating units do not have their own boards. The corporate boards are often viewed as yet another layer of authority limiting managerial autonomy. A common feature of IPE Boards in both North and South is that they operate to a significant extent as part of management instead of as representatives of the owner. This means that management is charged with implementing the programs and plans of the IPE Board and therefore its accountability for the results is limited.

6.15 Issues in Institutional Arrangements for IPEs. Although detailed institutional arrangements differed, in both cases North and South had complex IPE oversight responsibilities at the Government level. Such oversight arrangements introduce a whole range of other issues, including:

- (i) unclear and often conflicting objectives given to IPE management, who are expected to pursue both commercial and social objectives;
- (ii) differences in IPE operating environment, as various tutelage ministries may introduce different policies and oversight arrangements for their IPEs;
- (iii) high coordination requirements, as practically every aspect of IPE operations falls under the auspices of at least two ministries and a number of departments in tutelage ministries, which offers possibilities for bureaucratic bargaining;
- (iv) unclear role and mandates of different ministries and departments involved in IPE oversight, whose functions significantly overlap; and
- (v) significant lack of autonomy in IPE management and, because of too many parties involved in decision-making, lack of managerial accountability.

6.16 Impact of IPEs. The complexities of decision-making processes also mean that an excessive amount of time is spent in making operational decisions. This impairs IPEs flexibility to adjust timely to changing conditions in their market environment and stifles management initiative. Also management of the public sector is a burden for the Government of the Republic of Yemen for a number of reasons:

- (i) it diverts attention of senior government's officials away from the country's macroeconomic and sectoral policies and problems by forcing them to attend to more immediate IPE operational matters;
- (ii) management of IPE sector activities includes cumbersome and resource intensive processes and controls which increases the size of the government and thus the government's budget;
- (iii) IPE management processes absorbs educated and skilled manpower which could be used more productively elsewhere in the economy; and
- (iv) more than one third of the IPEs are making losses, and thus worsen the Government's fiscal deficits.

6.17 IPEs Reform Program. A reform program for IPEs is urgently needed to reduce their burden on the Government's financial, managerial and administrative resources; improve their efficiency and productivity; expand the role of the private sector; and ensure that the IPEs operate commercially and competitively (para.5.27). To meet these objectives the Government should consider a diverse range of options including privatization, commercialization and restructuring, leasing of enterprise facilities; and contracting out management to the private sector. Once the Government has fully embraced the objectives of a reform program of the IPE sector and developed a systematic approach for the reform process, it needs to work out the implementation arrangements.

6.18 Implementation Arrangements for the Reform Program. The implementation arrangements involve: (a) arrangements to improve the oversight of enterprises remaining within the public sector; and (b) arrangements for the divestiture process. At present the Department for Mixed and Public Enterprises (DMP) in the Ministry of Industry is responsible for both the oversight of the IPEs and the reform process. The report considers that given the small size of the IPE sector and that most of the enterprises are engaged in activities of a commercial nature, the reform program should emphasize divestiture over commercialization and restructuring. To that extent the need for an oversight structure for IPEs would be reduced. However, the need for an efficient structure to implement a divestiture program would be more important given that privatization involves highly specialized activities for which Government agencies are not normally equipped to handle. Usually a special entity is formed and once an IPE has been identified as a candidate for privatization and the decision to further pursue has been made by senior Government officials, the IPE is transferred to that entity which further manages the privatization process. The Government has indicated that the reform of the IPEs would be managed by MOI's DMP. The Government may wish to obtain technical assistance to assist the Department in drawing up and implementing an IPE reform program.

D. INDUSTRIAL SUPPORT SERVICES

6.19 Technical and Extension Services. Consulting, training and technical support services to the private sector are inadequate in both North and South. There are several indications of deficiencies in the process of project formulation and choice of technology. For example: (i) a tomato paste factory was started in Lahej when the supply of tomatoes was plentiful in Hadramaut; because of the location problem, this factory has been faced with the shortages of materials; (ii) a textile mill was started in the South on the basis of outdated technology based on short staple cotton, when the local cotton was of the long staple variety; (iii) a national tannery was started without ensuring the adequate supply of hides and skins; and (iv) in the North, Yemen Textiles Corporation was started without any link with the cotton growers for an adequate supply of cotton. These costly mistakes could have been avoided if adequate consulting and technical services had been employed. There appears to have been excessive reliance placed on external advice usually from the same countries offering investment financing, thus potentially compromising the integrity of the process of project formulation and technology choice. There is, therefore, a need to develop some local capacity to provide consulting and technical support services.

Existing Institutions

6.20 Currently the institutional framework for the delivery of technical and extension services, and entrepreneurial development is very weak in the North and practically non-existent in the South. In the North, there are several institutions in the financial and public sector as well as in industry which are either providing some form of technical and extension services or are interested in developing such capability.

6.21 Financial Sector Institutions. In the financial sector, IBY is currently establishing a Small Enterprise Development Unit (SEDU) which is expected to handle its SME loan portfolio as well as provide advisory services to the SME sector; about 30 percent of YCIF's portfolio is devoted for SME lending; but YBRD with the largest branch network has no arrangement or facility for SME lending or for provision of services to SMEs.

6.22 Public Sector Institutions. In the public sector, the National Institute for Public Administration (NIPA) is mandated to provide training for government and public sector employees, but also extends its facilities to private sector employees. The institute provides academic and applied training in a wide range of administrative subjects, does consultancy work, undertakes research and studies, organizes seminars and publishes texts and documents. NIPA has indicated an interest in developing an SME focus. The Military and Economic Corporation (MECO), a public corporation operated by the army and engaged in the production of a wide range of products as well as in trade and service activities does provide some support to small private enterprises, particularly through its source of raw materials and provision of advances. Both universities of Aden and Sana'a are currently constrained by limited faculty staff from playing an active role in private sector

development. The University of Aden has indicated that following completion of its faculty staff training program, within the next two years, it would be ready to participate in private sector development through direct provision of extension services and consultancy work. The University of Sana'a has been involved in some joint research and development activities with industry and recently established with USAID and Italian Government assistance, a science and technology center. Both Universities, could, thus develop adequate capacity in the medium to long term to play an active role in private sector development.

6.23 Private Sector Institutions. In the private sector, the most important institutions with the potential to provide support services are the Chambers of Commerce, firms of accountants and a few private consultants. The Chambers of Commerce in both North and South have not played an active role in assisting the development of SMEs. Their SME membership consist mainly of those enterprises engaged in trade and service activities. In the South, the business sector's perception of the Chamber of Commerce as lacking autonomy from the government has been an additional constraint on the chambers's effectiveness as a catalyst for the development of the manufacturing sector.

Measures to Strengthen Institutional Support System for Private Sector Development

6.24 We recommend that the following measures should be considered as part of the effort to strengthen the institutional framework for delivery of consulting, training and technical and extension services to the private sector:

- (i) a feasibility study to establish a private sector development corporation should be commissioned. Such a corporation, funded from Government as well as non-government sources would function as an umbrella organization for a variety of private sector promotional activities including investment promotion, provision of technical and extension services, for entrepreneurial development training, as well as to provide funding and referral services for management and consultancy services;
- (ii) other private sector consultancy firms, possibly in joint venture with foreign firms should be encouraged to expand their services to the SME sector.

6.25 Feasibility Study to establish a Private Sector Development Corporation. At present the Republic of Yemen does not possess adequate skills needed to provide the whole range of consulting, technical and extension services to the private sector and those that it posses are thinly distributed in several institutions and do not constitute a national program of industrial support services to the private sector. The Government should, therefore, explore the possibility of establishment by financial institutions and private sector companies of a Private Sector Development Corporation (PSDC) which could serve as the focal point for promotion of a variety of

private sector development activities including but not limited to investment promotion and delivery of industrial support services to SMEs as well as to large-scale enterprises. To facilitate implementation of this proposal, the Government may wish to designate a leading financial institution such as the Central Bank to take the lead in promoting study and possible establishment of the PSDC.

6.26 The study should explore whether, the PSDC could be structured so as to operate as a commercial venture and whether it could aim to become self-financing within a short period of 2-3 years. It could derive its income from charging fees for its consultancy, advisory and training services to industrial customers. To give it adequate autonomy necessary for its success, the study should consider whether, the PSDC could be promoted as a private sector organization and if its majority shareholding could be left with the private sector. The PSDC should not be a monopoly as it should face competition from other institutions, which should be encouraged to develop, so as to provide a competitive environment necessary for efficiency. The decision to establish the PSDC should be taken provided it is demonstrated in the feasibility study that the PSDC would become commercially viable within 2 to 3 years. Its commercial viability would be the ultimate test of the usefulness of its services.

6.27 A list of activities which the PSDC could also perform is as follows:

- (i) identify project ideas;
- (ii) prepare preliminary feasibility studies;
- (iii) identify alternative sources of technology and the terms and conditions for technology transfer with the help of foreign consultants;
- (iv) maintain a list of foreign consultants, with the help of relevant regional and international institutions, who are reliable experts in the field of project formulation and technology choice in areas of relevance to the new Republic, to enable private or public enterprises to obtain help and assistance for the formulation of projects based on technology suited to the conditions of the country; and
- (v) identify research problems related to the adaptation of modern technology to the local conditions relating to resources and skills, pose these research problems to the relevant research institutes abroad and use their research results for improving the process of technology choice.

6.28 Promote Development of Other Private Sector Consulting Capacity. The Ministry of Industry or the chamber of Commerce should maintain a register of

private sector consultants and should operate a referral service for SMEs wishing to obtain services.

6.29 For the purposes of improving product quality and technological development it is recommended that:

- (i) organizational and technical arrangements for introduction and enforcement of quality standards be explored through a feasibility study; and
- (ii) the PSDC should identify research problems and seek solutions from research and institutional abroad.

6.30 Standardization and Quality Control. Most industrial enterprises cannot compete in the international market because of the poor quality of their products. It is, therefore, important to introduce international standards and quality control to protect domestic consumers as well as to promote exports.

6.31 Adaptive and Technological Research. The modern technology may require some adaptation in the local context. Such adaptation may require some research. It may not be possible for Yemen to conduct this adaptive research. However, institutions like PSDC should identify such research problems and pose them to the relevant technological research institutions abroad. If such problems thus are tackled effectively, the investment and productive efficiency of Yemen enterprises could improve significantly. In the future, Yemen itself could develop competence in tackling some of these research problems. The private sector should be induced, through tax and other incentives, to develop competence for such research jointly with the public sector.

E. FINANCIAL INSTITUTIONS

(a) Commercial Banks

6.32 Currently, the financial system in both regions is dominated by the Central Bank and commercial banks, both of whom lend a major part of their resources to the government. There is only one commercial bank in the South - the National Bank of Yemen - and eight banks in the North; their major commercial banking business has been import financing and associated activities (opening letters of credit, sale of foreign exchange, etc). Their experience with other types of loans has not been favorable because of the loan recovery problem. This problem is so serious that the banks are unwilling to lend to those private sector borrowers who cannot provide foreign guarantees, that is, the guarantees of a foreign bank or collateral in the form of deposits abroad to the extent of 125 percent of the loan amount. Further, because of the foreign exchange constraints and import and exchange restrictions, there is only a limited demand for loans by credit-worthy borrowers. In both regions, the private sector and even public enterprise have a surplus position vis-a-vis the banks, that is their deposits exceed the

loans obtained. This surplus is kept as reserves with the Central Bank, which uses it for financing government deficits. Further, they do not provide any medium-long term loans and hardly provide any financial assistance to the small enterprises. They have not evolved any appropriate financial instruments for export financing.

6.33 Further, the interest rate structure is such that it is not profitable for them to provide loan assistance to the private sector in the light of their transaction costs and default risk.

(b) Specialized Financial Institutions

6.34 The South has no specialized financial institutions for providing medium-to-long term credit to the manufacturing sector. The North has a more diversified financial system and has two institutions -- Industrial Bank of Yemen (IBY) and the Yemen Company for Investment and Finance (YCIF) -- which have specialized in the provision of medium-long term finance to the industrial sector.

6.35 The IBY is a semi-government development finance company, and is the source of more than 86 percent of institutionally provided term finance for industrial development in the YAR. Its profitability, however, is poor because of high administrative costs, bad debts and provisions for default risk. With these high costs, it is hardly profitable for it to provide loans at the interest rate fixed by the government.

6.36 Its low profitability and loan recovery performance are partly due to deficiencies in its project appraisal and supervision process. Further, there is an exclusive focus on long-term financing which carries a much higher risk and no attempt is made so far to diversify its activities in fields like leasing, merchant banking, short-term financing or technical and managerial consultancy. Its financing of small enterprise is negligible.

6.37 The YCIF is a subsidiary of the largest semi-government bank -- Yemen Bank of Reconstruction and Development (YBRD). Its main function is to perform an active developmental role in the fields of industrial, commercial, tourism and agricultural investment projects through the provision of loan as well as equity finance, and entrepreneurial/managerial guidance and assistance. Sixty-five percent of its loans have been so far to the industrial sector. The equity participation has been in 16 companies till the end of 1988 and it has performed an active role in improving the performance of these companies during the past few years. Its profitability is still quite low.

6.38 Neither of the two institutions have made efforts at domestic resource mobilization and thus, their activities are partly constrained by the limited resources they have. Their share of total assets of the financial system is less than one percent.

(c) Expanding and Diversifying the Financial System

6.39 The new Republic will provide a larger market for the financial services as the commercial banks and the specialized financial institutions will be able to open branches in the South. Further, there would be greater competition among them if the legal restrictions on the geographical and functional scope of their activities are removed. It is thus possible to generate competitive impulses and pressures for improving their efficiency.

6.40 Further, they could reduce their over-all risk by diversifying their functions and activities. For example, IBY and YCIF could take up the function of providing working capital to their borrowers and expand their activities in the fields of merchant banking, leasing, consultancy and the like. They could participate in the promotion of the PSDC as suggested in the previous Chapter to provide managerial and technical assistance in the process of project formulation and technology choice and training to potential entrepreneurs to enable them to start small enterprises. They could also participate in promoting a Unit Trust as a first step towards the development of a capital market. There is a potential supply of equity (shares of various types) as IBY and YCIF require their borrowers to issue equity for meeting part of their financial requirements. In fact, both have a function of underwriting the equity of their clients and they themselves finance projects to some extent by investing in the equity of their clients.

6.41 These institutions thus can assist the enterprises in raising the required investment finance in a variety of ways and at the same time expand the market for their financial and other services and thus improve their profitability and hence the capacity to raise resources from the market.

(d) Need for Training

6.42 To expand their business and improve their capacity to perform a developmental role effectively and efficiently, while strengthening their financial viability, the commercial bank and the specialized financial institutions need to enhance their capability to appraise and evaluate enterprises and projects and thus to lend on the basis of soundness of enterprises and projects rather than simply on the basis of security and collateral.

6.43 Their staff at all levels for this purpose, would have to be trained in the skills, techniques and processes, essential for evaluating enterprises and projects. Since all the financial institutions need such training, it may be possible for them to set up a training institute, which can develop appropriate training programs for different levels of their staff. For this purpose, they could seek technical and professional assistance from advanced developing countries, which have such institutions, and international organizations like the Economic Development Institute of the World Bank.

6.44 At the same time, it is desirable to provide on-the-job training to their staff. Such on-the-job training can also be provided elsewhere with the help of financial institutions in some developing countries like India and

South Korea, which have expertise and competence, suited to the conditions of a developing country like the new Republic.

CHAPTER VII

SUGGESTED ACTION PLAN FOR INDUSTRIAL DEVELOPMENT

7.01 The recommended strategic objectives for industrial development outlined in Section D above are to:

- (a) increase inter-sectoral and intra-industry linkages;
- (b) create a competitive and stable business environment which would provide pressures for productive efficiency, and managerial and technological improvements;
- (c) attract foreign direct investment particularly from expatriates of Yemeni origin as an important means of acquiring managerial expertise, technology transfer and entrepreneurial talent;
- (d) actively promote development of the private SME sector which has the potential for efficient import substitution, creating export base, creating employment at low investment cost, and providing a seed bed for development of entrepreneurial capabilities which would be vital for subsequent growth of large-scale industrial enterprises; and
- (e) improve technical skills of managers and workers through well structured on the job training and vocational training programs.

7.02 These elements of an industrial sector development strategy were fully endorsed by the Government during technical discussions in June 1991. The broad direction of policy and institutional changes needed to accomplish these objectives is indicated in Chapters V and VI. The Government has already implemented some of the report's policy recommendations (paras. 5.16 and 5.17). However, to fully accomplish the recommended strategic goals, the Government needs to adopt the recommendations for additional policy and institutional measures (paras. 5.16 through 5.23). Once the additional institutional and policy goals are endorsed, it is recommended that MOI should: (a) prepare a broad statement of industrial policy encompassing the strategic elements suggested above. Such an industrial policy statement once endorsed by the Government should be issued to the public to inform existing and potential investors, both local and foreign, of the Government's policies in key areas.

7.03 To develop detailed programs for implementation of the suggested elements of the strategy for industrial development, it is recommended that the Ministry of Industry should establish task forces on each key element of strategy. Thus, five task forces should be established to draw up detailed action programs of outstanding measures on the development of intersectoral and intra-industry linkages; creation of competitive conditions; attraction of

foreign investment particularly from expatriate Yemenis; promotion of small and medium scale enterprises and improvement of managerial and technical skills. These action programs should incorporate after careful consideration the recommendations for policy and institutional changes contained in Chapters V and VI. It would be useful to announce the formation of these task forces in the proposed policy statement and to include in the task forces, representatives of the private sector, Chambers of Commerce and financial institutions. The Bank would be ready to assist the work for these task forces as requested.

7.04 The Government should also consider forming a Presidential Commission on Industry and Trade including inter alia, private sector, industry representatives and exporters. The Commission would serve as a permanent forum for discussion by the various parties of key industrial policy issues and thus would contribute to Government policy making. The Commission would act in an advisory capacity in providing its views to the Government on various industrial sector issues. The proposed Policy Analysis Department in the Ministry of Industry (para. 6.05) could be the focal point for organizing this effort.

REPUBLIC OF YEMEN
INSTITUTIONAL AND POLICY ENVIRONMENT
FOR
INDUSTRIAL DEVELOPMENT

NATIONAL ACCOUNTS
(millions of current YR)

	1985	1986	1987	1988	1989	1990
GDP at Market Prices	39,905	46,436	53,572	62,080	74,068	98,124
GDP at Factor Cost	35,389	41,219	48,923	56,528	67,371	91,002
Agriculture	9,161	12,337	13,235	13,882	15,081	19,191
Industry	7,553	8,296	10,228	13,799	16,315	19,862
Mining and Quarrying	241	382	580	2,941	3,676	4,502
Manufacturing	4,352	5,034	6,440	7,239	8,713	10,565
Services, etc.	18,675	20,586	25,460	28,847	35,975	51,949
Imports of GS	17,158	15,112	21,079	24,414	24,514	29,485
Exports of GS	2,526	2,263	3,429	8,053	10,148	12,186
Resource Balance	-14,632	-12,849	-17,650	-16,361	-14,366	-17,299
Total Expenditures	55,401	59,453	71,353	78,829	88,842	115,422
Total Consumption, etc.	47,486	52,004	62,178	67,076	77,178	102,043
General Government	9,209	9,554	12,039	15,382	16,159	24,216
Private, etc.	38,277	42,450	50,139	51,694	61,019	77,827
Gross Domestic Investment	7,915	7,449	9,175	11,753	11,664	13,379
GDFI	7,972	7,623	9,030	11,342	11,511	13,322
Nonfinancial Pub Sector	-	-	-	-	-	-
General Government	-	-	-	-	-	-
Central Government	-	-	-	-	-	-
State and Local Govt.	-	-	-	-	-	-
Nonfinancial Pub. Enterp.	-	-	-	-	-	-
Private Sector	-	-	-	-	-	-
Changes in Stocks	-57	-174	145	411	153	57
Statistical Discrepancy	-864	-168	-131	-388	-408	1
Gross Domestic Saving	-7,581	-5,568	-8,606	-4,996	-3,110	-3,919
Net Factor Income	9,481	8,049	9,893	4,635	3,368	8,457
Net Current Transfers	944	2,115	1,915	1,314	1,606	1,417
Gross National Saving	2,844	4,596	3,202	953	1,864	5,955
Net Indirect Taxes	4,516	5,217	4,649	5,552	6,697	7,122
Indirect Taxes	-	-	-	-	-	-
Subsidies	-	-	-	-	-	-
Gross National Product	49,386	54,485	63,465	66,715	77,436	106,581
IFS Conversion Factor	7.3633	9.6392	10.3417	9.7717	9.7600	-
IEC Conversion Factor	-	-	-	-	-	-
GDP at mp (cur. mil. US\$)	6,225	6,267	5,959	6,400	7,581	8,305
Av. Exch. Rate (Rials/US\$)	6.4100	7.4100	8.9900	9.7000	9.7700	11.8150

Note: a/ Data for 1985-89 result from adding national income account data of Yemen Arab Republic and the People's Democratic Republic of Yemen, at the official exchange rate. The two were unified in 1990 and the 1990 data represent a new series that may not be strictly comparable to data of earlier years.

Source: Ministry of Planning and Development and the Central Statistical Organization

REPUBLIC OF YEMEN
INSTITUTIONAL AND POLICY ENVIRONMENT
FOR
INDUSTRIAL DEVELOPMENT

GROSS DOMESTIC PRODUCT BY SECTOR

	1984	1985	1986	1987	1988	1989
<u>Yemen Arab Republic^a</u>						
GDP at Market Prices	24,756	30,969	37,505	43,519	53,766	66,069
Net Indirect Taxes	2,420	2,912	3,147	2,280	2,810	3,357
GDP at Factor Cost	22,336	28,057	34,358	41,239	50,956	62,712
Agriculture	6,236	8,033	11,136	11,922	12,390	13,381
Industry	4,486	5,504	6,613	8,546	14,143	17,374
Manufacturing	2,683	3,465	4,467	5,899	6,732	8,159
Mining & Quarrying	210	241	478	825	5,349	6,693
Of which oil	---	---	241	547	5,051	6,338
Other	1,593	1,798	1,668	1,822	2,062	522
Services	11,614	14,520	16,609	20,771	24,423	31,957
<u>Peoples Democratic Republic of Yemen^b</u>						
GDP at Market Prices	388.70	382.30	339.20	376.40	395.60	412.60
Net Indirect Taxes	66.90	61.70	48.20	53.60	55.40	53.10
GDP at Factor Cost	321.80	320.60	291.00	322.80	340.20	342.50
Agriculture	40.10	43.50	44.60	51.40	57.40	54.70
Industry	30.50	36.00	34.40	35.80	37.40	31.70
Construction	51.20	44.70	33.90	34.60	41.90	56.00
Services	200.00	196.40	78.10	201.00	203.50	200.10

Source: Ministry of Planning and Development and the Central Statistical Organization

^{/a} In Current Million Yemen Rials

^{/b} In Current Million Yemen Dinars

REPUBLIC OF YEMEN
INSTITUTIONAL AND POLICY ENVIRONMENT
FOR
INDUSTRIAL DEVELOPMENT

GROSS DOMESTIC PRODUCT BY SECTOR

	1984	1985	1986	1987	1988	1989
<u>Yemen Arab Republic^a</u>						
GDP at Market Prices	33,372	35,101	37,505	39,173	44,635	46,571
Net Indirect Taxes	3,333	3,363	3,147	2,171	2,161	2,116
GDP at Factor Cost	30,039	31,738	34,358	37,002	42,474	44,4
Agriculture	9,214	9,997	11,136	11,093	12,110	12,389
Industry	5,991	6,254	6,613	7,862	11,973	13,290
Manufacturing	3,613	4,034	4,267	4,948	5,161	5,326
Mining & Quarrying	270	249	478	821	4,628	5,633
Other	2,108	1,971	1,868	2,093	2,184	2,331
Services	14,834	15,487	16,609	18,047	18,391	18,776
<u>Peoples Democratic Republic of Yemen^b</u>						
GDP at Market Prices	401.00	389.00	339.20	344.00	347.00	352.10
Net Indirect Taxes	69.00	63.00	48.20	49.00	49.00	45.00
GDP at Factor Cost	332.00	326.00	291.00	295.00	298.00	307.10
Agriculture	41.30	44.30	44.60	47.00	50.30	53.00
Industry	31.40	36.60	34.40	32.70	32.80	40.20
Construction	53.70	45.50	33.90	31.60	36.80	40.20
Services	205.60	199.60	178.10	183.70	178.10	173.70

Source: Ministry of Planning and Development and The Central Statistical Organization

^{/a} In Constant 1986 Prices, Million Yemen Rials

^{/b} In Constant 1986 Prices, Million Yemen Dinars

REPUBLIC OF YEMEN
INSTITUTIONAL AND POLICY ENVIRONMENT
FOR
INDUSTRIAL DEVELOPMENT

BALANCE OF PAYMENTS^{a/}

(millions of current US\$)

	1988	1989	1990 p/	1991 g/
Exports of GS b/	877.1	1,089.9	926.0	1,050.0
Merchandise (FOB)	519.4	693.4	626.0	728.0
o/w Oil	397.9	538.9	515.0	528.0
Services	357.7	396.5	300.0	322.0
Imports of GS b/	2,669.5	2,664.7	2,223.0	2,298.8
Merchandise (CIF)	1,968.5	1,874.8	1,671.0	1,719.0
Services	701.0	789.9	552.0	579.8
Resource Balance	-1,792.4	-1,574.8	-1,297.0	-1,248.8
Net Factor Income c/	-	-	-	-
Factor Receipts	-	-	-	-
Factor Payments	-	-	-	-
Total Interest Paid (DRS)	-	-	-	-
Interest Due But Not Paid	-	-	-	-
Other Factor Payments & Disc.	-	-	-	-
Net Current Transfers	543.0	371.7	977.0	340.0
Current Receipts	574.5	409.7	1,000.0	350.0
Workers Remittances	574.5	409.7	1,000.0	350.0
Other Curr. Transfers	-	-	-	-
Current Payments	31.5	38.0	23.0	10.0
Curr. A/C Bal. Before Off Transfer	-1,249.4	-1,203.1	-320.0	-908.8
Net All Off. Transfer	150.7	192.8	104.0	200.0
Curr. A/C Bal. After Off. Transfer	-1,098.7	-1,009.3	-216.0	-708.8
LT Capital Inflows	762.3	841.8	100.4	-5.0
Direct Investment	-	-	-	-
Net LT Borrowing (DRS)	762.3	841.8	100.4	-5.0
Disbursements (incl. SC)	1,075.5	1,086.2	674.0	838.0
Repayment (incl. short-term)	313.2	244.4	573.6	843.0
Other LT Inflows (net)	0.0	0.0	0.0	0.0
Total Other Items (Net)	-	-	-	-
Net Short-term Capital	-	-	-	-
Change in Int. Arrears (Net)	-	-	-	-
Other Net ST Capital	-	-	-	-
Capital Flows n.e.i.	-	-	-	-
Errors and Omissions	-4.6	78.3	0.0	0.0
Changes in Net Reserves	-	-	-	-
Net Credit From IMF	-	-	-	-
Reserve Changes n.e.i.	-	-	-	-
Gross Reserves exc. Gold (IFS)	365.0	324.4	-	-
Gross Reserves inc. Gold (IFS)	367.3	326.7	-	-

- Notes:
- a/ Data for 1990 and thereafter represent a new series. They are not strictly comparable to data for earlier years.
 - b/ Including factor income.
 - c/ Data are not available separately.
 - g/ Government projections.
 - p/ Preliminary estimates by the mission.

Source: Central Bank of Yemen and the mission

REPUBLIC OF YEMEN
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GDP, GDP GROWTH AND INVESTMENT FINANCING

	1985	1986	1987	1988	1989
<u>Yemen Arab Republic</u>					
GDP ^a	35,101	37,505	39,173	44,635	46,591
GDP ^b	30,969	37,505	43,519	53,766	66,069
Real GDP Growth (%)	5.2	6.8	4.4	13.9	4.4
Gross Investment	14.4	13.3	14.5	13.8	12.2
Domestic Saving	-12.9	-8.5	-15.1	-0.6	5.9
Overall Deficit	18.4	15.2	23.8	16.8	9.2
Financed by CB Borrowing (% of Total Deficit)	72.4	58.0	64.0	61.7	62.4
<u>People's Democratic Republic of Yemen</u>					
GDP ^a	389	339	344	347	352
GDP ^b	382	339	376	395	395
Real GDP Growth (%)		-12.9	1.5	0.9	1.4
Gross Investment	34.5	30.3	30.5	41.8	45.4
Domestic Saving	-28.2	-21.4	-15.8	-22.7	-12.3
Overall Deficit	37.3	41.4	30.9	43.7	45.3
Financed by CB Borrowing (% of Total Deficit)	60.0	58.3	37.3	43.6	34.8

Source: Ministry of Planning and Development and Ministry of Industry

^{/a} Constant 1986 Prices, YR Million

^{/b} Current Prices, YR Million

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YAR: CURRENT STRUCTURE OF THE MANUFACTURING SECTOR
Employment and Investment

Sector	Employees Per Enterprise	Investment Per Employee ^a	Investment Value Added Ratio
Food & Beverages	35	192	1.86:1
Textiles & Leather	17	314	5.50:1
Chemicals & Plastics	41	424	2.90:1
Paper Products	42	528	5.38:1
Metal Work	17	288	3.46:1
Building materials	19	308	2.16:1

Source: Based on data provided by CPO

^{/a} In Thousands of Yemen Rials

YAR: CURRENT STRUCTURE OF THE MANUFACTURING SECTOR
Imports and Exports

Sector	Percentage of Foreign Personnel	Percentage of Imported Inputs	Exports/Imports Ratio
Food & Beverages	7	84	2.8
Textiles & Leather	9.6	31	
Chemicals & Plastics	11	83	0.8
Paper Products	27	46	
Metal Work	15	81	1.7
Building materials	4.5	7	0.04
Wood Working	--	68	--

Source: Based on data provided by The Ministry of Planning

REPUBLIC OF YEMEN
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STRUCTURE OF MANUFACTURING SECTOR: EMPLOYMENT, INVESTMENT AND PRODUCTIVITY

	YAR		PDRY			
	1984		1985		1988	
	No.	%	No.	%	No.	%
EMPLOYMENT						
Food Processing	4,518	40%	1,933	25%	2,306	28%
Textiles & Clothing	1,454	13%	1,545	20%	1,565	19%
Chemicals & Plastics	1,555	14%	696	9%	741	9%
Wood Products	180	2%	1,547	20%	1,400	17%
Extraction	0	0%	155	2%	82	1%
Metal & Equipment	1,273	11%	928	12%	1,236	15%
Building Materials	2,085	19%	541	7%	577	7%
Leather Products	0	0%	387	5%	329	4%
Printing and Paper	101	1%	0	0%	0	0%
Other	101	1%	0	0%	0	0%
TOTAL	11,267	100%	7,732	100%	8,236	100%

	1985-88		1985		1988	
	YR Mn	%	YR Mn	%	YR Mn	%
INVESTMENT						
Food Processing	888	48%	1.30	50%	1.33	53%
Textiles & Clothing	118	6%	0	0%	0.50	20%
Chemicals & Plastics	218	12%	0	0%	0.30	12%
Wood Products	0	0%	0.65	25%	0	0%
Extraction	0	0%	0	0%	0.03	1%
Metal & Equipment	396	21%	0.65	25%	0.03	1%
Building Materials	161	9%	0	0%	0	0%
Leather Products	0	0%	0	0%	0	0%
Printing and Paper	54	3%	0	0%	0	0%
Other	15	1%	0%	0%	0.33	13%
Totals	1,850	100%	2.60	100%	2.52	100%

VALUE ADDED/PRODUCTION (%)	YAR (1984)	PDRY (1988)
Food Processing	36.6	26.0
Textiles & Clothing	65.4	39.0
Chemicals & Plastics	34.3	42.0
Wood Products	53.2	42.0
Extraction	0	23.0
Metal & Equipment	46.1	34.0
Building Materials	48.3	0
Leather Products	0	29.0
Printing and Paper	51.7	0
Other	34.3	0
Average	40.7	33.0

Source: Based on data provided by The Ministry of Planning and Development and Ministry of Industry

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MANUFACTURING VALUE ADDED BY SUBSECTORS
(Percent, Current)

	1980	1984	1986
<u>YEMEN ARAB REPUBLIC</u>			
Food processing and Fisheries	45	38.5	51.9
Textiles and Clothing	8.2	6.9	8.7
Wood Products	10.7	0.9	3.9
Chemicals and Plastics	10.7	19	9.2
Metal and Equipment	8.6	8.8	8.7
Paper and Printing		0.9	0.5
Building Materials	10.3	24.5	15.3
Others	6.5	0.5	1.8
Totals	100	100	100
<u>PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN</u>			
Food processing and Fisheries	42	38	38
Textiles and Clothing	10	9	10
Wood Products	5	10	9
Leather products	5	5	5
Chemicals and Plastics	21	21	22
Extraction	1	1	1
Metal and Equipment	15	16	15
Paper and Printing	1		
Totals	100	100	100

Source: Based on data provided by The Ministry of Planning and Development and Ministry of Industry