

UNITED NATIONS ECONOMIC COMMISSION FOR AFRICA
MULTIDISCIPLINARY REGIONAL ADVISORY GROUP

**SEMINAR ON CAPACITY BUILDING
FOR THE DEPARTMENT OF INDUSTRY
MINISTRY OF TRADE AND INDUSTRY, ERITREA
16 - 26 September, 1996**

ADVISORY REPORT BY:

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ENTERPRISE MANAGEMENT AND PRIVATIZATION**

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REGIONAL ADVISER IN INDUSTRIAL POLICIES AND
INVESTMENT PROMOTION**

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I. Background and Organization of work

1. The seminar on "Capacity Building for the Department of Industry, Ministry of Trade and Industry (MTI), Eritrea" jointly organized by ECA, UNDP and the Government of Eritrea was held in the Asmara Chamber of Commerce Conference Hall from 16-26 September 1996. The seminar was a result of the needs assessment mission undertaken to the Ministry of Trade and Industry (MTI) in March 1996.
2. The seminar was attended by senior members of the Ministry of Trade and Industry, University of Asmara, Asmara Chamber of Commerce, Inland Revenue, Environment Agency of Eritrea, Customs Service, Eritrean Investment Center, the Commercial Bank of Eritrea, and the Bureau of Labour Affairs.
3. Three Regional Advisers of the ECA-MRAG - Messrs Edward A. Tiagha, Regional Adviser in Industry and Technology Development; Asmelash Beyene, Regional Adviser in Entrepreneurship Public Enterprise Management and Privatization and Ms Melkrist Hailu, Regional Adviser in Industrial Policies and Investment Promotion were invited by the Government of Eritrea to present papers at this high-level seminar, and to share ECA's experiences in other African countries in the area of industrial development.
4. The ECA Advisers prepared nine papers for the seminar. Dr. Tiagha prepared and presented seminar papers on (a) "Technology Transfer and Acquisition"; (b) "Global Technological Advances and their Effects on National Development"; (c) "Some models of University -Industry Cooperation as mechanisms for the industrialization of African Countries" (d) "Industrial Free Zones as Mechanisms for the Industrialization of African Countries"; and (e) "Industrial Development Programmes in Africa". Mr. Asmelash prepared and presented papers in "Small Scale enterprises as Vehicles for Development" and "Human Resources Development for Industrialization in Africa. Ms Hailu prepared and presented papers in "Introduction to the concept of Industrial Free Zones", and "Regulatory Instruments and Role of Government in Industrialization."
5. Country experts from the Department of Industry also presented papers as follows:
 - a) Elements for Effective Acquisition of Technology;
 - b) Promotion of SMEs in Eritrea;
 - c) Eritrea Human Resources development in the Industrial Sector;
 - d) The manufacturing sector policy and regulation in Eritrea;
 - e) Medeber Industrial Estate.
6. The terms of reference for the MTI, Eritrea and the ECA team are presented in Appendix 1 and 2 respectively.

II. Seminar Programme

7. The programme of the seminar is presented in Appendix 3. There were some modifications in the programme to include discussions by participants who were divided into two main groups. The outcome of the two syndicate groups forms part two of this report.

8. At the end of the seminar, there was an evaluation of the seminar. The results of the evaluation appear in Appendix 4. The list of participants is in Appendix 5.

9. This report contains two parts. Part one presents the various seminar papers and the ensuing discussions while part two deals with the discussions and recommendations of the syndicate groups.

III. Opening of the Seminar

10. The workshop was formally opened by the Honorable Ougbe Abraha, Minister of Trade and Industry of the state of Eritrea.

11. The statement read on behalf of ECA by Dr. Tiagha emphasized the importance of the workshop and expressed delight that ECA could be of some assistance to the ministry's capacity building effort. Mr. Martin N. Ngwenya, the Resident Representative of UNDP in Eritrea, underscored the importance of capacity building for the ministry in view of the challenges ahead and was happy that UNDP was able to co-sponsor the workshop with ECA, a sister institution. He also reiterated UNDP's commitment to support the development activities in Eritrea.

12. Ato Ougbe Abraha, on his part, indicated that his ministry considered the workshop very important because of the contribution it made for capacity building of the ministry. He recalled past collaborations with ECA in conducting joint training programmes and expressed his firm belief that the collaboration will be further strengthened in the future. He also expressed his appreciation to UNDP for co-sponsoring the workshop. He then declared the workshop opened.

PART ONE: SUMMARY OF SEMINAR SESSIONS

I. TECHNOLOGY TRANSFER.

1. There were two facilitators in the above session, ECA and the MTI of Eritrea. There was a film show on Building Materials Industry, after the two presentations.

1.1 Summary of the ECA paper entitled "Technology Transfer and Acquisition"

2. It is widely accepted that no real development can take place in any country without a solid industrial base, where goods and services are produced for the masses at affordable prices and in most cases using local resources as a comparative advantage.

3. Industrialization however, involves inter alia, a complex process that comprises focused economic policies, developed human resource base, adequate physical and institutional infrastructure, a well functioning financial resources system and the right political will for the efficient transformation of local raw resources into usable goods.

4. Technology transfer is simply the transfer of integrated specialized knowledge and skills for production purposes from one enterprise or institution to another, based on mutually agreed arrangements such as payment for the use of the technology. Thus, technology transfer can take place at the international, subregional, regional, national and departmental levels.

Mechanisms for technology transfer

5. The mechanisms for technology transfer can be regrouped into three main mechanisms i.e. (a) Leasing, a mechanism for technology transfer whereby the lessee (acquirer of technology) goes into contractual arrangements with the lessor (owner of the technology). This arrangement presupposes a time duration for the leasing of the technology and conditions for using it. The lessor retains ownership of the technology and can withdraw it when ever it is felt that the contract is not being fulfilled. (b) Build-Operate-Transfer mostly used by governments to acquire public infrastructures such as power stations, industrial estates, communication systems, highways, ports etc., and (c) Strategic Alliances, whereby the technology is acquired through joint ventures in which case a developing country buys shares in a company in a developed country and by so doing providing the developing country with the possibilities of acquiring the technologies from the developed countries.

Implications of the GATT agreements in the acquisition of technology

6. The Uruguay Round Agreement signed in Morocco in 1994, marks the beginning of a new phase in international relationship in the economic, trade, investment and scientific field. Therefore, tradition was broken and GATT was extended not only to the areas of investment, intellectual property rights and services, but it will also encompass the area of trade and

environment and even non-trade issues such as protection of human, animal or plant life and health.

7. Consequently, the Uruguay Round Agreement will exert a profound impact on the acquisition of foreign technology and development of indigenous technological capabilities by developing countries. As a result, the competition in the world market - including the domestic markets of developing countries, will intensify and such competition will increasingly be driven by technological superiority.

1.2. Summary of Country paper entitled "Elements of the Effective Acquisition of Technology"

8. Technology is defined as technological knowledge, procedural methods and organizational modes used to transform inputs into outputs. Thus it is to a large extent embodied in people and institution, not just in physical objects, and acquiring technological capability. It is mostly a matter of building up skills and institutions as opposed to just buying hardware.

9. Technology is becoming an increasingly important element in international competitiveness for countries. Technological capability is thus central for successful participation in the world economy. However, the development of technological capacity requires time, planning and investment in human and institutional capital.

10. To be at the forefront of international competition, it is necessary to develop new technology continually. Since, however, to develop new technology takes large financial and human resources, one of the key elements of a successful early technology strategy is the effective acquisition of foreign technology. This is important for developing countries such as Eritrea, since it is cheaper to acquire technology from abroad and adopt it to local conditions than to develop it entirely indigenously.

11. The technological problem of a country is not just acquiring foreign technology but diffusing and using technology efficiently and later improving and developing it to suit local circumstances. Developing technological capacity require:

- (a) Appropriate policy and legal framework for acquiring foreign technology (technology transfer, direct foreign investment and intellectual property protection);
- (b) Good information networks on existing technology, trends in technology, product market, and technology suppliers;
- (c) The capability to assess information on technology, markets, and suppliers and determine the kind of technology most appropriate to the economy specific circumstances;
- (d) The capability to assimilate and diffuse technology efficiently throughout the economy;

- (e) Developing the capability to adapt, improve and develop technology.

12. The human capital and technological base in Eritrea is backward; the technological capacity in the Industrial Sector is also not developed. To develop the capacity in this sector, firms need supporting networks and institutions for technological and market information, training, technical assistance and research and development.

13. At this moment, it is the responsibility of the Ministry of Trade and Industry (MTI) to facilitate and organize the support required in the Industrial Sector. In order to play an effective role, MTI needs to:

- (a) Have good policy on acquisition of technology;
- (b) Build up its own technical personnel;
- (c) Establish good information networks on existing technology, trends in technology, product market and technology suppliers;
- (d) Secure adequate fund;
- (e) Develop strong external information networks with consulting organization, university, international organizations, etc.

1.3. Highlights of Discussions

14. After the presentations the floor was opened for discussions. The following highlights were registered:

- (a) Developing countries are signatories to the Uruguay Round Agreements that took place on African soil in Morocco in 1994. They are thus bound by this agreement as part of the International Community, despite the apparent unfavorable terms as far as developing countries are concerned;
- (b) Regarding the World Trade Organization (WTO) and its policies on trade, intellectual property and other measures as well as their impact on the developing countries, attempts must be made by developing countries to put up a united front so as to protect their own interests;
- (c) Initially it will be difficult for developing countries who through the Lomé conventions had market access agreements with former colonial powers for their raw, semi-processed and processed materials. Thus, it will increasingly get difficult to acquire technology because of the high costs of acquiring it and the declining cost of African main exports. However, it is expected that developing countries will respond to this challenge by going into strategic partnerships, for the purposes of acquiring technology from developed countries; developing domestic and sub-regional markets, in preparation for exporting manufactured goods that cannot all be sold in domestic markets;

- (d) Technology transfer could also take place in a South-South context or intra- and or inter- States. Because of the fast development of new technologies, it is important for developing countries to adopt a two tier approach to the problem: put efforts into acquiring and mastering imported advanced technology while at the same time developing indigenous technologies;
- (e) Technology transfer has failed in most African countries because of ill conceived policies, poorly trained human resources etc. These issues have to be adequately addressed if success is to be achieved.

II. GLOBALIZATION OF TECHNOLOGY

ECA presented the paper to this session the summary of which follows.

2.1. Summary of the ECA paper entitled " Global Technological Advances and their Effects on National Development"

15. The Globalization of technology is not a new phenomenon, and did not begin with the information technology that has become the most visible form of the phenomenon. What appears to have injected new meaning and near panic to the globalization of technology is the rapidity with which technology has become diffused throughout the world and the impact it will have on the markets, governments and everyday life in society. Furthermore, the effects the change will have on the economies of nations that have not made adequate preparations to adjust their internal productive systems to absorb the impact of the change might be devastating.

16. The dilemma is that the continent of Africa has been very slow in adequately addressing the issues dealing with technology acquisition, transfer, and application, and by so doing risks being disconnected with the rest of the world. This is starkly manifested in the declining amounts of aid, shrinking trade and investment flows, reduction in positive media coverage, and diminished super-power involvement.

17. Africa's dilemma is further compounded by the dramatic rise in the cost of acquiring technology and other forms of know-how from developed countries, while the prices of African raw materials continue to plunge in world markets. Primary commodities account for over 92 per cent of the total export earnings of Africa, and the price of these commodities has fallen by over 50 per cent over the years 1957 to 1992, making it impossible for Africa to invest in science and technology. The contradiction is that the cost of information and other technologies is dropping faster than that of raw materials. This is primarily because improved man-made materials are used to produce better and cheaper components and systems. Low raw materials prices that are the principal source of income for African countries, partially explain why the set target of 1 per cent of the GDP contribution to promote science and technology by the Lagos Plan of Action is far from being achieved.

ISO 9000 quality standards

18. The corner stone of globalization of technology is the ISO 9000 family of standards, intended to provide a generic core of quality standards applicable to a broader range of industry and economic sectors. Collectively, they provide guidance for quality management and general requirements for quality assurance. The ISO 9000 family is intended to be used in four situations. It is understood that the supplier's organization should install and maintain a quality system to cover all the situations including the following:¹

- (a) **Guidance for management.** For this situation, the system will strengthen its own competitiveness to fulfil the requirements for product quality in a cost-effective way;
- (b) **Contractual arrangements between first and second parties.** The customer may be interested in certain elements of the supplier's quality system which affect the supplier's ability to consistently produce products to requirements, and the associated risks. The customer, therefore, contractually requires that certain quality system elements and processes, as appropriate, be part of the suppliers' quality system, by specifying a particular quality assurance model;
- (c) **Second-party approval or registration.** The supplier's quality system is assessed by the customer. The supplier may be given formal recognition of conformance with the standard;
- (d) **Third-party certification or registration.** The supplier's quality system is evaluated by the certification body, and the supplier agrees to maintain the quality system for all customers unless otherwise specified in individual contracts.

Telecommunications and Global Technological Changes

19. In no other field has global technology had more impact than in the telecommunications field. It is the basis of the high speed global data exchange networks, also known as Information Super-highways. This tool has changed the way the world communicates, works, shops, plays and invests. Since 1991, the United States' capital spending on computers and communications has exceeded outlays for heavy industry. Users from around the world send one billion e-mail messages through Internet each month. Half of all application and operating-system software sold in the world is produced by American firms.

Africa and the Telecommunications Industry

20. Africa is virtually out of the picture as far as telecommunications is concerned. Africa's share in the world telephone lines in 1992 was a meager 2 per cent, whereas Europe had 42 per cent, The Americas 34 per cent, and the Pacific Asia 22 per cent. For this two percent, South

¹ ISO 9000-1 Quality management and quality assurance standards. Part 1: Guidelines for selection and use. First edition 1994 07 01

Africa had the lion's share with 42 per cent, North Africa had 30 per cent and sub-Saharan Africa had 25 per cent. In as far as telephone density is concerned, ITU cites that in 1991, the number of lines /100 people was as follows: Republic of South Africa had a density of 9.4/100 people, North Africa 3.29, sub-Saharan Africa 0.39; and Europe and North America 50 to 60 per 100 people.

Africa and the Internet.²

21. Just like the telecommunication revolution has made telephones available in every corner of the world, except Africa, the internet is rapidly permeating the world of information technology and Africa is lagging behind almost all continents in the world.

22. The internet is cheaper than the telephone in the sense that one can **down load** information through the internet and store the information in the home computer whereas one can only converse on a telephone.

23. Examples of business use of the internet are:

- (a) Low cost communication (e-mail, video, tele-conferencing, internet phone);
- (b) Virtual stores (on lines sales of products and services, using secure electronic payment transactions);
- (c) Cost effective information dissemination (company information, product information, technical support, interactive customer relations);
- (d) Information gathering and retrieval to monitor markets and technology developments;
- (e) Through the internet, it is possible to engage in various applications for business, such as on line transaction, obtain customer information and support, and find information in a wide range of fields from more than 20,000 data bases.

24. UNECA and UNIDO will soon be providing support to African countries in the area of information, providing reliable links to industrial and technological information, bringing together industrial investment partners, and provide training to potential users of the internet.

² This section has drawn heavily from the paper presented by Pruim Hans, UNIDO - ITPD/INF. "Global Networking for Business" Presented at the Expert Group Meeting for the alliance for Africa's Industrialization, jointly organized by UNIDO and ECA and held in Addis Ababa, Ethiopia from 6 - 8 September, 1996.

2.2 Highlights of Discussions

25. It was generally agreed by the participants that the Globalization of Technology was an issue that needs to be taken seriously by African countries, in light of the fact that it was rapidly changing the way industrialization was taking place in the world. The following issues were proposed:

- (a) Telecommunication and especially the internet are tools that need to be utilized in order to gain access to the vast amount of information available in the world;
- (b) The United Nations institutions in Africa particularly the ECA and UNIDO should be requested to assist the Government of Eritrea to acquire these technologies and facilitate the filtering of information that is used for development. It was noted that the existence of information on investment, financial sources and other developmental aspects could be very useful to developing countries, especially if this information was available in data banks that are easily accessible to developing African countries without the high costs associated with obtaining the information from developed countries.

III. UNIVERSITY INDUSTRY LINKS.

3.1 Summary of the ECA paper entitled "Some Models of University -Industry Cooperation as Mechanisms for the Industrialization of African Countries"

26. Incubators and science parks often attached to universities and research institutions, provide business expertise to start-up companies. These companies are often created by personnel who have left universities or research institutions. The incubator companies have a greater chance of succeeding than other start up firms because they have the management support of parent university or research institution. Incubators thus maintain a strong link between the entrepreneur and the university. However, the high costs of incubators or science parks can drain the resources of the university and research institution if they are not well managed.

27. Existing models of co-operation between institutions of higher learning, research institutes and enterprises were explored by using three cases from Africa whose countries are by and large technologically underdeveloped; one case from India, a rapidly developing country; one other case was taken from the Philippines, an aspiring newly industrialized country (NIC); and the last case from Canada, a developed country.

28. Cooperation arrangements in some countries of the world have been developed and play an important part in industrializing the country, while others especially in Africa have not been well developed due to inherent problems of establishing linkage mechanisms. The goals of cooperation range from simply trying to solve internal technical problems such as the case of ENSET in Douala, to setting up productive incubator companies as was the case of the Excellence Center in Lapocatiere in Canada. Overall though:

- (a) Most universities still attach more importance to theory rather than to practice tallying with the "publish or perish" phenomenon that is prevalent in most Universities;
- (b) Prototypes are still basically used as didactic materials and no concerted attempts have been made to commercialize research work from universities;
- (c) Cooperation links with R&D institutions and enterprises are not developed in most universities;
- (d) Research and Development Institutions are still depended on the State for their funding, but this tendency is changing due to the economic situation, furthermore, these institutions are looking for ways to commercialize their research results.

3.2 Highlights of Discussions.

29. The discussion started by attempting to identify factors that motivate two or more entities to cooperate. One of the components must have what the other does not have and vice versa. This being the basis of cooperation might suggest mechanisms for linkages between university and industry. Universities have the manpower and industries have the entrepreneurship and machinery to transform raw materials.

30. There is no incentive in Eritrea for industry to link with the university because the goals of each institution have not been linked to national development. Thus, the curriculum in the universities should be linked to the development needs of the country.

31. In the specific case of Asmara University, the problem of not having enough lecturers for the university let alone the possibility of having the lecturers do extra work outside of the university was mentioned. The absence of University statutes that permitted the lecturers to be paid for any extra work carried out beyond the school hours was also emphasized. The concept of linkages existed but only on paper and had to be operationalized.

32. The following mechanisms were identified to facilitate linkages between universities and industry:

- (a) The process of summer jobs for University students in local industries should be formalized;
- (b) There should be a pooling of equipment at the national level so as to enable the various institutions access to the equipment;
- (c) Policy instruments should be developed to formalize the process of linkages between Universities and enterprises;
- (d) The policies should address the issue of remuneration of university lecturers adequately so that they can be motivated to do the extra work required of them;

- (e) The private sector should be encouraged to use the services of the Universities and assist in training the students.
- (f) Facilitate the industrial exposure of the University lecturers who have not had industrial experience;
- (g) Introduce courses on entrepreneurship in the University of Eritrea;
- (h) Include industrialists and other economic operators in the University Council.

IV. SSEs AS VEHICLES OF DEVELOPMENT

Two papers on SSEs were presented in this session from ECA and MTIs

4.1 Summary of ECA paper entitled "Small Scale enterprises as Vehicles for Development"

33. The paper highlighted the important role SSEs play as vehicles for industrialization and development and cited examples from the US, Asia, Africa and Europe to demonstrate their significance as instruments of development.

34. It was also indicated that there is no universally accepted definition of SSEs as different countries assign different definitions. Definitions are based on different concepts ranging from capital invested, to manpower employed and output produced. The paper suggested that given the variety of definitions, local parameters should determine the frame of reference to be adopted.

35. The paper then proceeded to examine the objectives and advantages of SSEs. Among the objectives were enhancing of regional economic balance through industrial dispersal including rural areas; moderation of rural and urban migration; promotion of effective domestic resource utilization; facilitation of managerial training for unskilled and semi-skilled labor and production of intermediated goods for use in larger enterprises.

36. While SSEs have numerous advantages, it was pointed out that they are beset with numerous structural problems such as under-capitalization, small-size, dearth of assets, high mortality rate; high risk rating and low productivity.

37. The paper emphasized the importance of an enabling policy and regulatory environment, institutional and infrastructural support and Entrepreneurship development programmes for the effective functioning of SSEs. The problems faced in each of the foregoing areas and how the problems should be tackled were discussed at length.

38. The constraints to SSE development in Africa were discussed in detail and included poor institutional support; socio-cultural factors; political constraints; economic constraints; legal constraints; problems of human resource development; problems of infrastructure; lack of

information network; and absence of appropriate science and technology policies. The paper then detailed the measures that needed to be taken to overcome the constraints.

4.2. Summary of Country paper entitled " Promotion of SMEs"

39. The objectives of the macro-policy of the State of Eritrea is to promote high level of investment and assure self-sustaining growth thereby increasing the standards and quality of the life of the Eritrean people. Eritrea has opted for an open, private sector led, free market economy.

40. The private sector is the lead actor in the economic activities of Eritrea. It is allowed to participate in all sectors of the economy with no restriction and discrimination. The government will take all necessary policy and other supportive measures to promote, encourage and develop the private sector and protect its interests.

41. Mission statement for promoting SME's

- . modernization
- . competitiveness

42. MTI's thrust towards the SME's is to create a strong and modern SME's sector that is efficient, profitable, competitive and export oriented, so that its role and contribution to be recognized as a valuable input to the overall socio-economic development of the nation.

43. Objective:

- . Enterprise growth and co-operation;
- . Entrepreneurship development.

44. Strategic choice/alternative: The alternative choice used as a base for the design of the SME's promotion programme are:

- (a) To build a competitive manufacturing sector;
- (b) To create balanced industrial development by promoting linkages;
- (c) To promote indigenous entrepreneurs - because of their easy of entry.

45. Existing constraints according to nation-wide survey done on July 1996).

For the start-up problem, finance is the most critical one.

46. Problems that are currently being faced by SME's is listed here according to their relative importance.

Problem Rank	Macro	Small	Medium
First	Market	Market	Raw material
Second	Transport	Raw material	Market
Third	Space/site	Space/site	Skilled labor
Fourth	Equipment	Lack of training	Utilities

Support programmes/Action plan

47. The action plan will ensure that scarce resources are concentrated on those services that are most needed for the identified priority sectors but viable enterprises. It is classified into Environmental-based and enterprise-level.

48. Enterprise-level support programmes will focus on the provision of:

- (a) Information;
- (b) Training;
- (c) Credit guarantee scheme.

49. Environment-level will focus on strengthening the business environment by:

- (a) Giving support to realize the full advantage of competitive collaboration;
- (b) Giving support to get access to international information and technology ;
- (c) Promoting inter-firm co-operation and net-working.

4.3 Highlights of discussions

During the discussions that followed the following highlights were recorded:

- (a) Since the Government has established the macro-economic policies for industrialization as essentially export led growth, both the small and medium size industries should be geared towards supporting this policy;
- (b) It is thus important for the Government to provide the support mechanisms or the enabling environment for these SMIs to carry out their activities. Specifically, the following action should be undertaken in the short and medium term;
 - (i) The department of industry in the Ministry of Trade and Industry should be strengthened with qualified and more human resources to be in the position where they can be of assistance to the SMIs;
 - (ii) Credit guarantee schemes should be put in place to facilitate credit facilities for industrial projects. This in turn will require that competent personnel is available at the banks and the Ministry to evaluate the viability of projects and business plans to ensure that they conform to the overall national goals.

- (iii) Since some high technology SMIs require partnership arrangements for technology acquisition and financing from outside investors, the conducive environment should take on the form of political stability, reduced bureaucracy in processing papers, and better incentives to entice the investors.

V. EXPORT FREE ZONES

50. Three papers were presented in this session: two from ECA and one Country paper. Their summaries follow.

5.1. Summary of ECA paper entitled "Introduction to the concept of Industrial Free Zones (IFZ)"

51. By way of introduction the ECA paper pointed out some of the advantages that dedicated industrial zones provide to promoters of industrial projects.

52. The paper then provided the historical perspectives on the origins of industrial free zones or export processing zones which nowadays and in most cases have led to the establishment of industrial estates or parks. The concepts of industrial estates and free zones were also covered independently.

53. Subsequently, the paper highlighted the purposes of establishing IFZs, which mainly include the promotion of manufactured exports, creation of employment opportunities, foreign technology and know-how and regional development.

54. The common characteristics of IFZs were then pointed out. These include, wide presence of foreign capital and technology with greater than average use of imports, enclave nature within inward oriented trade policies environment and labor intensiveness of the product lines. Then the reasons most frequently cited by firms choosing to locate in IFZs were emphasized, and some of the means of attraction for firms in EPZs were stated.

55. Finally the paper presented the lessons that could be derived from the theoretical and empirical considerations on IFZs, and concluded by indicating that IFZs would not be important tools of industrialization and development in the absence of the requisite ingredients for development, like resilient labor force, infrastructure and ambitious entrepreneurs. Moreover, the paper pointed out the fact that there is no optimal policy framework for IFZs; particular incentives and attractions that are of crucial importance in one situation may be redundant for other products, at other times.

5.2. Summary of the ECA paper entitled "Industrial Free Zones as Mechanisms for the Industrialization of African Countries".

56. Strategies and priorities for attaining the industrialization of most African countries have to be identified by the countries themselves to ensure the ownership of these programmes.

57. However, self-sustainment and self-reliance have to be the corner stones of any industrialization programme. These two goals are indeed formidable to be attained by a continent that, by all estimates, is finding it more and more difficult to feed itself, due to internal and external factors.

58. It is therefore clear that African countries have to provide the bulk of inputs, especially finances, to realize the industrialization of their countries. Financial resources have to be identified and channelled to the priority sectors. Of course outside help would be needed to finance some of her developmental programmes.

59. The financial requirements for implementing national industrialization programmes cannot all come from the public exchequer, but is expected to come from bilateral and multilateral sources through, perhaps, direct equity financing by foreigners.

60. Considering the lead role attributed to the private sector in the Second IDDA and in particular, the proposed strengthening of small-and-medium-scale industries, there is a need to develop financing arrangements better suited to private industrial activities, and, even more important to help the African people develop the industrial entrepreneurial spirit.

61. The promotion of small-scale industries and the fall-out effect of stimulating entrepreneurial activity are major elements in the national programmes component of the Second IDDA document. Among the many steps envisaged for the development and promotion of the small-scale sector are: the establishment of industrial estates, the promotion of industrial co-operatives, tax concessions, industrial promotion organizations, and feasibility studies. These factors are the necessary but not sufficient conditions for the smooth functioning of Industrial Free Zones (IFZs) or Export Processing Zones (EPZs)

62. It would appear that the mechanism of the Industrial Free Zones (IFZs) or the incentive schemes provided by the IFZ codes can, to a certain extent, help some countries if given the right conditions to attain some of their industrialization goals. This is especially so because IFZs

- (a) boost the export of non traditionally manufactured goods;
- (b) create employment;
- (c) generate net foreign exchange earnings;
- (d) enhance the entrepreneurial and technical skills of local entrepreneurs through the presence of new technologies;
- (e) stimulate local economies through backward linkages;
- (f) rationalize the exploitation of the host country's resources; and
- (g) give an up beat picture of the economic situation to local residents.

63. The role of the IFZs as mechanisms for industrial development however, appears to have been over-played in the face of overwhelming evidence showing that there have been on the one hand remarkable successes especially for those zones that were established during the period of rapidly expanding economic activities, and on the other hand dismal failures especially in sub-saharan Africa where "latecomer" IFZs were established more as a political mechanism rather than an economic booster. In the case of the African IFZs, the enabling environment was lacking.

Overall view of IFZs in Africa

64. The establishment of IFZs for the dual purpose of attracting foreign investment and promoting manufactured exports is becoming almost universally regarded as a form of industrial policy in many developing countries.

65. In more specific terms, the target-oriented objectives of IFZs can be classified as:

- (a) generating foreign exchange earnings;
- (b) creating employment;
- (c) attracting foreign capital and advanced technology;
- (d) acquiring and upgrading labor and management skills, and;
- (e) creating linkages between IFZ industries and the domestic economy.

66. In general, export processing zones have proved to be an effective means of stimulating economic development and export expansion in many developing countries, including Africa.

67. In analyzing the failure of the IFZ programmes in the rest of sub-saharan Africa, one needs to identify specific areas of difficulties as follows:

- (a) Investment opportunities for private firms; (b) Bureaucratic IFZ administrative policies/management; (c) Poor locations; (d) Serious deficiencies in international telecommunications and power supply.

68. The component of industrial expansion in the national programmes the second IDDA covers the following ten sectors: metallurgy, engineering and allied metal works, chemicals, agro-industries and food processing, forest-based industries, leather products, fisheries, textiles, construction materials and packaging. These sectors are also covered in the subregional component of the programme. IFZ regimes can play an important role in developing these priority sectors during the Second IDDA.

5.3. Summary of Country paper entitled "Medeber Industrial Estate".

69. The paper started by emphasizing the important role played by informal sectors in alleviating poverty, distributing income, accelerating economic and entrepreneurial development.

In this connection, it was mentioned that the Department of Industry has identified Medeber as a model for promoting informal sectors in the country, and is planning to conduct a study on the rehabilitation or expansion of this center.

70. Medeber was first established as a market place and has gradually evolved into an important manufacturing center, particularly in the area of shoe repairing and making, metal and wood working, pepper and flour mills.

71. Most of the people working in Medeber are family members with low level of education. They have acquired the skill through apprenticeship or through self training.

72. Currently there are over 50 shops found on the street of the Medeber area, and there are about 120 enterprises operating inside the Medeber compound in temporarily allocated areas. The premises of the enterprises are very congested and working environment is very poor. All in all there are about 346 enterprises inside Medeber.

73. The Asmara Municipality is solely responsible for administering the Medeber area. In addition to rendering administration services, the Municipality provides facilities such as water, electricity, security, etc., in return to the nominal fees it collects.

74. There are a number of constraints for the development of the Medeber compound of which lack of space, material inputs, technology, education marketing and credit are among the few.

75. The paper then concluded by listing out the assistance that the DOI requires in rehabilitating or expanding the existing compound and upgrading the skills of micro-enterprise owners.

5.4. Highlights of Discussions

76. Following the presentations on industrial free zones, participants raised a number of questions and made several comments. Below is a summary of the issues raised;

- (a) It is often recommended that industries should be located close to the sources of raw materials. Wouldn't locating the export processing zones far away from the sources of raw material result in additional cost?
- (b) With the kind of privileges extended to EPZs, will there be any interest for outside investors to develop industries outside the EPZs?
- (c) Considering the attraction EPZs offer to investors including the numerous privileges extended to them including cheap labor, will promoting EPZs not tantamount to encouraging labor exploitation?
- (d) Even though countries that have succeeded with EPZs like Mauritius may have benefitted in terms of generation of foreign exchange, they do not seem to have fully addressed poverty alleviation and democratization objectives which one

would hope to be among the anticipated benefits. Should short term industrialization benefits be taken as substitute to the long-term poverty alleviation and democratization objectives.

- (e) EPZs can be considered successful if the exercise results in technology transfer, skill upgrading and sustained employment. EPZs will also require skilled person power and it is the existence of such skill that would attract EPZs. Given the current situation where skilled person power may not be abundantly available is it possible to use EPZs as instruments for industrialization in Eritrea.

VI. HUMAN RESOURCE DEVELOPMENT

There were two papers presented in this session.

6.1 Summary of ECA's paper entitled "Planning, Development and utilization of Human Resources for Industrial Development".

77. The ECA paper focused on human resources development for industrialization in Africa, whereas the Ministry's paper dealt with human resource development strategies in Eritrea.

78. The ECA paper defined human Resource Development (HRD) as the skills, knowledge and attitude needed to act as catalyst in the process of economic development. It was reported that HR was responsible for the manipulation of industry, technology, agriculture, mineral resources etc. to maximize productivity and enhance growth. To perform its catalytic role, HR must be developed through one or a combination of several ways: formal and technical education, on the job learning , training , research etc.

79. African countries lack appropriate skills, knowledge and attitudes relevant to the needs of development , particularly industrial development. Africa's major challenge for the rest of the century is how to master the dynamics of the industrial sector. It will also depend on how effective and coherently she is able to plan, develop and utilize available resources to increase the productivity of the industrial sector especially agro-industries which currently dominate the manufacturing sector.

80. Even though Africa registered an impressive expansion in the stock of human capital through its formal educational institutions between 1960-1983, the growth is now being threatened by its population growth and the economic decline since the mid 1980s which has led to cutbacks in public spending in education. Despite the impressive quantitative growth in enrolment, an important issue which continues to dog the industrialization effort concerns the relevance of formal education curriculum to the needs of individuals and society at the secondary and tertiary levels. Course offerings are still heavily biased in favor of liberal arts as opposed to science, engineering, agriculture and management , fields critical to industrial development in Africa. It was also pointed out that constraints to growth of the manufacturing and agro-industrial sectors are related in a critical manner to questions of not only skill development but also more importantly to skill development and utilization.

81. Examples from Mauritius' HRD policies were used to demonstrate how such policies can be used to accelerate development. The presentation then proceeded to draw on recommendations made in several workshops on human resource development organized by ECA. Among the recommendation proposed are included: make technical education and training more relevant to industrial development; assist technical/vocational educational institutions to generate resources of their own by launching their enterprises thereby lessening their financial dependence on government; tap new sources of revenue generation for technical education and training through levies on industrial establishments, commercial firms and multi-national companies and/or finance the training of workers and technicians through a levy on wages and salaries paid by enterprises; establish or strengthen technical education resource centers to produce teaching materials and aid to relevant to the production of appropriate technology; strengthen existing science, technology and research institutions; establish centers of excellence for specific technical skills; develop demand oriented training programmes by adopting strategies that emphasize skill acquisition through joint ventures and training as part of technology acquisition; institute a special programme of training in fields and skill areas critical to industrial development such as R&D, skills in project identification, preparation of feasibility studies and project reports, supervisory and management skills, engineering fields of all kinds, industrial and financial management skills and skills for negotiation the procurement of equipment, installation of equipment and consultancy services; fund universities and R&D programmes that respond to the needs of agriculture, industry and science and technology; establish non-formal technical education programmes to supplement the efforts of technical/vocational education in the area of industrial development; develop non-formal technical programmes to retain graduates, school leavers, retired civil servants and skilled civil servants so as to upgrade them into small and medium-sized industrialists; advance women in managerial ranks and assist women entrepreneurs etc.

6.2. Summary of Country paper entitled " Eritrea, Human Resources Development in the Industrial Sector.

i) Background

82. The inadequacy of well trained manpower at managerial professional and technical levels hampers industrial development in Eritrea. besides lack of entrepreneurial and managerial skill also inhibits development of private sector, use of technology and market competence in the national and international world.

83. Eritrea has about 43 industrial public enterprises and 1300(as of May 1995) private industrial enterprises employing 19,000 workers of which the technical graduates account about less than 5 percent. The participation of Eritrean women in the sector is low.

ii) Review of Eritrean Government policy and programme on human resource development for industry.

84. Universal primary education up to seven years will gradually be made available to all. Accordingly, the 1994/95 enrolment has increased by 8 and 7 percents in primary and middle education compared with 1993/94 academic year respectively. The increase is due to the construction of 19 and 7 new primary and middle schools respectively.

85. Education will continue through formal and informal. The number of schools in primary, middle and secondary schools has increased by about 10 and 13 percents per annum. While the enrolment is estimated at 80 per cent for males and 90 per cent for females.

86. Skilled man power requirement will be met by a steady increasing at secondary, technical and vocational schools.

87. In 1994/95 the technical school enrolment decreased by 15.8 per cent, this was due to the closure of both evening programmes at Wine and Asmara technical schools. While 525 vocational students have got training of 6-8 months in variety of skills.

88. Tertiary education will be expanded selectively to meet envisaged manpower of the country. Eritrea has only one university with few colleges. Different steering committee have been set up to ensure the relevance of university program. In 1995/96 the university has started to offer diploma in Engineering of three years in the fields of civil, Electrical and mechanical.

iii) Efforts made by Government and non Government organizations for developing Human resource for industrialization.

89. University of Asmara:- The most important colleges for the development of Human resources for industrialization are colleges of Engineering, Business and Economics and Natural Science. They have external linkage with the university of New South Wales, Australia, Horned university of Neitherland and Upssala of Sweden respectively. The Department of industry have internal linkage with Engineering and Business and Economics, as 2 result the curriculum of the colleges was reviewed by DOT to meet the requirement of the industrial sector.

90. Points which should be emphasized in order to improve the quality of graduates and strengthen the relationship between the university and industry:

- (a) The course offered should be designed based on the existing realities, and emphasis should be given to applied and practical;
- (b) Strengthen steering committee of each college and assess the needs of each other;
- (c) Focus should be given to English language and communication skill by integrating with the most appropriate business subjects for advertisement and communication purposes;
- (d) Provision of Instructors, quest lecturers from industry on special areas should be encouraged;
- (e) Internal linkages of the university with industry should be strengthened for joint research;
- (f) Internship program for advanced students should be encouraged so that students gain invaluable job experience and institution access students suitability as future employees;

- (g) Higher attention should be given to private industrial sector;
- (h) Industrial entrepreneurial skills and SME's industrial management should be stressed in order to upgrade knowledge for self employment;
- (i) The micro-industrial enterprises or informal sector should be always taken into account when ever designing courses.
- (j) Senior project papers should be dealt with carefully and the works should be relevant and upon completion of the research, copies sent to the concerned organizations;
- (k) To meet the requirement of secretarial science, the CBE has to start the program in diploma level.

91. Other government and non-government organizations involved in the development of human resource for industrialization:

- Ministry of Education (MOE) involved in teaching technical school education.
- Eritrea management institute offers one month training on project and financial management.
- Ministry of Trade & Industry is involved in organizing industrial training.
- Private computer Centers, rendering Computer training
- Kingnam Construction Company:- Involved on the job training in the field of metal wood work, Electricity, Plumbing, machine operation.
- Both National Union of Eritrean women, youth & students are involved in computer, and other training.
- Asmara Chamber of Commerce is involved in organizing industrial training.
- Private tailoring school, involve in 6 month training in tailoring.

iv). Constraints

Below are some of the constraints:

- (a) Inadequacy of education, training, infrastructure and capability;
- (b) Lack of training facilities for management and entrepreneurship;
- (c) Lack of information;
- (d) Lack of adequate financial resources.

v) Recommendations

- MOE should made additional effort to formulate curriculum compatible with the requirement of industrial sector, commercial schools should be with the requirement of industrial sector, commercial schools should be set up and the existing technical schools should be strengthened.
- Active policy of facilitating the development of indigenous entrepreneurial and technological capability need to be formulated.
- Create an institutional infrastructure to promote industrial human resource and mechanism for regular and frequent consultation between the government and private enterprises.
- Strengthening the role of the international organizations
- Strengthening the role of training unit of MTI

vi) Conclusions

- The Government of Eritrea should create and modernize industrial human resource development institutions, educational schools, colleges, management institutes and MTI training unit.
- The government of Eritrea should design a national strategy which will develop the industrial culture of the people.
- The linkages between various colleges of the university and industry should be strengthened in order to assess the needs of industrial requirement.
- The industrial sector should intervene in the technical schools curricula starting from revising and expanding it.

Objective

92. The Eritrean Government has clearly articulated economic and social development objective. It is aiming to make Eritrea a modern, technologically advanced and internationally competitive within the next two decades by endorsing human centered and market oriented policy that ensures economic efficiency, social justice and is environmentally sustainable.

Resource

93. DOT maintains a down sized organizational structure. A core of skilled,dedicated and productive staff will be maintained at DOT to carry out promotional and regulatory activities. Special activities such as issuing of licenses, standards and metrology, privatization and

supervision of state enterprises and investment facilitation are to be carried by specialized agencies. Much of promotional and regulatory function will also be delegated to decentralized regional Trade and Industry offices.

94. DOT has secured reasonable financial and infrastructure facilities. It has also been successful in getting necessary cooperation from concerned government institutions.

Strategies

95. DOT has prepared a strategic plan covering the period 1996-2000 based on the Macro-economic policies. The strategies for industrial development include:

- a) Export led market oriented industrialization;
- b) Balanced industrial development;
- c) Private sector development;
- d) Environmental protection and safety;
- e) Human resource development.

Policies and regulations

96. Following the formulation of the Macro Policy in 1994, several measures have been taken to create conducive environment for industrialization. The measures include proclamations on investment, tax, business license, and standards and privatization.

97. In principle the policies issued and implementing agencies established so far do encourage industrial development. The are appropriate to Eritrean needs and consistent with its development objectives.

Strengths

Conducive Macro policy

MTI organizationally prepared to assist in industrial promotion

Establishment of supporting institutions such as Investment Center, Business License Office, Standards Institution Etc.

Cooperation with local and foreign institutions.

Starting from scratch

Conducive business culture. Most Eritrean's have positive attitude towards local and foreign private investment.

Weaknesses

Limited experience in modern industry and know-how

Limited resources manpower, finance and in Infrastructure facilities.

6.3. Highlights of Discussions

98. After presentation of the papers on Human Resource Development, the following discussions were undertaken:

- (a) In light of the World Bank's insistence that Governments should not concentrate on vocational training, perhaps the private sector should take on the task. But without a vibrant private sector in Eritrea and given the history of Government involvement with vocational training, it was not so clear as to how this was to be carried out.
- (b) Vocational programmes should be designed such that at the end of training, the students are able to start their own micro industries and be self employed.
- (c) The University should also assist in training competent employees for the job market, but it is found that students entering the University are not adequately trained in the mastery of the language and other basic skills, so they have to be trained to attain a certain level before they can be taught the relevant courses that will make them self reliant. High Schools should update their curriculum to better prepare the students for University work.
- (d) Human Resources Development should take into consideration the working conditions of the people involved. The case of Medeber pointed out some very serious violations of employee safety at work and in some cases of child labor violations.
- (e) the whole issue of Human Resources should be more cross-cutting and involving the various Ministries and not just the Ministry of Trade and Industry. There should also be the involvement of NGOs, international organizations such as the ECA, UNDP, World Bank, UNIDO, etc.
- (f) SMIs in Eritrea have problems in marketing their products. Capacities should be built in this area.

VII. INDUSTRIAL REGULATION

Two papers were presented in this session.

7.1 Summary of the ECA paper entitled, "Regulatory Instruments and Role of Government in Industrialization."

99. The paper was presented in three parts. The first part which was on the role of government in industrialization, covered issues like:

- (a) The roles of markets and governments in the industrialization process of market economies;
- (b) The direct and indirect intervention areas for governments;
- (c) Experience of developed and developing countries with regard to the role of government in industrialization;
- (d) Problems associated with extensive intervention and regulation;
- (e) Problems and shortcomings in the regulatory regimes of developing countries.

100. The paper pointed out that even though it is difficult to identify the precise role of governments, the general consensus is that governments should intervene in markets to improve economic performance, limit abuses and frauds, pollution and endangerment of health. The paper then continued by emphasizing that the most important point that comes out with intervention or regulation is not whether to intervene or not but how, what are the appropriate mechanisms for intervention.

101. The second part of the paper that dealt on the instruments of regulation and experiences of countries covered the following issues,

- instruments available for governments to regulate or shape their industrialization process,
- how countries of East Asia under consideration and Mauritius put into use these instruments to guide their industrialization process in the right direction.

102. With respect to the instruments, the paper stated that the appropriate role of governments would be supporting market oriented industrial activity. This would mean that governments should intervene somewhat less directly by making use of the instruments that are available to them. This, among others, would include, trade policy, fiscal incentives, price controls, investment regulations and financial and macroeconomic policies.

103. The experiences of six East Asian countries, and those of Mauritius which is the African success story, in relation to government intervention in applying the instruments were presented in greater detail.

104. The final part of the paper tried to draw respective lessons that could be considered in the process of industrial development. In this connection, the paper pointed out that government should be supportive of market trends while addressing market failures in the appropriate manner. Government should support the process of industrial development through responsible

macroeconomic management, efficient allocation of financial resources through the effective functioning of the financial sector, and through considerable investment in human capital and infrastructure. This would also mean greater wage and price stability, revision of interest policy, review of labor laws to enhance the productivity of labor, increment in labor productivity through industrial and vocational training, rationalizing the structure of tariffs and customs regimes for export growth. In conclusion the paper pointed out that government intervention in industrialization should be selective and temporary.

7.2 Summary of the country paper entitled, " The Manufacturing Sector, Policy and Regulation in Eritrea."

105. The country paper at first provided a brief summary on the objectives of the industrial sector of Eritrea in relation to the responsibilities entrusted to the Ministry of Trade and Industry of Eritrea and in particular to the Department of Industry. Some of the responsibilities of the Department include, the preparation of industrial policy and strategy, preparation of regulations and directives, promotion of small scale, handicrafts and cottage industries, provision of advise and assistance in the selection and acquisition of technology and advise and assist in the development of human resources for industry. The manpower and other financial and support services and resources available to the Department for discharging its responsibilities were then emphasized.

106. The paper then discussed the investment climate in Eritrea and the incentives that are provided to domestic as well as foreign investors. In relation to this, mention was made of the new one-stop business license office, that issues licenses with simple, speedy and accurate services. The close work collaboration between the Eritrean Investment Office, the Business License Office and the Department of Industry (DOI) was explained. Moreover, the DIOs working relation with the Standards Institute as well as with the Eritrean Agency for Environment was well discussed.

107. Some of the elements of the regulatory regime like price controls, import and export controls, foreign exchange regulations and labor issues were addressed in the light of the liberal stand the government has taken to facilitate economic development in general.

108. While highlighting the strengths and weaknesses in the regulatory system, emphasis was made on the conducive macroeconomic policy framework that has provided the basis for social and economic progress. Measures that have already been taken towards institution building and collaborative arrangements have been mentioned as concrete evidences of strength. Some of the weaknesses in the regulatory environment which are attributable to lack of human, financial, infrastructural and related resources were also discussed. Finally DOI's priorities and needs for the effective realization of industrial objectives and for discharging its responsibilities in an efficient manner were identified and discussed.

7.3 Highlights of the Discussions

109. Participants raised a number of questions relating to regulations. Among the questions raised were:

- (a) How should the financial sector be restructured to serve industry better/ When we do not have enough finances and have to rely on credit, what implications would that have on our debt stock?
- (b) What kind of licensing arrangement should be provided to foreign investors? Should it be open and free? If it is left free without some regulation, would it not lead to capital flight?
- (c) A number of industrialized states had used protection to their advantage at least in the short run. Can developing countries do the same on the face of the Uruguay round agreement?

110. The presenters from ECA and the Ministry of trade and development responded to the various questions as follows:

As to the reliance on credit as the only source of development finance, it was indicated that there would be an urgent need to look for sources of finance other than credit. Foreign direct investment, and joint ventures among others have to be explored as alternative sources of funding. The question then becomes how do we find other sources of finance for our industrialization? It is a matter of instituting macro-economic policies that are attractive to foreign investors. Policies on FDI have to be competitive, provide investors incentives comparable or better to those provided in nearby countries; provide conducive macro-economic environment as well as the required infrastructure.

111. Currently financial services in Eritrea are weak. There are no banks that cater to the manufacturing sector. Commercial banks only deal with commercial operations but do not give long term industrial development loans. They only provide working capital loans. But this is a temporary problem. For example in the near future the PTA bank will open facilities in Asmara which will include extending loan for development. The land issue which has slowed down distribution of land to developers will soon be addressed. It has been decided that land belongs to the people and will be made available for industrial development. The present land law has come with solutions to remedy some of the problems of the past. But there are administrative problems to be overcome.

112. It was also reported by the Investment Center that in spite of some initial delay in some places because of lack of master plan, nowadays, land is being provided to developers.

113. Every African country has to understand the Uruguay Round agreement and its implications for industrialization and find ways and means of using it to its advantage. African countries might look as losers, but in order to survive, Africa needs to develop its competitiveness and explore its potentials.

VII. SUMMARY OF THE SESSION ON THE INDUSTRIAL DEVELOPMENT PROGRAMMES FOR AFRICA

Breakthrough to an IDDA.

114. The breakthrough to an industrial development decade for Africa was reached when it was recognized that a wider concept of designing and constructing internal engines of growth in Africa to replace the long and accelerated weakening of an external engine of growth. This was even more so because the growth was tied to trade with the European and American markets.

115. At about this time, the United Nations was promoting the idea of development decades to promote development in the developing countries and reduce the huge gap between the third and the first world. The Lagos Plan of Action was a result of United Nations Third Development Decade during which the Regional Commissions were asked to propose concrete solutions to regional economic problems.

The First IDDA

116. The First IDDA (1981-1990) was the creation of the Lagos Plan of Action. Its aim was to translate the LPA goals into the arena of industrialization with the following objectives and strategic approaches: to use industrialization as a means of attaining self-reliance and self-sustainment; promote internal engines of growth; to promote in Africa the establishment of strategic industries; to develop critical national capabilities, physical and institutional infrastructures; and to promote subregional and regional co-operation. For several reasons resulting from several factors, the First IDDA did not attain the desired goals.

The Second IDDA

117. The fundamental goal of the Second Industrial Development Decade for Africa (1991-2000) proclaimed by the United Nations General Assembly in resolution 44/237 of 22 December 1989 is to achieve self-reliance and self-sustaining development in Africa.

118. This calls for an increased use of local factor inputs in the manufacturing sector and especially the strengthening of linkages between various agricultural activities and industry. To this effect, the development of small-scale industries especially the agro-based industries has been identified as an important component in the development of these linkages. A mastery of environmental issues thus takes on added importance.

Role of private sector, SSIs SMEs.

119. African decision makers recognized the role of the private sector in the development of the industrial sector and decided to contribute to the creation of an enabling environment to facilitate the more active participation of private entrepreneurs in the process of industrialization, especially with respect to small-and medium industries. The Ministers are determined to rationalize and harmonize existing production capacities in each industrial sub-sector in order to realize a full market potential through economic integration as called for in the Treaty establishing the African Economic Community.

Evaluation of the Second IDDA programme

120. It is clear that since the declaration of the Second IDDA (1993 - 2002), by the General Assembly, very few African countries have revisited their national programmes for the purposes of implementing it. As a result, the programme for the Second IDDA faces the similar fate of the programme of the first IDDA whereby most member States did not put in much efforts for the attainment of its objectives.

121. The mid-term evaluation of the implementation of the second IDDA programme shall be principally guided by the spirit of the Gaborone Declaration, which above everything else called for a re-affirmation of the commitment by African countries of the implementation of the second IDDA programme.

122. To this effect, the following areas that are forward looking and to a large extent are in conformity with the strategic directions for the ECA renewal, form the basis of the framework for evaluating the mid-decade:

1. Industrial Competitiveness.

- Examine the extent to which an industrial culture has been developed in member States for developing and sustaining entrepreneurial capabilities.
- Promote the exploitation of Africa's comparative advantage, particularly its human resources and vast natural resources.

2. Human resources for industrial development.

- Extent to which government and the private sector enterprises play a catalytic role in the elaboration of national training programmes.

3. Industrial private sector development

- Extent to which the private sector especially the SMIs and SSIs are promoted and given the required support.
- The extent to which the State and private sector play a catalytic role in the evaluation and implementation of national policies and strategies.

4. Mobilization of financial resources for industry.

- Identify domestic and foreign sources for financing programmes/projects.

5. Regional Cooperation

- The extent to which the promotion and support is given to the industrial activities of African subregional and regional economic communities.
- Enhance opportunities for intra-African trade and cross-border investments in industrial and technological activities

6. International cooperation

- Forge alliances with the international community to promote Africa's industrialization.
- Flow of ODA through bilateral and multilateral sources.
- Mechanisms for project identification and promotion.

PART TWO

SYNDICATE GROUPS DISCUSSIONS

PART TWO: Guidelines for participants of the syndicate groups

INTRODUCTION

123. Workshop participants will be divided into two syndicate groups and will examine in detail, issues pertaining to broadly related themes.

124. **Group one** will examine the themes of technology transfer and acquisition, industrial regulation, industrial export processing zones and industrial estates and other supporting infrastructure.

125. **Group two** will examine the issues of Small and Medium Scale Industries (SMIs) and human resource development. In addition to the above themes, each group will examine the implications of the second IDDA for its respective themes.

126. After examining the issues in detail, the groups are expected to prepare reports focusing on their assigned themes. The report should review the issues under the respective themes, identify the problems and suggest ways and means of dealing with them. In examining the issues and proposing solutions for the problems, participants should keep in mind Eritrea's industrial objective of becoming an export led industrial state by 2020. Solutions and recommendations shall incorporate the vision of the MTI as well as the role of other Ministries and groups in Eritrea, such as NGOs, Consumers, etc.

127. The group reports should be typed and ready for presentation in the plenary on Wednesday morning. After review and discussion of the syndicate reports by all the participants and the necessary corrections made to reflect the consensus of the group, the recommendations of the workshop will be presented in the afternoon session in which it is hoped the Honorable Minister of Trade and Industry or his representative would be present.

Discussion Guidelines for Technology Transfer, Industrial Regulation IFZs and Industrial Estates.

A. Technology Transfer

128. Do existing macro-and other policies say anything about technology transfer and technology acquisition? If such policies are in place, do they have gaps that ought to be addressed? If such policies are lacking, what technology transfer and acquisition policies should be put in place so as to ensure the realization of Eritrea's objectives of becoming an export led industrialized state?

129. What indigenous technology exists in Eritrea that can be promoted and developed to compliment technology importation and utilization?

130. What university-industry linkages exist at the moment? What constraints do they face? What should be done to strengthen the linkages? What specific policy measures are required to realize stronger linkages?

131. What policy instruments should be put in place to address the challenges of globalization particularly in the area of telecommunication and the internet? What are the things we should watch out for as one seeks the benefits of such technologies? Should the private sector be encouraged to participate in the importation, development and application of such technology? What are the pros and cons of involving the private sector? What specific role should the government assume in this regard? How useful would strategic alliances be for technology transfer/development and application? How should the different means of acquiring technology be judiciously used in the interest of Eritrea? What human resources development and utilization policies should be put in place in order to realize the effective transfer of technology?

B. Industrial Regulations

132. What regulatory mechanisms are in place right now to promote competitive industrialization? What are their strengths and weaknesses? What can be done to rectify the weaknesses and make them less cumbersome and less bureaucratic? As Eritrea aspires to become an industrialized state in 2020, what environmental and other regulatory regimes should it institute to safeguard the degradation of the environment while at the same time exploiting natural resources?

C. IPZs and other Infrastructural Support

133. What type of export processing zones or industrial free zones development strategies should Eritrea adopt? What problems should be anticipated in deciding on the EPZs? How should some of the anomalies of EPZs be handled? What additional infrastructural support would be required?

Guidelines for Group II-SMIs and Human Resources Development

A. SMIs

134. What does the macro-policy say about SMIs? Should SMIs be the engine for growth for industrialization in Eritrea? Do existing policy and regulatory regimes constrain or facilitate the growth of SMIs? What should be done to stimulate and sustain the growth of SMIs in Eritrea? Participants are encouraged to examine the taxation system, legal barriers, licensing requirements, access to premise and land etc.

135. Everywhere, SMIs appear to suffer from lack of access to credit. What is the situation in Eritrea? Is access possible and easy? What kind of financial infrastructure exists that could

lend support to SMIs? Do existing facilities adequately address the financial needs of SMIs? If not, what policy measures are needed to rectify the situation? what are the prospects for using traditional resource mobilization strategies like the "Ikub" to facilitate SMIs access to resources? What institutional and infrastructural support do SMIs need to play an effective role in Eritrea's drive to industrialization? Do facilities like industrial centers, industrial estates, business and technical incubators exist? If not, do you consider them important to warrant government's support? What policies should Eritrea incorporate in support of infrastructure and institutions in its future programmes? How can the university and other technical/research institutions support SMIs?

B. Human Resource Development and Utilization

136. Human resource development is a cross-cutting theme, how should it be reflected and incorporated in the different areas addressed in the course of the discussion? Are appropriate human resource development programmes in place in Eritrea when viewed in light of its industrialization goals? What institutions and human resource development and utilization policies are in force? How appropriate and adequate are they in addressing short and long term industrialization needs? If there are shortcomings in the current programmes, what should be done as a matter of urgency to ensure the right human resource policy and programmes are in place?

137. What Entrepreneurship Development Programmes (EDPs) and institutions are needed for SMI development? What exists, what needs to be improved? what should be done to popularize EDPs throughout the society? What specific roles should be assigned to schools, technical and vocational schools, universities in promoting and developing human resources for development? How about non-formal training arrangements? Does the current curriculum cater to the needs of industrialization? If not, what should be done to make it relevant for industrialization? what should be done to train micro-enterprise entrepreneurs and operators in the informal sector in appropriate skills so as to facilitate their graduation to SMIs? How can the ongoing national youth service programmes be utilized for EDP purposes as well as instill the virtue of self employment and generating employment for others? How can EDPs be used to convert unemployed youth, disabled and demobilized combatants to become entrepreneurs?

C. Industrial Development Decades (IDDA)

138. IDDA provides general guidelines which member states should consider in formulating their industrial policies. Do any of the elements reflected in IDDA appear relevant to the Eritrean situation? Which of the elements proposed under IDDA do the participants consider relevant to Eritrea?

139. In your deliberations and recommendations consider factors such as industrial competitiveness, private sector development, sub-regional, regional and international cooperation

GROUP DISCUSSIONS

Group I: Human Resource Development in the industrial Sector

I. Background

1. The inadequacy of well trained manpower at managerial professional and technical levels hampers industrial development in Eritrea. Besides, lack of entrepreneurial and managerial skill also inhibits development of private sector, use of technology and market competence in the national and international world.
2. Eritrea have about 43 industrial public enterprises and 1300 (as of may 1995) private industrial enterprises employing 19,000 workers of which the technical graduates account about less than 5 percent. The participation of Eritrean women in the sector is low.

II. Review of Eritrean Government Policy and Programme on Human Resource Development for Industry.

3. Universal primary education up to seven years will gradually be made available to all. Accordingly, the 1994/95 enrolment has increased by 8 and 7 percents in primary and middle education compared with 1993/94 academic year respectively. The increase is due to the construction of 19 and 7 new primary and middle schools.
4. Education will continue through formal and informal. The number of schools in primary, middle and secondary schools has increased by about 10 and 13 percents per annum. While the enrolment is estimated at 80 per cent for males and 90 per cent for females.
5. Skilled man power requirement will be met by a steady increasing at secondary, technical and vocational schools.
In 1994.95 the technical school enrolment has decreased by 15.8 per cent, this is due to the closure of both evening programmes at wine and Asmara technical schools. While 525 vocational students have got training of 6-8 months in variety of skills.
6. Tertiary education will be expanded selectively to meet envisaged manpower of the country. Eritrea has only one university with few colleges. Different steering committee have been set up to ensure the relevance of university program. In 1995/96 the university has started to offer diploma in Engineering of three years in the fields of civil, Electrical and mechanical.

III. Efforts made by Government and Non Government Organization for Developing Human Resource for Industrialization.

7. University of Asmara: The most important colleges for the development of Human resource for industrialization are colleges of Engineering, Business and Economics and Natural Science. They have external linkage with the university of New South Wales, Australia, Horned university of Neither land and Uppsala of Sweden respectively. The Department of industry have internal linkage with Engineering and Business and economics, as a result the curriculum of the colleges was reviewed by DOT to meet the requirement of the industrial sector.

8. Points which should be emphasized in order to improve the quality of graduates and strengthen the relationship between the university and industry:

- The course offered should be designed based on the existing realities, and emphasis should be given to applied and practical;
- Strengthen steering committee of each college and assess the needs of each other;
- Focus should be given to English language and communication skill by integrating with the most appropriate business subjects for advertisement and communication purposes;
- Provision of Instructors, guest lecturers from industry on special areas should be encouraged;
- Internal linkages of the university with industry should be strengthened for joint research;
- Internship program for advanced students should be encouraged so that students gain invaluable job experience and institution access students suitability as future employees;
- Higher attention should be given to private industrial sector;
- Industrial entrepreneurial skills and SME's industrial management should be stressed in order to upgrade knowledge for self employment;
- The micro-industry enterprises or informal sector should be always taken into account when ever designing courses;
- Senior project papers should be dealt carefully and the works should be relevant and deeper. upon the completion of the research copies was to sent to the concerned organization;
- To meet the requirement of secretarial science, the CBE has to start the program in diploma level.

9. Other government and non-government organizations involved in the development of human resource for industrialization.

Ministry of Education (MOE) involved in teaching technical school education.

Eritrea management institute:- offering one month training on project and financial management.

Ministry of Trade & Industry:- is involved in organizing industrial training.

Private computer Canters:- rendering Computer training

Kingnam Construction Company:- involved on the job training in the field of metal wood work, electricity, plumbing, machine operation.

Both National union of Eritrean women & youth & students... both involve in computer, and other training.

Asmara Chamber of Commerce is involved in organizing industrial training.

Private tailoring school. Involve in 6 month training in tailoring.

IV. Constraints

- Inadequacy of education, training, infrastructure and capability

- Lack of training facilities for management and entrepreneurialship

- Lack of information.

- Lack of adequate financial resources.

V. Recommendation

- MOE should made additional effort to formulate curriculum compatible with the requirement of industrial sector, commercial schools should be with the requirement of industrial sector, commercial schools should be set up and the existing technical schools should be strengthened.

- Active policy of facilitating the development of indigenous entrepreneurial and technological capability need to be formulated.

- Create an institutional infrastructure to promote industrial human resource and mechanism for regular and frequent consultation between the government and private enterprises.
- Strengthening the role of the international organizations
- Strengthening the role of training unit of MTI

V. Conclusions

- The Government of Eritrea should create and modernize industrial human resource development institutions, educational schools, colleges, management institutes and MTI training unit.
- The government of Eritrea should design a national strategy which will develop the industrial culture of the people.
- The linkages between various colleges of the university and industry should be strengthened in order to assess the needs of industrial requirement.
- The industrial sector should intervene in the technical schools curricula starting from revising and expanding it.
- For industrial enterprises, human resources development program should be taken in people which is more important as investing equipment. Thus the employer should provide in plant training and technical grading as the government provides schools universities, vocational and specialized training facilities.

Objective

The Eritrean Government has clearly articulated economic and social development objective. It is aiming to make Eritrea a modern, technologically advanced and internationally competitive within the next two decades by endorsing human centered and market oriented policy that ensures economic efficiency, social justice and is environmentally sustainable.

Resource

DOT maintains a down sized organizational structure. A core of skilled, dedicated and productive staff will be maintained at DOT to carry out promotional and regulatory activities. Special activities such as issuing of license, standard and metrology, privatization and supervision of state enterprises and investment facilitation are to be carried by specialized agencies. Much

of promotional and regulatory function will also be delegated to decentralized Regional Trade and Industry Offices.

DOT has secured reasonable financial and infrastructure facilities. It has also been successful in getting necessary cooperation from concerned government institutions.

Strategies

DOT has prepared a strategic plan covering the period 1996-2000 based on the Macro policing. The strategies for industrial development include:

- export let out market oriented industrialization
- balanced industrial development
- private sector development
- environmental protection and safety
- human resource development

Policies and regulations

Following the formulation of the Macro Policy in 1994, several measures have been taken to create conducive environment for industrialization. The measures include proclamations on investment, tax, business license, and standards and privatization.

In principle the policies issued and implementing agencies established so far do encourage industrial development. There are appropriate needs to Eritrean and consistent with its development objectives.

Strengths

- a) Conducive Macro policy
- b) MTI organizationally prepared to assist in industrial promotion
- c) Establishment of supporting institutions such as Investment Center, Business License Office, Standards Institutions, etc.
- d) Cooperation with local and foreign institutions
- e) Starting afresh
- f) Conducive business culture. Most Eritreans have positive attitude towards local and foreign private investment.

Weakness

- a) Limited experience in modern industry and know-how
- b) Limited resources manpower, finance and in infrastructure facilities.

**TERMS OF REFERENCE FOR A SEMINAR ON CAPACITY BUILDING FOR
THE DEPARTMENT OF INDUSTRY OF THE MTI, ERITREA**

	1
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II. Format of Seminar	2
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V. Financing	2

**GUIDELINES FOR PREPARING COUNTRY PAPERS FOR THE SEMINAR ON
CAPACITY BUILDING FOR THE DEPARTMENT OF INDUSTRY OF THE MTI,
ERITREA**

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II. For the country Paper on the establishment of Industrial Estates	4
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Appendix 1

Appendix 2

Appendix 3

Appendix 4

Appendix 5

**TERMS OF REFERENCE FOR A SEMINAR ON CAPACITY BUILDING FOR
THE DEPARTMENT OF INDUSTRY OF THE MTI, ERITREA**

I. Objective

To assist in the capacity building efforts of the Department of Industry, of the MTI of the Government of Eritrea, by exposing its staff members to concepts, issues, methodologies and constraints in the area industrial policy, development, promotion and regulation.

Specifically, the seminar is designed to,

- (i) Expose participants to issues of technology transfer, acquisition, negotiation, etc., drawing from experiences in other African countries; consider the problems of globalization of technology in context of the Uruguay Round Agreements; review problems and prospects for technology application in Eritrea, based on local experiences and strategic plans;
- (ii) Review experiences on industrial free zones, technical incubators, industrial estates, in the African context and their possible applicability to Eritrea;
- (iii) Examine the rationale and instruments of regulation in the industrial sector, particularly in Africa and the NICs of Asia with a view to adapting them to the realities of Eritrea;
- (iv) Review strategies for human resource development for the industrial sector in Africa as well as other developing economies and examine their relevance to Eritrea, with a view to proposing mechanisms for effective coordination of Eritrean human resources for industrialization;
- (v) Survey African experiences in promoting SMEs, particularly focusing on policies, human resource development, provision of physical and institutional infrastructures, constraints etc., with a view to proposing possible solutions to the Eritrean situation;
- (vi) Expose participants to the concepts and philosophy of industrialization in the context of the Second Industrial Development Decade for Africa (IDDA-II).

II. Format of Seminar

The seminar will be highly participatory, with the resource person presenting the topic for a maximum of thirty minutes and then followed by open floor discussions. There is provision for small group discussions in cases where the subject matter requires detailed discussions.

The recommendations of the seminar shall be submitted to the MTI authorities for use as they see them fit.

III. Duration

Due to the participatory nature of intended seminar a maximum of two weeks or 10 working days is planned.

IV. Proposed dates

The seminar is proposed for July or September, 1996.

V. Financing

The ECA will finance all the cost of its experts. It is hoped that the UNDP will assist in defraying some of the costs by providing seminar and other related services.

GUIDELINES FOR PREPARING COUNTRY PAPERS FOR THE SEMINAR ON CAPACITY BUILDING FOR THE DEPARTMENT OF INDUSTRY OF THE MTI, ERITREA

I. For the Country Paper on technology Selection and Negotiation

- (i) Analyze policies and strategies for science and technology capacity building with special emphasis on how the Departments intend to solve the problem of:
 - human resource development and brain-drain;
 - physical and institutional infrastructures;
 - technology acquisition, transfer, negotiation and application;
 - science and technology information gathering and dissemination;
 - financing science and technology at various national levels;
 - incentives to promote science and technology;
 - foreign direct, investment in technology transfer;
 - the effects of globalization of technology in face of the Uruguay round Agreements;
 - popularization of science and technology.
- (ii) Review government policies on the application of research and development findings at the sectoral level, e.g. agro-industries, environment, mining, tannery, transformation of natural resources into finished goods, etc. so as to make Eritrea self sufficient and also prepare for export markets;
- (iii) Evaluate factors that enhance Eritrea's technology programme and Eritrea's comparative advantage that will enable it to foreign ahead despite the constraints posed by the limited natural resources base;
- (iv) Analyze government's attempts for reforms in science and technology programme to make it more responsible to the development needs of the country. The analysis should include streamlining efforts, attracting and prudent utilization of FDI, improving trade, providing credit facilities, improving taxation and possibilities of privatization;
- (v) In evaluating Eritrea's science and technology capacities, particular attention should be paid to capacities developed so far, or are in the process of being developed in (a) training of indigenous personnel in science and technology for the manufacturing sector, (b) the implications of ISO 9000 per the Uruguay Round Agreement in the development of local products for export markets.

- (vi) Analyze the capacity of the Departments of Trade and Industry to facilitate coordination and working with other relevant agencies and institutions involved in technology activities such as the Ministry of Higher Education; Secondary Education; Research and development Institutions; Private sector; NGOs; Women organizations; Chamber of Commerce; etc.

II. For the country Paper on the establishment of Industrial Estates

- (i) Gather relevant material on the subject matter and prepare detailed notes for eventual analysis of issues. It will be useful to give concrete examples such as ways and means of improving the productivity of Medeber micro scale industrial zone.

III. For the Country Paper on Industrial Regulation

- (i) Review and provide details on the responsibilities of the Department of Industry in carrying out regulatory functions.
- (ii) Assess the capacity of the Department in carrying out its functions, in terms of human resources, infrastructural and institutional support, etc.
- (iii) Review and assess the role of the Government in the following:
 - price regulation;
 - labour market - wage policy and employment;
 - export and import controls;
 - foreign exchange regulation;
 - directing foreign and domestic investment.
- (iv) Identify weaknesses and strength in the current regulatory measures.
- (v) Assess the capacity of the Department in gathering and analyzing information which in the final analysis would recommend for government intervention and regulation. Provide examples if possible.

IV. For the country Paper on Human Resources Development

- (i) Review the Government's policy and programmes on human resources development particularly human resources development for industry.
- (ii) Examine the existing linkages between industry and university, and asses the efforts far made in developing human resources for industry.

- (iii) Review and assess other related efforts being carried out by the Government on the development of human resources for industry.

V. For the Country Paper on the Promotion of SMEs

- (i) Provide information relating to the size of SMEs in Eritrea, policies for promoting SMEs, constraints faced by SMEs, institutions in place in support of SMEs development.
- (ii) Review and assess issues like access to land, access to finance, entrepreneurship development programmes, availability of technical skills to SMEs, training facilities that SMEs could benefit from, etc.

It is suggested that the MTI expert consult extensively with their colleagues in other Ministries for a comprehensive, productive and coherent outcome of the seminar. For example their could be consultation with the following bodies if they exist:

- Ministry of education
- Commercial Bank of Eritrean
- Eritrean Chamber of Commerce
- Ministry of Economic Development
- etc.

Provisional Work Programme**Monday 16 September 1996**

- | | |
|---------------|--|
| 08:30 - 10:00 | Registration of Participants |
| 10:00 - 11:00 | Opening of the Seminar |
| 11:00 - 12:00 | Organization of work |
| 12:00 - 14:00 | Lunch Break |
| 14:00 - 15:30 | - Presentation of the Seminar Paper on Technology Transfer and Acquisition (Dr. E. Tiagha) |
| | - Presentation of Country Paper |
| 15:30 - 15:45 | Break |
| 15:45 - 17:00 | - Film Technology Transfer in Building Materials Production |
| | - Discussion |

Tuesday 17 September 1996

- | | |
|---------------|--|
| 08:30 - 10:00 | - Presentation of the seminar Paper on Global technological Advances and Effects on National Development (Dr. E. Tiagha) |
| | - Presentation of Country Paper |
| 10:00 - 10:15 | Break |
| 10:15 - 12:00 | Discussion |
| 12:00 - 14:00 | Lunch Break |
| 14:00 - 15:30 | - Presentation of the seminar Paper on Models of University |
| | - Industry Cooperation as a mechanism for the industrialization of African Countries (Dr. E. Tiagha) |
| 15:30 - 15:45 | Break |
| 15:45 - 17:00 | Discussion |

Wednesday 18 September 1996

- | | |
|---------------|---|
| 08:30 - 10:00 | - Presentation of the Seminar Paper on Industrial regulation (Ms. M. Hailu) |
| | - Presentation of Country Paper |

Wednesday 18 September 1996 (Continued)

10:00 - 10:15	Break
10:15 - 12:00	Discussion
12:00 - 14:00	Lunch Break
14:00 - 15:30	- Presentation of the Seminar Paper on SSEs (Dr. A. Beyene)
	- Presentation of Country Paper
15:30 - 15:45	Break
15:45 - 17:00	Discussion

Thursday 19 September 1996

08:30 - 10:00	- Presentation of the Seminar Paper on Industrial Estates and Free Zones (Dr. E. Tiagha & Ms. M. Hailu)
10:00 - 10:15	Break
10:15 - 12:00	Discussion
12:00 - 14:00	Lunch Break
14:00 - 15:30	- Presentation of the seminar Paper on Human Resources Development for Industry (Dr. A. Beyene)
	- Presentation of Country Paper
15:30 - 15:45	Break
15:45 - 17:00	Discussion

Friday 20 September 1996

08:30 - 10:00	- Presentation on the IDDA Programme (Dr. E. Tiagha)
10:00 - 10:15	Break
10:15 - 12:00	Discussion
12:00 - 14:00	Lunch Break
14:00 - 15:30	- Discussion on the preparation of the National Programme of IDDA II
15:30 - 17:00	Film

Monday 23 September 1996

Syndicate Group Discussion and exercises

Tuesday 24 September 1996

Syndicate Group Discussion and Exercises

Wednesday 25 September 1996

08:30 - 10:00	Syndicate groups Presentation
10:00 - 10:15	Break
10:15 - 12:00	syndicate Groups Presentation continued
12:00 - 14:00	Lunch Break
14:00 - 15:30	General Discussion on the presentation of the Syndicate groups
15:30 - 15:45	Break
15:45 - 17:00	General Discussion continued

Thursday 26 September 1996

08:30 - 12:00	Adoption of recommendations and closing of the Seminar.
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Summary of Evaluation of Training

1. Have you benefitted from the course?
 Yes 19 (100 per cent)
 No 0

2. Do you feel some of the topics in the training should have been addressed less extensively?
 No 15(79 per cent)
 Yes 4(11 per cent)

3. Do you think that the course content and method of delivery took into consideration the interest and background of the participants?
 Yes 17(79 per cent)
 No 1(3.6 per cent)
 No answer 2(7.4 per cent)

4. Was the training venue adequate?
 Yes 18(95 per cent)
 No 1(5 per cent)

5. Was the time allocated to the different topics sufficient?
 Yes 17(89 per cent)
 No 2(11 per cent)

6. Was the Administration of the training programme adequate?

	Adequate	Inadequate
Availability of reading materials	16(84 per cent)	3(16 per cent)
Tea break	19(100 per cent)	0
Audio visual activities	13(68 per cent)	6(32 per cent)
room comfort		
Room Comfort	18(95 per cent)	1(5 per cent)

Do you have any suggestions as to how the administration of the training programme could be improved?

- Reading materials were so many that they should have been given ahead of time so that participants could read them before coming to the workshop
- The sessions should be half day in order to give time for reading
- The role of UNDP should have been more visible in the administration of the training programme

7. What is your overall evaluation of the quality of instructors?

Very Good	15(79 per cent)
Good	4(21 per cent)
Poor	-

8. What is your over all evaluation of the training programme?

Very Good	11(58 per cent)
Good	8(42 per cent)
Poor	-

9. Do you think similar programmes should be conducted in the future?

Yes	17(89 per cent)
No reply	2(11 per cent)

If so, what particular areas do you think should be developed in future training courses?

- Why African countries failed in industrialization
- Training programme tailor made to the department of trade
- SMIs and Human Resource Development
- Tools for monitoring and evaluating impact of the ministry of Trade and industry's strategy on SMI development
- Investment promotion with emphasis on small scale industry
- Information technology
- Technology transfer
- Environmental issues

10. If you have some additional comments on the training programme, please state briefly.

- Course should be repeated and run in the Zones
- Workshops of this nature should be run outside Asmara to ensure full concentration of participants
- Most of the papers presented by the local resource persons should have been prepared in depth
- Number of participants should be increased
- Keep up the good work

Subject: Seminar on Capacity Building for the Department of Industry
Date: 16-26 September 1996
Venue: Asmara Chamber of Commerce, Asmara

List of Participants	Organization
Sengal Woldetinsae	DOI
Hailom Negassi	DOI
Asheber G/Mikael	DOI
Abrham Kubrom	DOI
Berhane Mesfin	DOI
Michael Tsegai	DOI
Mulugeta Hadish	DOI
Solomon Tesfamariam	DOI
Mogos Weldemicahel	DOT
Amanuel G/Eyesus	DOT
Amdebrhan Haile	MTI
Berhane Araya	MTI
Berhane Abrham	MTI
Tekie Weldu	MTI
Mehari G/Egziabher	MCEW
Michael G/Medhin	MOI
G/Egzabher G/Medhin	BLO
Tekle G/Mariam	ETS
Yohanes Haile	MLHW
Solomon Abera	MOI
Petros Tesfagiorgish	CBE
Dr. Berhane Girmay	University of Asmara
Tsehai Zerai	Chamber of Commerce
Tekle Haile	Inland Revenue
Lia Ghebrea	Environmental Eritrea
Idress Mohammed	Custom Finance
Fatma Beshir	Journalist
Abrham	MLHW
Abdulahi Yassin	Er. Investment