



OCCASION

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



DISCLAIMER

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

FAIR USE POLICY

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

CONTACT

Please contact <u>publications@unido.org</u> for further information concerning UNIDO publications.

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

21944

USTRAD NATIONS DEVELOPMENT OF CORRADAL

MAURITIUS

ESTABLISHMENT OF A CONSULTANCY SYSTEM FOR PRODUCTIVITY IMPROVEMENT IN THE SMALL AND MEDIUM SCALE ENTERPRISES IN THE EXPORT PROCESSING ZONE DP/MAR/93/002/A/01/37

Report of the Evaluation Mission





Mission Members:

October 1994

B. GAKUBA
A. ERANEVA
K. ASIEDU (Leader)

MAR 1

File copy. Pls do not remove

UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP)

MAURITIUS

ESTABLISHMENT OF A CONSULTANCY SYSTEM FOR PRODUCTIVITY IMPROVEMENT IN THE SMALL AND MEDIUM SCALE ENTERPRISES IN THE EXPORT PROCESSING ZONE DP/MAR/93/002/A/01/37

Report of the Evaluation Mission

Mission Members:

October 1994

B. GAKUBA A. ERANEVA K. ASIEDU (Leader)

BASIC FACTS ON MAURITIUS

| POPULATION | 1972 | 1983 | 1990 | 1991 | 1992 | |
|--------------------------|---------|---------|-----------|-----------|-----------|--|
| Mauritius | 826 000 | 960 228 | 1 024 000 | 1 035 000 | 1 045 000 | |
| Rodrigues | 24 769 | 32 963 | 34 204 | 34 321 | 34 989 | |
| Total | 850 769 | 993 191 | 1 058 204 | 1 069 321 | 1 079 989 | |
| Annual Growth Rate % | 1,35 | 1,22 | 0,67 | 1,05 | 0,99 | |
| GDP | | | | | | |
| At market prices (Rs M) | 1 576 | 12 775 | 7 9257 | 12 725 | 47 415¹ | |
| Real growth rate | +10,6 | +0,4 | +7,1 | +4,6 | | |
| GNP per capita | | | 36 748 | 41 359 | 44 926 | |
| Human Development Index | | | | | 0,7932 | |
| Social Indicators | • | | | | | |
| Life expectancy at birth | | | | | | |
| Male/Female | | 64/71 | 66/73 | | | |
| Combined | | | 69,3 | | | |
| Infant Mortality rate | | | | | | |
| Mauritius | | 25,6 | 19,9 | 18,1 | | |
| Rodrigues | | 51,6 | 40,7 | 32,9 | | |
| Combined | | 27,0 | 20,4 | 18,6 | | |
| Adult Literacy rate | | | | | | |
| Male | | | 86,3 | | | |
| Female | | | 76,6 | | | |
| Combined | | | 81,4 | | | |
| School Enrolment ratio | | | | | | |
| Primary (11 years) | 92 | 95 | 103 | 106 | | |
| Secondary (12-19 years) | 34 | 44 | 49 | 50 | | |

Total Area: 2.020 sq. km

- a. Cropland 1 060 sq. km
- h. Others 790 sq. km
- c. Annual rate of deforestation (1980's): 3,3%
- 1. US\$ equivalent to Rs 18,10 (December 1993)
- 2. Ranked 48th amongst 160 countries Mauritius is a middle-income country

Source:

Central Statistical Office.

Human Development Report 1992

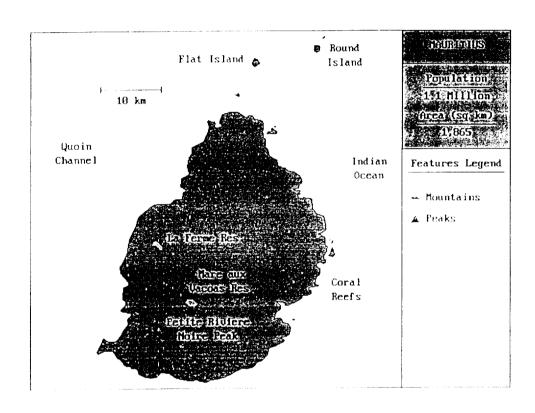


TABLE OF CONTENTS

| 2001 | | |
|------------|------|--|
| I. | EXE | CUTIVE SUMMARY |
| II. | PRO | JECT CONCEPT AND DESIGN |
| | A. | Context of the Project |
| | | 1. Review of the National Sector or Sub-Sector Plans |
| | | 2. Women's Role in Mauritius Socio-Economic |
| | | Development - A Review |
| | | 3. Appropriateness of Project Concept, Design |
| | | and Institutional Arrangements |
| | | Agencies including the Ministry of Industry and |
| | | Industrial Technology |
| | | 5. Adequacy of Methodologies Used for the Problems |
| | | faced by the Small Export Enterprises of EPZ |
| | | 6. The Project vis-à-vis the Comparative Advantages of |
| | | UNDP and its six (6) Areas of Concentration |
| | | 7. Mechanism of Approval |
| | В. | Project Document |
| | | - Brief Analysis of Project's Development and Immediate Objectives and Outputs, Identification of Beneficiaries and Implementing Agency: Major Assumptions and Risks |
| II. | PROJ | ECT IMPLEMENTATION |
| | Α. | Activities |
| | B. | Quality of Monitoring and Backstopping |
| V . | pR∪i | ECT RESULTS |

PAGES

| | C. | Outputs | 36 |
|------|------|---|----|
| | D. | Immediate Objectives | 38 |
| | E. | Development Objectives | 38 |
| | F. | Effectiveness | 39 |
| | G. | Capacity Building | 39 |
| | H. | Impact | 39 |
| | I. | Sustainability | 39 |
| | J. | Follow-up | 40 |
| V. | CON | CLUSIONS | 41 |
| | Α. | Findings | 41 |
| | B. | Assessment in Terms of Relevance, Performance | |
| | | and Success | , |
| VI. | RECO | DMMENDATIONS | 48 |
| VII. | LESS | ONS LEARNED | 52 |
| | ANNI | EXES: Terms of Reference | 55 |
| | | List of Persons and Institutions Consulted | 66 |
| | | Programme of Work | 70 |
| | | List of Documents Reviewed or Consulted | 75 |

PREFACE

This In-Depth Evaluation of the UNDP/UNIDO funded Project DP/MAR/93/002/A/01/37 being implemented by the Export Processing Zone Development Authority (EPZDA) in conjunction with the Ministry of Industry and Industrial Technology, Government of Mauritius, was undertaken from 08 September to 28 September, 1994 by an Evaluation Team.

The Evaluation Team was composed of one nominee of UNDP (Team Leader) and two nominees of UNIDO (one specialized in productivity programmes and SMEs and the other on Women's Programmes and Gender in Development).

This Report is a summary of the visitations, discussions, experiences, analysis and conclusions of the Evaluation Team according to the mission's Terms of Reference which is contained in Annex I. The Report is presented in seven chapters. Chapter 1 gives the Executive Summary of the entire Report, while Chapters 2 to 4 sequentially address the following aspects: project concept and design; quality of backstopping and monitoring, project's impact, sustainability and relevance, and follow-up. Chapters 5 and 6 contain the Summary of Findings and Assessment, and Recommendations respectively, whilst Chapter 7 gives a summary of Lessons Learned from the Project.

During the course of this Evaluation, the team benefitted enormously from the generous contributions of time, material and discussions from several individuals and institutions, and these are contained in Annex 2. Their respective contributions are hereby gratefully and sincerely acknowledged. The collective logistical support of the UNDP Offices in Dakar (Senegal), Antananarivo (Madagascar), Port Louis (Mauritius), the Ministry of Industry and Industrial Technology and the Export Processing Zone Development Authority, as well as UNIDO Headquarters, Vienna (Austria) have provided invaluable assistance in conducting the evaluation, and the team is very grateful to them all.

Furthermore, the team is indebted to Ms J. Vieillesse of UNDP Port Louis, Mrs. Carrim and Mr. A. Soondur both of the Ministry of the Industry and Industrial Technology. Ms J. Vieillesse in word-processing the first draft of the report, had to grapple with the different and sometimes illegible handwritings of the team members, while Mr. Soondur and Mrs Carrim accompanied the team in all its visitations to the various factories and organizations.

The Contents of this Report and the opinions expressed therein are the sole responsibility of the Evaluation Team. It is hoped that the Report would be found useful to all the parties concerned.

Beatrice GAKUBA Antero ERANEVA Kojo ASIEDU (Team Leader)

ACRONYMS AND ABBREVIATIONS

ACP African, Caribbean Pacific Countries associated with European Union

APDF African Project Development

CAD/CAM Computer Aided Design/Computer Aided Manufacturing

CAMI Conference of African Ministers of Industry

CEDEFOB European Centre for Vocational Training (with special attention to SME)

CPPE Centre de la Promotion de la Petite Entreprise

DBM Development Bank of Mauritius

EEC European Economic Community now European Union (EU)

EPZ Export Processing Zone

EPZDA Export Processing Zone Development Authority

FCEM Femmes Chefs d'Entreprise Mondiale

FDI Foreign Direct Investment

GATT General Agreement for Tariffs and Trade

GDP Gross Domestic Product
GNP Gross National Product

IFBPW International Federation of Business and Professional Women

IDDA Industrial Development Decade for Africa

ILO International Labour Organization
IMF International Monetary Fund
IOC Indian Ocean Commission

IVTB Industrial and Vocational Training Board

JEC Joint Economic Commission
JPO Junior Professional Officer
LEI Local Employment Initiatives
MCB Mauritius Commercial Bank Ltd

MCCB Mauritius Cooperative Commercial Bank
MCCI Mauritius Chamber of Commerce and Industry

MEDIA Mauritius Export Development and Investment Authority

MEF Mauritius Employers Federation

MEPD Ministry of Economic Planning and Development MEPZA Mauritius Export Processing Zones Association

MES Ministry of Education and Science

MFA Multi Fibre Agreement

MIIT Ministry of Industry and Industrial Technology

NGOs Non-Governmental Organizations

NHC National Handicraft Centre
NOW New Opportunities for Women
NPC National Project Coordinator
SCB State Commercial Bank

SMEs Small and Medium Enterprises

SMIDO Small and Medium Industries Development Organization SPES Société pour la Promotion des Entreprises Spécialisées

SSDWE Support Services for the Development of Women Entrepreneurs

SSU Support Services Unit

TAC Technical Advisory Committee

UNDP United Nations Development Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

UNICEF United Nations Fund for Children

UNIDO United Nations Industrial Development Organization

UNIFEM United Nations Development Fund for Women

VAT Value Added Tax

WLAW Women's Legal Action Watch

WWB Women World Banking

World Bank International Bank for Reconstruction and Development

INTRODUCTION

Mauritius has experienced a major structural transformation over the last two decades: from an agrarian monocrop economy, with high levels of unemployment, low per capita income and grim prospects for sustained economic development to a middle-income country with almost full employment.

The availability of preferential treatment under the Lomé Conventions has been a major factor responsible for the transformation of the economy. The arrangement has provided a guaranteed outlet for sugar exports at a stable price which has generally been much higher than the prevailing world prices.

Equally, the manufacturing sector, in particular the textile and garment sub-sector, has played a significant role in Mauritius' transformation from a predominantly monocrop economy into the process of industrialization. Emerging as the most dynamic sector in the 1980s, it has put an end to the economic stagnation of the late 1970's and early 1980's, and given a new dimension to the development potential of the country. It has outpaced the traditional sugar sector as the main gross foreign exchange earner. The most dynamic sector within the manufacturing has been the Export Processing Zone (EPZ) sector.

In spite of its rapid growth and dynamism the EPZ, which is dominated by the textile sector, remains fragile and vulnerable. This is explained in its rather weak structure, heavy dependence on imports, poor domestic inter-industry linkages, and an overwheming concentration on one type of product. Perhaps, a more serious weakness of the EPZ is its reliance on a few markets. The EEC and North America (USA and Canada) collectively account for 92 percent of EPZ exports. This concentration of exports on a few countries, and the growing pressure for greater liberalization of trade in textile products under GATT, make the EPZ sector vulnerable to any change in marketing arrangements and access to its major markets.

The textile and garment sector is becoming a more and more difficult activity, in the sense that the lead time for delivery is becoming shorter, orders are getting smaller, styles more sophisticated and market trends are also changing at a faster pace. This situation of intensified competition has been aggravated by some domestic development including:

- Labour scarcity;
- Rising labour costs;

- Stagnating productivity in turn leading to the closure of several EPZ firms facing financial difficulties:
- Absenteeism and growing labour undiscipline.

The pressure on labour market rules out the continuation of the 1970s and 1980s strategy of exports of low-cost, low-skilled products. For the continued growth of the Mauritius economy, labour productivity, especially in the textile and garment sector has to improve through skill acquisition and provision of modern technology.

The Government of Mauritius, very conscious of the constraints, problems and issues specific to the EPZ sector, established in 1991 the Export processing Zones Development Authority (EPZDA) to deal among others, with the problems facing the sector as well as to commission consultancy services for export enterprises.

It is against this background that the Project: "Establishment of a Consultancy System for Productivity Improvement in the Small and Medium Enterprises in the EPZ", was formulated in 1993. with the overall objective of preparing and organizing a consultancy system providing direct productivity improvement in the small and medium garment making factories of the EPZ. Moreover, the project was also to promote women entrepreneurship in Mauritius.

The significance of this jointly financed UNDP/UNIDO project, implemented by EPZDA, lies in the fact that it addresses the issue of productivity improvement which is of prime importance at this time for Mauritius as it enters the second phase of industrialization. Also, UNIDO has given priority, within the framework of IDDA II and its limited funds, to the financing of this project.

The Tripartite Review Meeting on this project, held on 23 June 1994, decided that the project should be evaluated with a view to assessing its achievement, assessing and identifying the factors which have facilitated the quality of the project achievements, ascertaining project's effectiveness and impact. Furthermore, the evaluation was to examine what follow up actions can be taken and what lessons can be drawn at the operational/organizational and policy levels.

The evaluation was undertaken by UNDP/UNIDO team from 6-28 September 1994.

I. EXECUTIVE SUMMARY

- 1. An In-Depth Evaluation of the UNDP/UNIDO funded Project MAR/93/002 implemented by Export Processing Zone Development Authority (EPZDA) of the Ministry of Industry and Industrial Technology, Government of Mauritius, has been carried out to assess its achievement towards:
 - i) The establishment of a consultancy system for productivity improvement in the small and medium garment making industries;
 - ii) The development of a strategy on promotion of women entrepreneurship in Mauritius.
- 2. The Evaluation was also to assess the effectiveness of the project and its impact, as well as to examine what follow-up actions can be taken and what lessons can be drawn at the operational/ organizational and policy levels.
- 3. The Evaluation reviewed, with respect to the project, the national sector plans, appropriateness of the project concept, design and institutional arrangement and the involvement of counterpart organizations proposed in the project. Also reviewed was the adequacy of the proposed methodologies for the problems faced by the small export enterprises of EPZ. The execution and implementation including outputs and achievement as well as the mechanism of approval of the project, respectively, were assessed and briefly revisited.
- A set of recommendations are put forth, arising from the evaluation's findings and conclusions for the continuation of the relevant part of the project, for the future direction and orientation of EPZDA's work in order to become more relevant, visible and pro-active in discharging its important mandate, a task of national interest which has become more critical today than when the project was conceived. The recommendations will be found also useful in the planning or implementation of similar projects in future.
- 5. A number of both classic and non-classic lessons have been learnt from the project which, it is believed, should be relevant to improving the quality of future programmes/projects in;
 - Capacity building initiatives;

- Human development; and
- Development of the textile/garment sector at both the operational and policy levels.
- 6. Both the Executing and Implementing-Agencies are now encouraged to use these lessons appropriately in preparing themselves better for a stronger role in the pursuit of the second industrialization phase of Mauritius and the promotion of women entrepreneurship in that country. The Project's objectives are both so important and urgent that a strengthened and pro-active EPZDA is required for assisting the target groups in a more effective fashion. This depends very much on the Board of Administration of EPZDA and its readiness to provide the necessary support to the EPZDA in terms of recruitment of additional qualified personnel.
- 7. The Evaluation Team noted with satisfaction that the project was approved without much delay this clearly demonstrates the importance and the necessity of close cooperation between Government and UNDP Country Office and the full understanding of each others aims, priorities and responsibilities. The strong commitment of both parties is also evident (attendance of meetings by high-level personnel) in the numerous project-related reports which were reviewed.
- The following are some of the major findings of the evaluation exercise:
 - i) The Project, in spite of the constraints faced in its implementation, has been partially successful in terms of the quality of the outputs produced, sustainability of the results achieved and the multiple-effect and impact these are likely to have. More importantly, perhaps, the project has been used effectively to demonstrate how Government, UN System and the private sector can in a synergetic fashion cooperate in development efforts.
 - ii) The decision of the Government and UNDP and UNIDO to tackle upfront the problems of the small/medium textile/garment sector and the issue of women entrepreneurship promotion through this project was indeed correct;
 - overambitious, from the onset. As such, to have expected to accomplish what was to be accomplished in one year time frame may not have been realistic. That being the case, measured vis-à-vis the expected outputs, the

project had not achieved as had been intended. This notwithstanding, the project had a number of achievements, notably in two of the factories where work had been completed, a phenomenal productivity increase of 40 to 200% has been recorded. More importantly, it was evident that the factories concerned could sustain these levels. The technology transferred and the production systems applied have been effectively used to increase productivity. In addition, the absorption by the beneficiaries of the project contribution has achieved positive impact;

- iv) The two main project's objectives which have achieved a significant measure of success are:
 - a) Consultancy methods and tools for productivity increase; and
 - b) Development of a strategy for the promotion of women entrepreneurship and its operationalization. In this regard, the project should identify as part of the strategy some indicators against which to measure, after a reasonable period of time of implementation, the achievements as regards whether and extent to which women entrepreneurs have been promoted.
- v) The production of manuals and the organization of seminars have on the one hand given the relevant entrepreneurs **practical knowledge** about how to organize production systems for productivity improvement and on the other, have created awareness of the gravity of the situation of the textile/garment industry. This aspect of the project has also given EPZDA its highest visibility so far.
- Following the joint ILO/UNIDO Mission for Women Entrepreneurship vi) Development in Mauritius and the design of a strategy on promotion of women entrepreneurship, it is noted that the initiatives contained in the strategy document with respect to operationalization have captured the interest and enthusiasm of all the parties concerned in view of its pertinence to the whole issue of productivity enhancement and women participation in and benefit from development activities. The strategy is in place and it is closely linked with the private sector as explained in detail under (xiv). It has also effectively interlinked with the other two objectives through the membership of the UNIDO Expert in the substantive Women going to the established cellule have Advisory Committee. through this mechanism approached EPZDA for assistance in productivity improvement schemes. One such woman has requested active assistance in her enterprise which is a screen printing one.

- vii) The Development Objective of the project is more critically relevant today than when the project was formulated. The remaining activities of the first two immediate objectives, for all practical purposes, have to be completed on the basis of the work plan which was made available at the time of the evaluation. The third immediate objective has to be pursued according to the Work Plan in the Strategy Document.
- viii) The manpower situation at EPZDA needs to be strengthened in order to provide more effective consultancy services to the relevant enterprises. It is noted that only two (2) counterparts with some industrial background were available instead of the six prescribed for the project and these two accompanied the project expert for only some 23% of available time. As a result of this inadequate number of counterpart staff, the much desired institutional capacity enhancement expected did not take place.
- The institutional capacity of EPZDA has not been enhanced as expected, although the few counterpart professionals are in the position to work independently and impart on others the acquired knowledge. The network of consultants for all practical purposes cannot be said to have been created.
- x) EPZDA is presently not constituted to generate substantial income from productivity enhancement activities, although with the recruitment of additional staff with engineering/ industrial background working under the supervision of an experienced expert, it possess a great potential.
- A number of factors which adversely affected the achievement of project's objectives and project implementation resulted on the one hand from the design of the project and, on the other, the different interpretations of certain sections of the project document by the expert and the Implementing Agency. Prominent among them are the following:
 - a) The expectations with respect to the institution-building element in the project (i.e. development of consultancy capability at EPZDA) were unrealistic in relation to the resources of the project and its time frame.
 - b) In some cases, outputs that could be easily quantified were not quantified (for example: consultancy contracts, trained consultants);

- c) The project design did not provide a clear line of authority in the project expert's Job Description and this led to disagreement between the expert and his counterparts as to who should market the services of EPZDA;
- d) There were different interpretations as to who was to carry out some of the activities listed in the project document (the Expert or the team comprising of EPZDA and private consultant firms);
- e) The second objective (network of trained consultants) repeated again as an output which is unquantified, and the activities related to it are vague;
- f) In addition to the above observations, the following also affected adversely the achievement of project's objectives:
 - 1. While the problems facing the exporting garment sector have been clearly identified and analyzed by the country's planners, it seems that only a handful of garment manufacturers have drawn the logical conclusions and are heading towards higher worker productivity and more diversified production. The rest, although aware of the ever-increasing competition in the export market, have not always attempted to analyze their manufacturing process with a view to taking measures which would preserve their competitiveness. This fact along with the relatively high fees (Rs5000 per day) charged by EPZDA has led to the situation where the "small" entrepreneurs cannot afford the assistance in the extent that would be required for it to have an impact. As a result, the project's benefits could not be fully utilized.
 - 2. Lack of adequate counterpart staff.
 - 3. Communication between UNDP Country Office and UNIDO Headquarters was often **frustrated** as requests for administrative action, approvals, etc.. often went unanswered for **long** periods.
 - 4. The Executing Agency's backstopping and monitoring were in many cases weak and inadequate. In fact, the project document had no indication as to schedules of monitoring. Good monitoring and backstopping followed by definitive decisions could have avoided the ever pending CAD/CAM

issue. Likewise, pro-active monitoring should have detected some of the project design deficiencies at a much earlier stage.

A number of steps can be taken to correct the situation. These include incorporation of strict monitoring mechanism into projects; better coordination of activities/actions among the substantive divisions involved in a particular project; enhanced and more attention paid to project's quarterly or bi-monthly reports.

- The preparatory work towards the installation of a CAD/CAM facility at EPZDA has been done and Government has made available local counterpart funds of US Dollars 400,000 to be used for the purchase of equipment as well as for expertise required for relevant training purposes. This is commendable as it clearly indicates, in general, the seriousness which Government attaches to its declared policy towards the textile/garment sector and, in particular its readiness to implement the CAD/CAM idea with a view to improving labour productivity through skill acquisition and provision of modern technology. At the time of the evaluation, Government and UNDP were still waiting for UNIDO's reaction with respect to the evaluation of bids.
- The implementation of the strategy on women entrepreneurship development has started with the creation of an Advisory Committee, Support Services for the Development of Women Entrepreneurs (SSDWE) and Documentation Unit as well-as with the recruitment of a Coordinator who will be in charge of the overall implementation of the strategy. There is also the Support Service Officer who, among others, is responsible for:
 - Data collection pertaining to the creation of the Documentation Unit;
 - Updating, editing and assisting in publishing the Directory of Women Entrepreneurs by the Coordinator, as well as assisting in editing of the Project Newsletter;
 - Development of a national data base on women entrepreneurs.
- The innovative modality of implementation of the strategy with Centre de la Promotion de la Petite Entreprise (CPPE) is explained by the fact that the day to day operationalization to be undertaken by SSDWE is placed at CPPE as host organization with strong links with the private sector. This essentially implies that the implementation of the third objective will be

through subcontracting a collaborating agency (host agency) with strong private sector links in cooperation with other private sector entities.

- 9. The following recommendations emerged from the evaluation exercise:
 - i) For all practical purposes, the present project as regards the productivity aspect has already run its course with only three (3) months of extended time left for the Expert. In this regard, it is best to proceed conscientiously according to the available Work Plan and complete the work now in progress (factory consultancy, preparation of manuals, conducting of seminars, study tours) and then terminate that part of the project.
 - ii) It is recommended that any follow-up (establishment of a CAD/CAM facility, productivity Centre, etc..) should be the subject of a more profound investigation because of the many and diverse imponderables related to its acquisition, operation and management.

The equipment, activities and staffing of a CAD/CAM-equipped productivity centre were the subject of a report produced by UNIDO consultant as one of the outputs of this project. The report of the consultant draws attention to several factors that must be considered before embarking upon such a major undertaking:

187

- The market for the services of a CAD/CAM productivity centre. An initial survey of some 300 small and medium-scale garment manufacturers produced an extremely poor response.
- The initial financial outlay. To finance the equipment and related expatriate expertise Government would have to take a bank credit of US\$ 400,000 at an annual interest rate of 10,5%.
- A **staff** of highly qualified specialists would have to be recruited and paid for.
- The facility would at least initially for an unspecified period serve as a demonstration facility only and thus not generate any income.
- The centre would need efficient and dedicated management to cooperate effectively with the industry.
- iii) Taking into due consideration the fact that Government has already taken the loan of US Dollars 400,000 and also the issues raised in the above

recommendation (ii) as well as the fact that there is a need to train designers in the country, it is recommended that Government should consider, at the same time, the establishment of a Training Centre - which may be open to other countries in the Region, possibly in cooperation/coordination with IVTB and other relevant institutions for vocational training in textile design and pattern making. Once the training activity was well on its way - perhaps during, but not necessarily, the second year - the facilities of the Centre could be augmented and upgraded with more sophisticated aids such as CAD equipment. At that stage, the CAD facility could be used also to demonstrate to the industry its value and possibly do some commission work.

It is noted here again that the availability of designers and pattern makers is a sine qua non for any optimum use of a CAD/CAM system.

iv) Considering the urgent need for more productivity in the small export industries because of increased international competition and the fact that more industries should be reached by the productivity programme, it is recommended that EPZDA should be more aggressive in promoting its services and to use at least a part of the revenues generated through this project to strengthen its human resources as foreseen in the Project Document.

Also, lessons from the very positive experience of productivity gains referred to earlier, should be drawn upon in view of the urgent need for more productivity improvements.

- on the basis of the successful cooperation between UNDP and UNIDO in Mauritius, especially in the implementation of the Project XA/MAR/93/616 and DP/MAR/93/002 "Establishment of a Consultancy System for Productivity Improvement" being co-financed by both organizations and which enjoys also the financial support of the Government of Mauritius, it is recommended that UNIDO should examine the possibility of a further UNIDO financial contribution or technical assistance so that the Productivity Programme can reach more entrepreneurs in the garment industry, especially women entrepreneurs as spelt out under "Special Consideration" of the Project Document. This recommendation is made also in view of the successful experience in the two factories as regards productivity increase and the need to increase productivity in more factories.
- vi) Recognizing the need for high quality monitoring and backstopping for achieving project objectives efficiently, it is recommended that UNIDO review its Programme of Monitoring and Backstopping of the substantive

divisions with a view to streamlining the monitoring mechanism and incorporating some form of accountability. In some instances, it might be necessary to set up Project Steering Committees (PSC) whose membership should include officers of adequate professional competence. The PSC duties would include monitoring the progress of project, reviewing progress reports, approving work plans and advising on future activities.

- In view of the positive progress made so far with respect to the third objective of the project (Design of the a Strategy on the Promotion of Women Entrepreneurship in Mauritius, including the Structuring and Operationalization of an Appropriate Mechanism for the Development and Promotion of Women Entrepreneurship), it is recommended that this part of the project should continue for the next 12 months. During this extension period, it is also recommended to review it twice at least so as to correct any deficiencies that may crop up during project implementation. Furthermore, the project should develop a set of indicators for assessing the impact of activities on a quarterly basis.
- viii) The project should develop a gender sensitization training package for top corporate management to promote female managers. This should be mainstreamed into the general policy to improve management quality in Mauritius. It is learnt that the quality of top management is emerging as one of the crucial constraints in achieving the second phase of industrialization.
- As regards the further development of women entrepreneurship and on the basis of discussions held at the Indian Ocean Commission (IOC), it is recommended that a subregional project proposal linked to the present strategy be submitted by the end of November 1994 to IOC for possible funding through the European Union. In this proposal, linkages should be developed (network, study tours, information sharing, etc..) among the countries in the subregion (Seychelles, Comores, Madagascar) as regards Women Entrepreneurship and Gender Mainstreaming.
- x).... The project should incorporate under the strategy for promotion of women entrepreneurship, the promotion of entrepreneurial culture among women with a view to promoting business start-ups in the mainstream areas of the economy and in the new emerging ones.
- Noting that the remaining funds for project activities, with respect to the third objective, are not substantial, it is recommended that Government and UNDP should seek other sources of funding. Parallel funding and cost sharing are normally encouraged by the UNDP, which should now

in collaboration with relevant Agencies assist the Government to explore the prospects of bilateral assistance.

- The package of incentives to attract investors in the textile and garment sector should be reviewed by Government in collaboration with the private sector, bearing in mind the desirability of encouraging investment at the certain level of technology with more value added. There are still certain niches in the apparel sector which can still be exploited given the right incentives. At the same time every assistance should be given to help existing enterprises survive if only to maintain employment as otherwise, the social costs to Government will become unbearable if the rate of unemployment was to increase to unacceptable proportions. Affordable funding should be made available to those who are willing to upgrade but cannot afford the fees being charged at present. In this connection, the EPZDA scheme of cost sharing (i.e. sharing cost between EPZDA and a recipient firm) for consultancy services is a move in the right direction, which should be vigorously publicized among the firms.
- Education and Training are of vital importance in respect of productivity improvement and quality upgrading. IVTD should take a leading role in providing training in the various spheres of textile and garment manufacturing activities from machine repair and maintenance to design. The University of Mauritius which has only recently started textile courses and which should be provided with more training facilities in textile and garment manufacture, could be the fertile "breeding ground" for textile/garment specialists in Mauritius in the future.
- The existence in the early 1980s of a pool of unskilled labour, particularly xiv) female labour, enabled the pursuit of the strategy of exporting low-cost, low-skilled products. As the competition in the international market is becoming more intense, Government has adopted a strategy of having a well educated Mauritian society with an industrial culture. In this regard, preprimary. primary Government is investing more in secondary/polytechnic and vocational training as well as university education and also encouraging more intensive and better interaction between educational and training institutions on the one hand and industry on the other. Government's efforts in this respect are commendable and should be reinforced.
- The Government of Mauritius and its relevant Ministries and institutions, the UNDP and UNIDO are **urged** to see to the **implementation** and follow-up of the recommendations contained in this Report.

II. PROJECT CONCEPT AND DESIGN

A. Context of the Project

1. Review of the National Sector or Sub-Sector Plans

This section of the Report seeks to review Mauritius' development plan and to examine how this project fit into it.

The Fifth Development Plan which covered the period 1988-1990 sought to address the problems of the Mauritian economy in its quest to sustain the growth momentum. The problems in question were related to shortages of labour, both skilled and unskilled, in nearly all sectors of the economy, which is turn has increased pressure for higher wages and salaries, thereby adversely affecting the competitiveness of the country's exports in the international market.

In the Fifth Development Plan, emphasis was also laid on expanding and diversifying the country's export-base and consolidating the gains already achieved. Firms in the textile and garments sector have been encouraged to move up-market and to explore new outlets and a comprehensive incentive system has been put in place to induce investors to diversify into economic activities with higher value-added.

The current Development Plan is basically a logical but more ambitious extension of the strategy enunciated in the previous Plan. Also, the current Plan considers the consolidation, diversification and modernization of the economy to continue to be the driving force that will enable the country to meet the challenges confronting it. Furthermore, emphasis is laid on the sustainability and quality aspects of growth.

This requires a sustained drive to improve efficiency through a more rational and optimum use of available resources. This will include, among others, a steady and continuing growth in total factor productivity, including labour productivity, a new industrial culture, improved work ethics, and greater flexibility in response to emerging trade and business opportunities. The need for greater efficiency and flexibility in the pursuance of economic growth is accordingly the leitmotiv of the Plan.

The social dimensions of development embracing, as ends in themselves, better education, higher standards of health and nutrition, less poverty, a cleaner environment and a richer cultural life, are other aspects of development to which the Plan is sensitive. Furthermore, the development strategy ensures that the various sections of society contribute to the development process and share fully the benefits of development.

The manufacturing sector, especially, the textile and garment sub-sector, has propelled Mauritius from an essentially monocrop economy into the process of industrialization. Emerging with its Export Processing Zone as the most dynamic sector in 1980s, it stopped the economic decline of the late 1970s and 1980s, and gave a new dimension to the development potential of Mauritius.

The manufacturing sector has reached a turning point as new constraints have emerged. The conducive environment that influenced its performance has changed under the pressure of new external and internal forces. The major determinants of the sector's performance (socio-political stability, relevant infrastructure) and the package of fiscal incentives are showing signs of fatigue and inadequacy especially as the cheap and abundant supply of labour has dried up and the pace of competition has increased in markets where the country has enjoyed preferential access.

The contribution of the manufacturing sector to GDP is expected to be around 23% during the period 1992 to 1994. However, the manufacturing sector is likely to provide the best prospects for further development, subject to appropriate measures. Government is placing more emphasis on a longer term solution which includes the raising of labour productivity, and increasing investment in capital intensive techniques of production and encouraging new higher value-added activities.

With a view to improving productivity and optimizing the use of available labour, it is Government's policy to train workers, carry-out in-factory studies with a view to making a rational use of scarce factors of production, and assist firms in acquiring better-performing equipment.

The private sector, through its various organizations, has played a supporting role in the industrialization process of Mauritius since the early 1970s. The Mauritius Chamber of Commerce and Industry (MCCI) has, historically, represented the private sector interest in trade and commerce. The emergence of

the EPZ sector, however, has seen the creation of MEPZA, which is dominated by textile interest, given the predominance of the textile sector in the EPZ. The private sector has been instrumental in promoting trade, investment and exports as well as collaborators in other development efforts such as the present project.

2. Women's role in Mauritius Socio-Economic Development - A Review

Sustainable development requires equitable and effective use of a country's human resources. Therefore, both men and women should participate in and benefit from all development activities, as workers, employees or entrepreneurs, i.e., at all levels of hierarchy, including at decision-making levels.

During the past two decades of Mauritian transformation from agriculture-based economy to a newly industrializing country status, women's labour force participation increased from 20.3% (1972) to about 40% (1993). This significant development can be attributed among other factors to:

The establishment of EPZ which made it possible for many women to work in jobs outside the traditional sectors. Women's share in total employment in EPZ has been spectacular - about two thirds of the work force in EPZ is female.

Many women entrepreneurs are engaged in small-scale enterprises and the manufacturing sector is a large employer of women. While Government policy is to encourage the expansion and modernization of industries, including small industries, and a number of Government and private sector organizations are promoting entrepreneurial skills, there is a need to pay special attention to women in industrial development. This is reflected in the Mauritius Declaration at the Eleventh Meeting of the Conference of African Ministers of Industry in May 1993 in Mauritius: "We recognize that special attention needs to be paid to the question of women in industrial development. There are cultural traditions which tend to militate against the absorption of African women in the industrial labour force or hinder their capacity to become entrepreneurs. Therefore, specific programmes should be targeted to support the development of women entrepreneurial skills¹". Consequently, there is a felt need for a national policy on women entrepreneurship development. Specific programmes should be targeted to support the development of women's entrepreneurial skills in the interest of economic efficiency and productivity considerations in line with the requirements of the next phase of industrialization that Mauritius is entering.

: .1

Mauritius Declaration, 11th CAMI, Paragraph 17, May 1993.

The young female work force has been growing in the manufacturing sector, particularly concentrated in the garments subsector in the EPZ, followed by the leather and footwear subsector. There is both horizontal and vertical segregation of occupations. Apart from the business owners, women in the EPZ are absent in technical fields. 60% of the jobs available for women are for unskilled labour, compared to 30% of those available for men.

The new Industrial Expansion Act of Mauritius identifies clearly in which direction the industry will be developing. Strong emphasis is laid on the following areas:

- 1. Promoting an export-led growth;
- 2. Accelerating modernization and expansion of the industrial sector;
- 3. Promoting transfer of technology;
- 4. Encouraging an ecologically unstainable industrial development;
- 5. Facilitating the integration of EPZ and non-EPZ sub-sectors; and
- 6. Promoting diversification of products and markets.

The Modernization and Expansion Scheme under this Act is designed to accelerate modernization, expansion and diversification of industrial sector while encouraging them to invest in equipment, in computerization, in rationalization of production systems as well as pollution control technology. The aim is to gear the Mauritian industrial production to exports markets.

The Act also contains a list of qualifying activities for pioneer status enterprise which comprise of new technology, support industries and service industries. It has been observed that out of the activities foreseen, the following offer most potential for women entrepreneurs if they are to keep up to the developments in the country and participate equally in the industrialization process:

Specialized Informatics and communication technology such as computer aided design which will be used widely in the garment making subsector where they are strongly represented;

- Service industries such as consultancy services in production, fashion design and development of applied creative products;
- Subsectors: Information service and technology, data processing, translation, jewellery, light engineering products.

The Mauritian Government also puts emphasis on the development of small scale industries. This is defined in the 1992-94 National Development Plan. "The Small Scale Industrial Development Organization will be upgraded and provided with greater autonomy to permit it to operate in a more flexible manner. With the facilities in place, SMIDO will be better equipped to take up the new challenges and work towards the integration of a dynamic small scale sector with the rest of the economy". For this purpose, SMIDO is given the responsibility to assist SSIs and to educate them with the aim of integrating those industries into the fabric of larger enterprises. The Government has plans to establish industrial estates for small enterprises and to link them to the larger ones through subcontracting arrangements. Small ancillary industries in electronics informatics and jewellery will get much attention from all quarters in the future.

In addition, the Government has strong commitment for the integration of women to the development of the country. The Deputy Prime Minister has expressed in one of his recent speeches at the National Seminar on Women in Development in September 1993: "At a time where there is a shortage of labour in the country, we should give serious thought to enhancing the participation of women, through the creation of an appropriate institutional framework, through training, through the creation of support services".

The Ministry of Women's Rights, Child Development and Family Welfare has been working on a White Paper on women in development. For this purpose, a seminar was held in September 1993 to which a Retrospective Study was presented. It was a study of the evolution of women in the Mauritian society and a situation analysis carried out by a team of sociologists from the University of Mauritius. This study was sponsored by UNICEF and UNDP in order to assist the Government in the preparations of this White Paper as well as for the Fourth World Conference on Women which will take place in Beijing in 1995.

At the 5th UNIDO General Conference in Yaounde on December 1993, the statement of Honourable J.C. de l'Estrac, Minister of Industry and Industrial Technology indicated that: "Mauritius is appreciative to UNIDO for

continuing to extend valuable technical support to its current cost - sharing programmes aiming to improve the efficiency and productivity of small and medium enterprises in the garment sector. A strong component of this joint UNDP/UNIDO project "Establishment of a Consultancy System for Productivity Improvement in the Small and Medium Garment Industries will aim at the promotion of women entrepreneurs in this competitive export oriented sector".

In summary, the project on the whole is well situated within the context of the current National Development Plan. More concretely, both the strategy on women entrepreneurship development and the objective of improving productivity at the factory level in the short-term and of upgrading the quality of the sector's labour force in the long run are in accord with Government's declared policies.

3. <u>Appropriateness of Project Concept, Design and Institutional Arrangements</u>

The Project was conceived on the basis of the following facts:

- The importance of EPZ as the engine of growth in Mauritius in the last decade;
- Firms located in EPZ employ some 87,000 men and women contributing about 13% of the GDP and accounting for about 66% of all domestic exports;
- EPZ is characterized by a heavy concentration of textile and garments companies which employ 90% of all EPZ workers and account for more than 80% of all EPZ exports;
- The need to promote women entrepreneurship on a broader scale and not limited only to the garment sector as stated in the Mauritian Declaration of the 11th CAMI and in the Resolution i(xi) on the Implementation of the Second IDDA Programme;
- The competitiveness of the EPZ sector is seriously under threat in the light of upward pressure on wage rates and diminishing labour supply and the lack of productivity growth to compensate the loss of the comparative wage advantage;
- The need to make provision for the installation of a CAD/CAM system with common service facilities.

To underscore the seriousness of the situation as well as to emphasize the need for improving productivity, it is noted that in general labour cost in Mauritius is five (5) times higher than its Far East competitors. Similarly, the cost of production in Mauritius (USD 1.40 per hour) is relatively high compared to China (36 cents/hour).

Given the gravity of the textile/garment in the EPZ and given the problems faced by the enterprises in that sector, and generally taking into due consideration, the socio-economic importance of that sector to the country, the concept aimed to support measures in the form of a project, that would lead to higher productivity and thus enhance the competitiveness of the textile/garment sector as well as to promote women entrepreneurship could not have been more appropriate. Likewise, the decision of the Government, UNDP and UNIDO and the private sector to support the project was indeed a correct one.

The present project was apparently designed and justified on the basis of the success of UNIDO SIS project SI/MAR/90/80, which brought significant productivity improvements (more than 50%) in several SMIs in the garment making sector. The project was modified however in order to address the issue of women entrepreneurship promotion on a broader scale and not limited only to the garment sector. This is within the context of the Mauritian Declaration of the 11th CAMI and on the basis of the Resolution i (xi) on the implementation of the Programme for the Second IDDA.

The design addressed institutional capacity building to make EPZDA attain a reasonable measure of consultancy capacity within the project life. This was highly unrealistic taking into consideration the time normally required for capacity building in a young institution without much experience, and inadequate manpower provision.

The provisions of project activities especially as regards timing were predicated upon the availability of the required and appropriate counterpart staff, as well as on the prompt reaction of the Executing Agency to project requests. As it turned out, lack of adequate counterpart staff greatly affected the achievement of project objectives/outputs. Also, perhaps due to lack of experience, the project design failed to take account of the invariably bureaucratic obstacles usually found in a large project-executing organizations.

Furthermore, the willingness of the target groups to cooperate and their ability to pay for the services envisaged in the project were over-estimated.

As stated already elsewhere in this report, some project outputs were overly ambitious especially with respect to:

- a) Training in one year by one expert of six (6) persons without much prior experience; and
- b) Creating at the same time by the same expert a network of trained consultants who were to come from local consulting firms/organizations lacking almost totally in garment industry experience.

The time-periods provided for some of the proposed activities were either too short, or even not determined, and did not reflect experience in proper scheduling of work. For instance, the time allocated for the activities related to the creation of a computerized CAD/CAM Centre for the future Textile Productivity Centre did not consider adequately the usual period of time required for the preparation of tender documents, announcement of tenders, receipt and collation of submissions review of tenders and selection of suppliers. This was clearly not examined very thoroughly, considering the hi-tech nature of the materials under reference, the wide array of suppliers and middle persons normally involved in such transactions, and the difficulty of evaluation of tenders of technical specifications. Furthermore, this exercise was supposed to be jointly carried out by both the Implementing and Executing Agencies which are almost poles apart from each other.

Another omission of the project design was its failure to stick to the usual UNDP Project format as well as provide a clear line of authority in the project expert's Job Description. One other drawback of the project design was furthermore its near-neglect of the fact that many of perceived beneficiaries have not, in general, acquired the industry-oriented culture and awareness that is necessary for properly harnessing the opportunities and potential of the project as a tool for their survival and eventual growth. Again, no follow-up mechanism was built in the design to monitor the use to which the newly-acquired knowledge and technology is put by the target groups, or to ensure that the highly desirable multiplier-effect takes place at the beneficiaries' or target groups' level.

5 3

The Government of Mauritius, conscious of the problems facing the EPZ, and its commitment to both the Mauritius and Yaoundé Declarations, initiated through the Minister of Industry and Industrial Technology the present project. The Government entered into a formal agreement with UNIDO and UNDP in respect of the project in September 1993 while UNIDO is Executing Agency, EPZDA was selected by Government to be the implementing agency. The day-to-day coordination of the project was to be run by the international expert who, according to the signed project document, was supposed to work not only with EPZDA, but also with other institutions which will be providing the productivity specialists. These institutions were supposed to be IVTB, University of Mauritius, Mauritius Bureau of Standards, Chamber of Commerce. Also,

freelance consultants were to be incorporated if and when necessary. The other relevant organizations included the Ministry of Women's Rights, Child Development and Family Welfare, CPPE, MCCI, MEPD, etc..

The UNDP/UNIDO assistance was essentially intended to respond to the urgent need to increase productivity of a very important sector of the Mauritian economy as well as to promote women entrepreneurship on a broader scale. The project was also intended to strengthen the consultancy capacity of EPZDA in the execution of its mandate.

The extent to which the above institutional arrangement was appropriate is assessed on the basis of the relevant institutions' available manpower, expertise and experience, operational equipment and facilities, as well as their professional linkages and institutional networks. For obvious reasons, only EPZDA is manly considered in this assessment.

While the general manpower situation at EPZDA may be satisfactory, the expertise available in-house is of a rather limited scope with respect to the comprehensive mandate of EPZDA. In this project, only three (3) counterparts - two (2) operational analysts and one (1) financial analyst - could be made available instead of the six (6) prescribed in the project document.

In terms of equipment, EPZDA has a good and well-utilized set of computers as well as enough office space and other infrastructural facilities.

EPZDA which became operational in 1992, cooperates with a number of international organizations including the Centre de Développement Industriel (CDI) of Brussels, British Executive Service Organization (BESO) and the French Bureau de Style PROMOSTYL, which publishes the Cahiers de Tendances, the Indispensable Tools of the Garment Industry; the Council for Scientific and Industrial Research of South Africa; the UK Clothing and Footwear Institute. At local level, forty-two enterprises, within the first ten months of its existence, had recourse to the consultancy services of EPZDA for productivity improvement.

In summary, it can be concluded that whilst the institutional arrangement looked appropriate and fitting theoretically at the time of project formulation and approval, it had a number of fundamental problems.

EPZDA itself could not provide the required counterparts staff for training neither could the proposed collaborating institutions. These institutions seem to have preoccupied

themselves with their "own" business. Furthermore, the relative inexperience of EPZDA in project implementation did not auger well in this project in terms of compatibility with the expert, marketing of services, etc...

The above notwithstanding, it is noted that although the capacity of EPZDA has not been enhanced through this project, it has been gained some invaluable experience in implementing UN-assisted projects.

The Government and the UNDP have consistently given the necessary support to the project and have often used their position to solicit similar support from relevant organizations.

4. <u>Involvement of the Counterpart Organizations and other Agencies including</u> the Ministry of Industry and Industrial Technology

The main counterpart organization involved in this project is EPZDA which was established by an Act of Parliament of Mauritius in December 1990, and became operational in September 1992. EPZDA's mission is to act as a catalyst and facilitator for the export sector to attain high levels of international competitiveness through enhanced productivity, improved quality and added creativity. Within the framework of its mission, EPZDA is active in technology transfer, productivity enhancement and dissemination of information.

By virtue of its mission, objectives and main areas of activity, EPZDA was selected as the implementing agency of the project.

The strategy of the project was to disseminate through EPZDA new production methods by installing low cost systems in factories willing to make a real productivity effort and invest in low cost handling systems. This strategy, which was meant to create a demonstration effect, was chosen on the basis of experience gained with a previous UNIDO SIS Project called "Efficiency and Effectiveness Improvement in the Export Processing Zone SI/MAR/90/801".

Most of the direct assistance of the project was given under specific contracts made with EPZDA, which provided for the payment of the technical assistance with money earned as a result of increased productivity. Furthermore, the involvement of EPZDA in the project relates to the training of some of its own staff in consultancy for

the textile and garment industry. This resulted to two EPZDA staff trained in garment industry consultancy. Several other organizations were involved in the project, notable among which are the Ministry of Industry and Industrial Technology, Ministry of Economic Planning and Development; Wilton Associates, Ministry of Women's Rights, Child Development and Family Welfare, CPPE; Prosimex Industrial Co. Ltd; Tamak Ltd, etc..

On the basis of Meetings' Reports, in particular the Ministry of Industry and Industrial Technology (MIIT); Ministry of Economic Planning and Development and the Ministry of Women's Rights, Child Development and Family Affairs were represented at a very high level in all the decision making process of the project. Furthermore, MIIT was instrumental in obtaining, on behalf of EPZDA, the loan of US Dollars 400,000 at 10.5% interest, for the proposed CAD/CAM Centre.

5. Adequacy of Methodologies Used for the Problems faced by the Small Export Enterprises of EPZ

The methodologies used in the project were based on the projects' strategy. The focus of the project was to be on about 50-100 enterprises of the garment making sector of the EPZ. After free-of-charge assessment and subsequent identification of management and technical problems, new low cost production methods or systems were to be installed in factories who were willing to pay.

In order to reach several garment making factories, the project was supposed to set up a "Productivity Team" for garment making operations. The international expert was expected to train potential consultants in textiles for EPZDA and other institutions.

A total of about 10-12 persons were expected to be provided with some training by the project in consultancy work including diagnostics and in productivity increasing methods.

The above-illustrated strategy-was divided into three (3) phases:

In the first phase the international expert was to organize direct assistance in selected enterprises with the objective of achieving a demonstration effect. In addition, the future EPZDA consultants were to receive training with a focus on industrial organization and productivity methods.

In the second phase, an operational system for a network of industrial consultants was to be prepared and a training programme for these consultants worked out, both by the project i.e. the expert, international and local consultants/trainees.

During the third phase which was planned to be financed on cost-sharing basis, the installation and operation of the computerized cutting room and later the setting up of the Productivity Centre were to be effected.

The methods foreseen in the project did not take into adequate consideration the small targeted firms. Most of these firms did not possess the necessary capital to make "major" investments in their plants. In addition, most of them needed more time to react to the new productivity methods owing to their lack of adequate "industrialist's mentality".

The methodologies adopted in the project which were based on previous SIS project, were too optimistic and, in some cases, practically unrealistic.

In the first place, a competent and competitive industrial consultant is the one who is able to make the right diagnostics based on a comprehensive technical and managerial background and experience. This analytical quality requires long training. It was therefore not very realistic to have expected future consultants selected on the basis of their former experience in the industry, to acquire in the considered period of time, the required analytical level expected of a competent consultant. In one year, it is just impossible for one expert to train six persons without much prior garment industry experience to become garment industry consultants in their own right. It is equally not realistic for the same expert applying the methodologies designed in the project to create a network of trained consultants capable of advising the garment industry when the institutions/staff concerned lack prior industry experience.

The method adopted to evaluate the costing systems in the firms was inappropriate for the existing situation in Mauritius as firms are reluctant to disclose their account to outsiders.

It was envisaged under "Special Considerations" of the project that at least three (3) factories managed by women should be given direct assistance. It was further expected that direct advice by the team will, at the end of the project, have increased the number of entrepreneurs and managers. This approach of direct assistance was used to assist two (2) women garment entrepreneurs. The approach however, did not succeed to augment the number of women entrepreneurs or managers.

Under the third objective, the provisions made to adequately face the problems of women entrepreneurship promotion are promising when assessed against the progress made at the time of evaluation. The crux of the approach being proposed lies essentially in the operationalization of that aspect of the project. In this regard, key elements on the strategy on promotion of women entrepreneurship development have been defined with a phased implementation including the identification of linkages with existing private and governmental institutions and technical services specific for women entrepreneurs.

The direct involvement of the project with industry was aimed at using the experience or lessons learned in the work programme of future Productivity Centre.

It was also envisaged in the project to start with the creation of a network of consultants derived from existing institutions like IVTB, University of Mauritius, Mauritius Bureau of Standards, Chamber of Commerce. The degree of involvement, however, of the aforementioned institutions in the project is negligible.

On the whole, taking into consideration the above observations as well as the level of the project inputs and duration, it can be concluded that although the proposed methodologies were used to assist effectively a number of garment entrepreneurs, they were inadequate to address the overall problems faced by the small export enterprises of EPZ.

6. The Project vis-a-vis the Comparative Advantages of UNDP and its six (6) Areas of Concentration

The six (6) areas of concentration of UNDP include the following:

- poverty alleviation and grass-roots participation in development;
- environmental problems and natural resources management;
- management development;
- technical cooperation between developing countries;
- transfer of technology; and
- women in development.

A major feature in the outlook of the UNDP resources is the new UNDP policy emphasis on national execution of projects. This means that responsibility for the management, execution and control of programmes and projects financed by UNDP including inter-country projects will devolve more to the beneficiary countries themselves and their institutions and organizations, rather than to specialized agencies and regional commissions.

During the 20 years period 1972 to 1992, UNDP's Country programme specific assistance to Mauritius totalled some US Dollars 18 million. In addition, assistance from other UNDP administered funds amounted to some US Dollars 700.000.

The newspaper l'express of October 22, 1985 summarized UNDP's role in Mauritius since its operation in December 1969 as follows:

"Discret mais déterminant à plus d'un titre. Tel pourrait être, en substance, un résumé des plus succints de l'assistance financière du PNUD à Maurice"²

Although the UNDP assistance in this particular project is modest in financial terms, the distinct comparative advantages of UNDP - political and sectoral neutrality, impartiality and non-commercial approach, access to universal knowledge and expertise, multisectoral and interdisciplinary scope - have been not only strategic and catalytic in this project of national importance but also innovative and effective. The much pronounced collaboration between UN System and Government and the private sector or the synergy of the parties is put into practice.

Further, this project fits into some of the six (6) areas of concentration of UNDP. There were elements of human resource development, participatory development, gender consideration, or women in development, and transfer of technology and to some extent capacity building especially at the factory-level.

[&]quot;Discret but effective in many ways: a good summary of UNDP's financial assistance to Mauritius. Extracted from the booklet UNDP in Mauritius - A catalyzing force: A historical perspective 1972-1992 published by UNDP Mauritius in collaboration by Mr. Jacques Dinan as Pr. Consultant, March 1994.

7. Mechanism of Approval

The project was initiated by the Mauritius Minister of Industry and Industrial Technology whilst on mission to UNIDO Headquarters, Vienna Austria. After this initiative, a project proposal was drafted by relevant UNIDO Division in consultation with the relevant organizations including EPZDA.

The Document was then examined at the Field Office Project Appraisal Committee (PAC) Meeting held on 2 September 1993. Present at this meeting were high level representatives of the following Ministries/organizations: MIIT, MEPD; EPZDA; MCCI; Ministry of Women's Right, Child Development and Welfare. Also present were UNDP Resident Representative and her Deputy as well as UNIDO JPO.

The Project Document was finally signed on 10 September 1993 by all the parties concerned (Government, UNDP; UNIDO). The project is financed on the one hand though UNIDO IDDA II funds and on the other hand by the UNDP IPF. The significance of this joint financing between UNIDO/IDDA Programme and the UNDP Programme lies in the fact that it addresses the issue of productivity enhancement which is of prime importance at this time for Mauritius as it enters the second phase of industrialization. Equally important is the fact that UNIDO has given priority to this project in the light of very limited funds at the IDDA programme. This project also demonstrates an interesting and useful example of interagency collaboration.

Despite the relatively many organizations involved in this project, the time required for its approval was exceptionally short (less than 5 months), i.e. from date of formulation to date of signature.

B Project Document

The Development Objective of the project as stated in the Project Document is to "bring the industry of Mauritius from labour-intensive to a skill-intensive, capital intensive level, and to diversify the industry". This is in line with the stated policies of the Mauritian Government and its Ministry of Industry and Industrial Technology. It is also in line with the new Industrial Expansion Bill which calls among others, for the modernization of the industry.

The project document lists three immediate objectives:

- a) increase productivity in selected garment factories;
- b) establish a network of consultants capable of providing advice on productivity;
- c) design a strategy on the promotion of women entrepreneurship.

While the first two immediate objectives are in line with the project's main aim to improve productivity in the garment industry sector, the third objective to design a strategy on the promotion of women entrepreneurship tends to fit inappropriately, "technically" speaking, into the body of the project. However, in view of the fact that about 75% of the workforce in the garment sector is female and several garment enterprises are managed by women, and taking into due account the Mauritian Declaration of the 11th Conference of African Ministers of Industry (CAMI) as well as the Resolution 1 (xi) on the implementation of the Programme for the second IDDA, it was considered appropriate, and innovative in terms of optimum use of available resources, to use this project as an unique opportunity and a vehicle to address the issue of women entrepreneurship promotion on a broader scale and not limited only to the garment sector.

A total of eight (8) outputs were envisaged in the Project Document as follows:

The first objective has six outputs; the other two one each - total of eight.

- a.1) Six trained consultants available at the counterpart agency EPZDA capable of advising on productivity in the garment industry.
- a.2) Five manuals and four seminars completed on consultancy methods and productivity.
- a.3) Productivity increased by 20 50% in at least 10 factories.
- a.4) Consultancy contracts (not quantified) concluded with garment manufacturers.
- a.5) An operational sewing machine maintenance section at the EPZDA.
- a.6) Plans for the creation of a CAD/CAM facility for a future textile productivity centre.

- b.1) Trained consultants (at various levels) for the garment industry (not quantified).
- c.1) A strategy on the promotion of women entrepreneurship and operationalization of a technical information/orientation service to support the promotion of women entrepreneurship.

The project, as far as the first two objectives are considered, has grown from a preceding phase of SIS-financed direct assistance to selected garment factories (by the same expert) and, although institution-building aspects have been added to it, the focus still remains on direct assistance. Furthermore, the institution-building elements are partly in the objectives (objective 2) and partly in the outputs (output 1 for objective 1). They are also unrealistic in relation to the project inputs and duration.

The first six outputs are presented in a rather confusing manner. Against the first objective of increasing productivity in selected factories the first output is a trained team of six productivity consultants available at EPZDA. The first objective is then repeated as an output (output 3). Consultancy contracts with prospective clients is given as output 4; yet it should be obvious that a consultancy contract is a necessary prerequisite before any consultancy work can start at a client factory. This output should thus be an activity under output 3.

The second objective (network of trained consultants) again repeated as an output, is unquantified and the activities related to it are vague.

As the above examples show the relation between the first two objectives and their related outputs and activities are often not very clear. Neither does the workplan of the project clarify the situation. On the other hand, the third objective and its related output and the activities to be undertaken to achieve that output are clearly stated in the Project Document.

The selection of EPZDA as the Government implementing agency was not the result of an assessment of potential alternatives but followed naturally the preceding SIS-financed activities which coincided with the establishment of EPZDA. EPZDA's aims include the commissioning of outside consultants to improve the productivity of the factories operating under the EPZ scheme; the SIS expert was used in this sense and his activity simply continued under the present project. This explains, at least in part, why the project has the characteristics of an SIS project. As such, the end users are clearly identified; the rest is a less successful effort towards institution building.

The obvious conflict between the functions of EPZDA as a commissioner (rather than doer) of consultancy and the objective of the project (given as output for objective 1) to create consultancy capability at the EPZDA seems to have escaped the attention of the drafters of the project document. This has led to difficulties from the start and contributed to the fact that the project's outputs could only partially be produced.

Although a logical framework is missing in the project document, it is nevertheless, clear that the project aims to:

- a) improve productivity at factory level direct;
- b) establish local consultancy capability both at the EPZDA and outside and;
- c) develop a strategy for women entrepreneurship.

Of the first two objectives the first (to improve productivity in at least 10 factories by 20%) is perfectly clear and achievable with the inputs and time frame of this project.

The second objective to establish consultancy capability at EPZDA (six persons) and outside (unquantified) is overly ambitions and with respect to the network of consultants rather too optimistic. It is not possible for one expert, within one year, to train a team of six persons at EPZDA in addition to an unspecified number of outside consultants to become garment industry consultants in their own right unless these persons are garment technologists with industrial experience - an assumption not made in the project document.

The third objective to design a three-year strategy on the promotion of women entrepreneurship development in Mauritius - with a phased implementation is realistic and achievable provided an expert with adequate experience in the issues being addressed in that part of project is recruited.

The project document clearly stated the problem that the project was intended to solve. It also specified and recognized, respectively, the major assumptions and risks. The major assumptions included the acceptance by the beneficiaries of the productivity methods and payments of productivity contracts. The project also made the assumption that productivity will be increased by making available technological packages (e.g. computerized cutting room). In addition to the above, the project also assumed that the entrepreneurs will see the immediate and long term interest in quickly increasing productivity with small new investments.

The project document listed three (3) main risks including the following:

Productivity increases only make sense if the target - Market risks: South the second

firms can also sell the increased production;

- Training risks: The difficulties involved in obtaining good industrial

consultants after the relatively short period of

training; and

- Brain drain risks: The possibility of taking over by the industry of the

good consultants trained through the project.

To summarize, the project is generally well in line with the measures needed to address the problems and issues described in the background information of the project document. The ultimate beneficiaries were correctly identified, the direct assistance as quantified is achievable and the potential for a measurable level of success of the project is considerable although part of the document itself is presented in a rather confusing manner, making the monitoring difficult. It is also the considered opinion of the mission that the institution building elements regarding the first two objectives are unrealistic considering the time frame and inputs of the project.

III. PROJECT IMPLEMENTATION

Activities A.

According to the project document all outputs should have been produced by the end of August 1994 but a Tripartite Review Meeting conducted in June 1994, concluded that, as several outputs were still incompleted, the project, with regard to its productivity improvement aspect, should be extended until December 1994. While the women entrepreneurship activities will continue into the year 1995.

The project activities concentrated initially on producing output 3 - productivity increase in selected garment factories. Although this activity was virtually a carry-over from the preceding SIS-Project where the same expert had been performing similar tasks, it started slowly for mainly two reasons: firstly, unlike during the preceding SIS phase the work in the factories was now channelled through EPZDA who charged a fee for the consultancy services and, secondly, EPZDA did not have a portfolio of contracts with clients which would have permitted immediate start of the work. A couple of months were spent trying to resolve the issue over whose responsibility it was to market EPZDA's services; EPZDA's or the expert's.

The fee charged by EPZDA (RS*5,000.00 per day = \$290) seemed rather high for several manufacturers for services whose results were uncertain and this undoubtedly acted as a constraint. Gradually, however, a portfolio of seven contracts was built up and four of those were completed by September 1994. The remaining three are scheduled to be completed by the end of 1994, leaving this output still short of its original target of ten factories.

The expert attached to this project had spent by September 1994 a total of 240 working days of which 155 in the factories and 85 at the EPZDA. During his factory visits his EPZDA counterparts accompanied him for only 23% of his time. This limited exposure clearly was not conducive to local capacity building. It also reflects the different views of EPZDA on the one hand and the project on the other with regard to EPZDA's role: commissioner or doer of consultancy.

In keeping with its proclaimed role as commissioner or channeler of consultancy to the industry, the EPZDA concurrently with this project, has also received free consultant services from the European Union (Centre for the Development of Industry) in Brussels for a total of 49 man-weeks of which 39 have been implemented thus far. EPZDA channels the services of the garment industry technologist provided under this scheme to 12 EPZ garment manufacturers and charges Rs*2,000.00 per day for his work which is on-site training based on a modular approach. Discussions with the CDI expert confirm that this EPZDA/CDI programme has faced similar difficulties just like this project under evaluation: absence of consultancy contracts initially and thus wastage of expensive man-weeks and shortage of counterpart staff to accompany the expert and have exposure to his methods. According to the expert concerned his counterparts accompanied him for only one third of his time in the factories.

With regard to the timeliness of providing the project inputs there was, naturally, no delay in the expert component since the only expert in this project was already in the field and was simply transferred from a preceding SIS project. There were no significant delays in the training component either, but the only major piece of equipment, the project vehicle, was not supplied until half-way through the project. Project activities had to be undertaken during the six months using mainly public transport.

Compatibility problems between the expert and his counterparts arose from the beginning and while they were somehow contained, the close working relationship that is a prerequisite for successful transfer of expertise never fully developed. This was further acerbated by the limited time of exposure.

A Tripartite Review was held in June 1994 - two months before the scheduled end of the project. There was disagreement between the Government implementing agency (EPZDA) on the one hand and the UNDP and UNIDO on the other, with regard to the achievement of the project objectives. The management of EPZDA felt that the project objectives and outputs had been largely achieved and the project should, therefore, be terminated as scheduled and the remaining funds used towards the establishment of a CAD/CAM Centre at the EPZDA. UNDP and UNIDO were of a different opinion and proposed a three-month extension and a corresponding workplan for the project.

A Project Performance Evaluation Report (PPER) was prepared jointly by the expert and EPZDA and submitted to the Tripartite Review Meeting (TRM). The PPER reflects the EPZDA contention that the project has been satisfactorily completed and should be terminated. Six outputs out of seven (excluding the women entrepreneurship issue) have been declared as satisfactorily completed. These include output No.1 (a team of 6 productivity consultants for the garment making industry available at EPZDA). Yet only two counterparts with no garment manufacturing experience are available at EPZDA and these two were attached to the expert for only 23% of his time. The PPER arrives at the required number of 6 persons by including the expert, two outside consultants (with no garment industry experience) the two EPZDA counterparts and one financial analyst. This contention is not only debatable but also incomprehensible for it makes the expert both an input and an output.

B. Quality of Monitoring and Backstopping

The role of an Executing Agency in a project of assistance to an existing institution and/or factories takes on a more critical dimension when the project to be implemented is of a highly specialized nature. It becomes necessary that the Executing Agency does not only carry out administrative and backstopping functions, but also possess sufficient professional competence in the relevant technical fields to be able to give technical guidance and professional supervision to the Implementing Agency and others who may become associated with the project.

United Nations Industrial Development Organization (UNIDO) is the Executing Agency for the project under evaluation as well as for other thousands of projects of different dimensions and scopes, and in many and diverse industrial development sectors.

With particular reference to this project under evaluation, UNDP Country Office and the relevant Government Ministries demonstrated a commitment to see to it that the project succeeds. Adequate administrative and operational backstopping was provided by the UNDP Office within the limits permitted by its available resources. Several meetings were organized which dealt exclusively with project matters. Decisions that were taken

at those meetings were implemented without delay when there was no need for outside consultation or authorization.

The Executing Agency through its relevant officers undertook three (3) missions to monitor the project. An Expert in CAD/CAM system was recruited to do a feasibility study on the establishment of such facility at EPZDA. In spite of the missions undertaken by the Officers and the production of a comprehensive report by the CAD/CAM expert, very pertinent issues raised during the monitoring missions as well as those pointed out in the Expert's Report were not adequately followed up.

Taking the above into consideration, and also taking account of information gathered from various sources concerned with this project and project-related documents consulted, it is suggested that:

- There existed no strict Executing Agency's programme of monitoring or some form of accountability.
- Communication between UNDP or Implementing Agency and the Executing Agency was often frustrating as requests for administrative action, approvals, authorizations, etc... often went unanswered for long periods of time. A glaring example of this is the issue on the CAD/CAM. Since April 1994 (till the time of the evaluation exercise) no definite response had come from UNIDO to repeated UNDP requests.
- The Executing Agency should have given more definitive guidance to the formulation and supervision of the project's Work Plan.
- The Executing Agency should have taken a firmer decision (when this was brought to its attention) on the question of "who was to market the services of the Implementing Agency". This issue impeded the achievement of some of the expected outputs. Also, pro-active and better quality monitoring and backstopping should have discovered and corrected at an earlier stage the weakness of some of the technical provisions of the project design.

The Tripartite Review Meeting that took place in June 1994, two months before the scheduled end of project, brought to light some of the major issues and problems that were facing the project. Not all the solutions agreed on at that meeting had been implemented by the time of the Evaluation. Generally, it is noted that the administrative procedures of checks and balances were often bureaucratic and unduly slow. Although there is ample justification for such scrutiny by the Executing Agency, the efficiency with which requests for administrative action were treated left considerable room for improvement.

IV. PROJECT RESULTS

A. Relevance

The project's main purpose - to increase productivity in the garment manufacturing sector as well as to make special effort to promote women entrepreneurship continues to be relevant and fits well into the Government's development plans and activities as well as relevant Declarations and Resolutions to which the Government of Mauritius is a party. The project's objectives are here interpreted to be three-fold:

- a) to increase productivity in selected garment factories through direct assistance;
- b) to create local consultancy capability in the garment sector; and
- c) to promote women entrepreneurship on a scale broader than only the garment sector.

The purpose of the project is still relevant in the current context. Basically, the approach and modality of execution are relevant too. While the selected recipient institution may be relevant or appropriate for the objective (a) that is, the direct assistance to selected garment factories, it is debatable whether the same can be said for the remaining objectives.

B. Efficiency

The UNDP Office and the Government's commitment to the project was firm as can be seen from reports of the several project-related meetings and many exchanges of fax messages between UNDP Port Louis and UNIDO Headquarters. Also, decisions taken concerning the project were implemented without any delay by Government or UNDP. Seen from this angle, the project was well managed. At the level of the implementation of the project, there were some problems caused mainly by the absence of a portfolio of consultancy contracts and the issue of whose responsibility it was to generate such contracts contributed in some instances to the "ad-hoc nature" running of the project. The decision rather late in the project's life - to involve local consultancy firms again led to

misunderstandings in the absence of the clear-cut procedures and Terms of Reference. Here, the Executing Agency should have made more pro-active interventions. The Project's equipment (car, computer) were efficiently used.

C. Outputs

Output 1.1

A team of at least 6 productivity consultants for the garment making industries available at EPZDA.

Only two counterparts with some technical background were provided and they spent with the expert only 23% of his working time. Transfer of expertise was thus limited, and only to the two counterparts.

The output has not been produced.

Output 1.2

5 manuals and 4 seminars on productivity.

Four manuals have been prepared and further two will be prepared by the end of the expert's assignment.

One seminar has been given and further four will be given by December 1994.

This output can be considered as satisfactorily produced.

Output 1.3

:

Productivity increases of 20 - 50% in at least 10 factories.

During the project seven factories programmes were started and of these four have been completed. The remaining three will be completed by the end of the year during the project's extension. In these programmes productivity was increased significantly from 40 to 200 per cent - and the levels attained could be sustained by the factories concerned.

This output can be considered as partially produced (approximately 75%).

Output 1.4 : Consultancy contracts with factories.

This is actually not an output but an activity. A contract proceeds

a consultancy assignment.

Output 1.5 : A sewing machine maintenance and special attachment ...

established and operational.

No activity on this subject. The output has not been produced.

Output 1.6 : Plans for the creation of a CAD/CAM cutting room for a future

Textile Productivity Centre.

A study has been completed on this subject and submitted to the Government. Equipment offers have been received but not yet

evaluated.

The output has been produced.

Output 2.1 : Network of trained consultants.

Contract has been established with one or two local consulting firms and some factory programmes have been carried out in This activity was, however, started cooperation with them. relatively late during the project's life, there misunderstandings as to procedures and, as repeated in the various sections of this report, the exposure to the expert has been very limited. In view of the total lack of prior garment manufacturing experience the transfer of knowledge to those local consulting firms has been negligible. It would be gross exaggeration to claim that a network of garment industry consultants has been created.

The output has not been produced.

Output 3.1 : A strategy on the promotion of women entrepreneurship.

Following a joint ILO/UNIDO mission, a strategy (incl. structure & operation) for Women Entrepreneurship Development in Mauritius has been developed in close consultations with key private sector organizations who are expected to assist in various

aspects within its implementation, notably CPPE, CLL Management Consultants, MCCI, MEF and SMIDO. Meanwhile, the implementation of the Strategy based on Work Plan for Phase I (March 94 - February 95) is well underway. The output has been produced.

D. Immediate objectives

As already mentioned, the project's immediate objective with regard to productivity is two-fold:

- to improve productivity in selected garment factories in the EPZ and;
- to create local consultancy capability for the garment sector.

The first part has been partially achieved, the second part has not been achieved to any measurable degree.

With regard to the sustainability of the results at the level of the ultimate beneficiaries the answer is in the affirmative. The companies assisted are able to maintain the improved productivity levels and, in some instances, even improve upon them. In that respect, the project has been successful, but it has not been able to create any significant local capability in garment sector consultancy- either inside or outside the EPZDA. The expectations in this regard were unrealistic to start with and the limited counterparts exposure did not permit any significant technology transfer to take place.

The third immediate objective of the project - to develop a strategy on women entrepreneurship - has been achieved and has contributed considerably to the overall partial success of the project.

E. Development Objectives

Even the partial achievement of the project's immediate objectives' has and will continue to contribute to the attainment of the development objective of bringing the industry of Mauritius from labour-intensive to a skill-intensive, capital-intensive level, and of diversifying the industry.

F. Effectiveness

The project could have been more effective if its strategy had been better elaborated from the outset: clearer delineation of responsibilities, detailed work plan, adequate preparatory work prior to the start of the project. Full understanding of the role of the counterpart agency and firmer management on the part of the executing agency. Nevertheless, while an exact cost/benefit analysis is not possible it is fair to conclude that the cost of the direct assistance to the garment industry channelled through this project is justified with regard to the results. It generated an income of about \$70,000 to EPZDA and the sustainable results at the factory level in terms of increased production with the same or reduced workforce compare favourably with the cost of the project.

Furthermore, the project, within its limited resources, has been able to produce an operationalizable strategy which should go, given the required financial assistance, a long way to promoting women entrepreneurship in Mauritius.

G. Capacity building

The capacity building effect of this project is related mainly to the field of human resources development in the sense that the improved production methods installed in selected garment factories through the intervention of this project were always connected with the training of the operative staff concerned. The effect has shown to be sustainable.

H. Impact

An objective assessment of the project impact is difficult at this point in time. This notwithstanding, it is prudent to assume on the basis of discussions held with both project target groups and Government policy makers, that positive impact indices are already noticeable. In any case, no negative impact has been registered.

I. Sustainability

As already explained in preceding chapters the project has had a sustainable effect at the factory level. Likewise, the knowledge gained by the counterpart staff through the project is likely to be sustained.

J. Follow-up

At the Tripartite Review Meeting in June 1994, it was decided that the project resident expert's assignment should be extended until December 1994. A plan for his activities during this extended period was agreed upon and it is fair to assume that it will be carried out as scheduled. Concerning the productivity issue, the project's activities will thus be terminated in December 1994. The activities related to the strategy on women entrepreneurship will continue into 1995 and, if possible, beyond.

The remaining question and one that has occupied the Government implementing agency for several months now concerns the planned establishment of a CAD/CAM-equipped productivity centre under the aegis of EPZDA. The equipment, activities and staffing of such a centre were the subject of a report produced as one of the outputs of this project.

The report draws attention to several factors that must be considered before embarking upon such a major undertaking:

- The market for the services of a CAD/CAM productivity centre. An initial survey of some 300 small and medium-scale garment manufacturers produced an extremely poor response.
- The initial financial outlay. To finance the equipment and related expatriate expertise EPZDA would have to take a bank credit of US\$ 400,000 at an annual interest rate of 10,5%. UNIDO would further apply an overheads charge to cover its services if it were called upon to execute the project.
- A staff of highly qualified specialists would have to be recruited and paid for
- The facility would at least initially for an unspecified period serve as a demonstration facility only and thus not generate any income.
- The centre would need efficient and dedicated management to cooperate effectively with the industry.

However, obviously accepting the decision to set up the centre as a foregone conclusion the report does not further dwell on the above prerequisites, but goes on to recommend a certain equipment configuration. Based on these specifications, UNIDO requested and received bids from several manufacturers. These bids had not been reviewed at the time of this evaluation.

In the light of the above, it might be reasonable to reconsider the establishment of a CAD/CAM demonstration facility at the EPZDA. Also, the following alternative approach is put forward for serious consideration:

Start a course in textile and garment design - including pattern-making. This course can be run in cooperation/ coordination with the Industrial Vocational Training Board (IVTB) and, once the skills of the first class have been raised to a level where sophisticated design aids are warranted, introduce the application of CAD in the programme - not before.

The main arguments in support of the above approach are:

- There are already some 20 CAD installations at individual garment factories operating in the EPZ, but many of them perhaps most are not being run efficiently for lack of trained staff.
- On-going training activity with CAD equipment would be quite compatible with the idea of demonstrating the use and potential benefits of CAD to interested garment manufacturers. The facility could even time permitting be used for some commission work.
- IVTB has already taken initial steps towards starting a textile design course and is very likely to be interested in pursuing and perhaps expanding its scope.

V. CONCLUSIONS

The following is a summary of the major conclusions/findings of the Evaluation Mission covering essentially all the issues raised in the Terms of Reference.

A. Findings

1. With respect to the principal aim of the project, to increase the productivity in the garment industry, the results have been relatively modest and limited essentially to direct assistance to selected garment factories. No significant local consultancy capability has been created. The expectations in this regard were too high to start with and limited counterpart availability further diffused the effect. Only two counterparts with some industrial background were available instead of the six prescribed by the project document and these two accompanied the expert for only some 23% of available time.

- 2. The direct assistance to garment factories started slowly owing to initial resistance on the part of the industry and to lack of experience of EPZDA to market its services. By the time of the evaluation 13 factory surveys had been completed leading to 8 contracts of which four had been either completed or were in progress and further four scheduled for the remainder of the expert's time.
- 3. In two of the factories where work had been completed productivity increases were significant 40 to 200% and it was evident that the factories concerned could sustain these levels.
- 4. The idea of a CAD/CAM facility at the EPZDA is very much in the minds of the Government and EPZDA management. Preparatory work towards this goal has been done within the context of the project but no definite conclusions have been drawn yet with regard to finances, mode of operation or equipment. This notwithstanding, the Ministry of Industry and Industrial Technology on behalf of Government has taken a loan of US Dollars 400,000 (Four hundred thousand US dollars), at 10.5% interest. This clearly demonstrates Government's firm commitment to see to the need of facilitating technology advancement and transfer to the country for industrial production process. UNIDO has been informed about this development as well as the confirmation of the Government about the cost sharing arrangements meant to be used for equipment and expertise for relevant purposes. Government still awaits UNIDO's reaction with respect to despatch of bids, which are necessary for Government in order to transfer the required amount to UNDP.
- 5. The project faced basically two types of problems: firstly those related to issues between the expert and the government implementing agency (EPZDA) and secondly those arising from the relative indifference of the ultimate beneficiaries of the project, the garment manufacturers themselves.
- 6. With respect to the former, there were compatibility problems between the expert and his counterparts from the very start, there was disagreement as to who should market the services of EPZDA the expert or EPZDA -. Besides, the number of counterparts was inadequate and they were available for only 23% of the expert's time thus making any technology transfer very difficult.

- 7. While the problems facing the exporting garment sector have been clearly identified and analysed by the country's planners, it seems that only a handful of garment manufacturers the larger and more progressive ones have drawn the right conclusions and are moving towards higher worken productivity and more diversified production. The rest, although undoubtedly aware of the increased competition in the export market, have not always attempted to analyse their manufacturing process to see what measures could be taken to preserve their competitiveness. The message that EPZDA is trying to send seems not to have always been received or understood.
- 8. Furthermore, there has been initial resistance on the part of manufacturers to the relatively high (RS*5000.00 per day) fees EPZDA is charging for its services. This has also led to a situation where those manufacturers who are operating at the lowest levels of worker productivity and thus sinking faster than others cannot afford the assistance in the extent that would be required for it to have an impact. As a result, the project's assistance has focused on a few medium-size garment manufacturers who could afford the intervention and make full use of it.
- 9. The lack of clear-cut Terms of Reference or Job Description for the expert as regards his direct supervision and the failure to resolve this issue at the early stage of project implementation created undesirable working atmosphere.
- 10. The other problems that the project faced were:
 - i) Bureaucratic obstacles in the Executing Agency resulting in prolonged delays in processing of project related requests;
 - ii) Lack of adequate Agency's backstopping.
- 11. A strategy (incl. structure and operation) for Women Entrepreneurship Development in Mauritius has been developed following close consultations with key private sector organizations who are expected to assist in various aspects within its implementation, notably, CPPE, CLL Management Consultants, MCCI, MEF and SMIDO. Meanwhile, the implementation of the strategy based on Work Plan for Phase I (March 94 Feb. 95) is well underway.

- 12. With reference to the design of a Strategy on promotion of women entrepreneurship, the initiatives contained in the developed strategy have captured the interest and enthusiasm of all the parties concerned in view of its focus on linking actively, the Government, United Nations system and the private sector in the pursuit of development efforts.
- 13. A phased implementation programme to operationalize the third objective of the project has been developed including a detailed work plan for the first year of operation. Furthermore, a Support Service Unit for Women Entrepreneurs has been established within CPPE. CPPE is an already established organization, involved in the promotion of SMEs. One of their assets being that CPPE has already established strong links within the business and financial communities and various training institutions.
- 14. The project targeted three (3) women entrepreneurs as envisaged under "Special Consideration" of the project document. Two of these women entrepreneurs have garment making companies while the other one has a toy making enterprise. In the first two enterprises a new production system for material handling was introduced.
- 15. After reviewing the strategy at the policy level the following conclusions pertinent to the issues of women entrepreneurship promotion may be drawn.
 - i) Government policies to stimulate small and medium sized business development and to promote self-employment have encouraged small business start-ups by women, especially in the present climate of an expanding local market with a deepening of the range of services demanded.
 - ii) Most businesses started by women have been in the area of food preparation, garment making, services, retail trade and handicrafts. Self employment accounts for only 5.5% of the female workforce according to 1989 census data. Many of the businesses started by women are in the informal sector. The entrepreneurial activities of women tend to be associated with the informal sector. Indeed there is a lack of technical knowhow and business and managerial skills among women entrepreneurs.
 - There is a low participation rate of women entrepreneurs in training programmes and related support services for start-ups and upgrading.

- iv) There are indications that women could be exploring selfemployment as an alternative to wage employment. The reasons are to do with the perceived greater flexibility of managing the interface between home and work, including working from home, as well as the unattractiveness of long term employment in working conditions which characterize women's employment. There may thus be life cycle patterns in decisions to take-up self employment. Another reason is the existence of the glass ceiling which cut short women's upward mobility in organizations.
- v) There is no clear-cut definition of what constitutes an entrepreneur, and indeed the promotion of an "enterprise culture" has so far not explicitly considered women. Women's entrepreneurial activity is thus considered fairly marginal. In general, there is no entrepreneurial promotion.
- vi) Private organizations have so far been supportive of the principle of promotion of women's entrepreneurship as a mainstream, not marginal activity.
- vii) Constraints facing existing women entrepreneurs are not lack of education, but lack of training in business development and management, poor motivation among some of them to expand and upgrade their business, reluctance of husbands to accept the implications of their wives' activity: sharing of family responsibilities, acceptance of likelihood that wives may earn more, generally for husbands to be as supportive as wives are to them.
- 16. With regard to project finances, the initial budget that has been allocated to the implementation of the third component was estimated at US\$ 75,000. It appears from the financial records provided by UNIDO as of August 15, 1994 that only US\$ 5,000 is shown as the balance. The financial situation is **critical** and therefore **additional funds** should be secured for the continuation of the project.
- 17. Given the importance and scope of its mission, the manpower situation at EPZDA needs to be strengthened in order to provide more effective consultancy services to the relevant enterprises. The EPZDA is presently not constituted to generate substantial income from consultancy services, although it can make modest revenue from time to time.

18. The above notwithstanding, and although the institutional capacity of EPZDA has not been significantly enhanced by the project, the experience gained through this project is worthwhile especially in project implementation.

B. Assessment in Terms of Relevance, Performance and Success

The conclusions that can be drawn from the evaluation in terms of project relevance, performance and success are the following:

The issues addressed in the project are still as relevant today, perhaps with more urgency, as they were at the time of the project formulation. The achievements and performance are modest. However, the contributions of the project in addressing the problems confronted by the garment industry are significant and their absorption by the beneficiaries reached by the project has achieved positive impact. This impact is likely to multiply with time.

To a very significant degree, the rationale, objectives and expected impact of the project remain pertinent. They are also of utmost importance as regards the long term objectives, identified priority needs and concerns of the manufacturing sector. The project's three immediate objectives fit well into Government Development Plan and the Mauritius Declaration of the Eleventh Meeting of the Conference of African Ministers of Industry in May 1993.

The project's main purpose is consistent with other national initiatives, and its concept responded to acute needs of the beneficiaries. The relevance of the project is aptly summarized in the National Development Plan (1990-1994). Under "Constraints and Issues" the Document states, among others: "The apparent labour shortage is worsened by the fact that some EPZ firms tend to have excess labour while in other firms, production routing and management are wanting in efficiency. There is, therefore, a growing need to increase productivity by upgrading the skills of workers and the methods of production through more performing machines. During this plan period, efforts will be directed to stimulate and sustain the move to a more effective labour/capital mix in the manufacturing sector".

The performance of the project cannot be rated high for several reasons, the most important of which are:

- i) Despite the fact that the skilled expert arrived on time and able to transfer skills, there were not enough counterparts.
- ii) Although the project was reasonably well managed in the Field Office, Executing Agency's backstopping and monitoring were inadequate.
- (4) have been or will be partially produced by the end of the project.
- of the three (3) immediate objectives contained in the Project Document, only the third objective can be said to have been achieved; the second objective was not achieved while the first one increase productivity in selected garment factories (not quantified) was achieved partially.

Taking into due consideration, the youthfulness and lack of adequate experience of the Implementing Agency, the identified deficiencies of the project design (too many and ambitious outputs; too short duration; over optimistic assumptions, absence of crystal clear delineation duties and responsibilities between implementing agency and expert) as well as the just average backstopping, the project can be rated as partially successful. This partial success can be explained by the fact that:

- The two counterpart staff trained can deliver direct consultancy services to the garment industry.
- In the two factories where work had been completed productivity increases are phenomenal 40 to 200% and it was evident that the factories concerned could sustain these levels. The introduced production methods and technology are effective.
- The issue of promotion of women entrepreneurship has not only captured the interest, enthusiasm and support of the Government but it has also brought to light how the private sector and the financial and business communities can actively be involved in development projects.
- Government commitment was both firm and consistent.
- Although impact can be better assessed in the longer term i.e. at ex-post evaluation stage, than it can during or immediately upon project termination, the initial impact of this project is positive and

significant on target groups, direct beneficiaries, and institutions/companies who were involved in the project. In particular, the project's impact related to improvements in the few factories can be sustained and consolidated.

The effectiveness of the project is high considering its duration, budget and the results achieved.

The project's outputs are generally accepted by the beneficiaries including women and the number of local organizations involved in the project is substantial. Some of these are listed under Annex II.

VI. RECOMMENDATIONS

The following recommendations emerged from the evaluation exercise:

- 1. For all practical purposes, the present project as regards the productivity aspect has already run its course with only three (3) months of extended time left for the Expert. In this regard, it is best to proceed conscientiously according to the available Work Plan and complete the work now in progress (factory consultancy, preparation of manuals, conducting of seminars, study tours) and then terminate that part of the project.
- 2. It is recommended that any follow-up (establishment of a CAD/CAM facility, productivity Centre, etc..) should be the subject of a more profound investigation because of the many and diverse imponderables related to its acquisition, operation and management.

The equipment, activities and staffing of a CAD/CAM-equipped productivity centre were the subject of a report produced by UNIDO consultant as one of the outputs of this project. The report of the consultant draws attention to several factors that must be considered before embarking upon such a major undertaking:

The market for the services of a CAD/CAM productivity centre. An initial survey of some 300 small and medium-scale garment manufacturers produced an extremely poor response.

- The initial financial outlay. To finance the equipment and related expatriate expertise Government would have to take a bank credit of US\$ 400,000 at an annual interest rate of 10,5%.
- A staff of highly qualified specialists would have to be recruited and paid for.
- The facility would at least initially for an unspecified period serve as a demonstration facility only and thus not generate any income.
- The centre would need efficient and dedicated management to cooperate effectively with the industry.
- Taking into due consideration the fact that Government has already taken the loan of US Dollars 400,000 and also the issues raised in the above recommendation (ii) as well as the fact that there is a need to train designers in the country, it is recommended that Government should consider, at the same time, the establishment of a Training Centre which may be open to other countries in the Region, possibly in cooperation/coordination with IVTB and other relevant institutions for vocational training in textile design and pattern making. Once the training activity was well on its way perhaps during, but not necessarily, the second year the facilities of the Centre could be augmented and upgraded with more sophisticated aids such as CAD equipment. At that stage, the CAD facility could be used also to demonstrate to the industry its value and possibly do some commission work.

It is noted here again that the availability of designers and pattern makers is a sine qua non for any optimum use of a CAD/CAM system.

4. Considering the urgent need for more productivity in the small export industries because of increased international competition and the fact that more industries should be reached by the productivity programme, it is recommended that EPZDA should be more aggressive in promoting its services and to use at least a part of the revenues generated through this project to strengthen its human resources as foreseen in the Project Document.

Also, lessons from the very positive experience of productivity gains referred to earlier, should be drawn upon in view of the urgent need for more productivity improvements.

- 5. On the basis of the successful cooperation between UNDP and UNIDO in Mauritius, especially in the implementation of the Project XA/MAR/93/616 and DP/MAR/93/002 "Establishment of a Consultancy System for Productivity Improvement" being co-financed by both organizations and which enjoys also the financial support of the Government of Mauritius, it is recommended that UNIDO should examine the possibility of a further UNIDO financial contribution or technical assistance so that the Productivity Programme can reach more entrepreneurs in the garment industry, especially women entrepreneurs as spelt out under "Special Consideration" of the Project Document. This recommendation is made also in view of the successful experience in the two factories as regards productivity increase and the need to increase productivity in more factories.
- 6. Recognizing the need for high quality monitoring and backstopping for achieving project objectives efficiently, it is recommended that UNIDO review its Programme of Monitoring and Backstopping of the substantive divisions with a view to streamlining the monitoring mechanism and incorporating some form of accountability. In some instances, it might be necessary to set up Project Steering Committees (PSC) whose membership should include officers of adequate professional competence. The PSC duties would include monitoring the progress of project, reviewing progress reports, approving work plans and advising on future activities.
- In view of the positive progress made so far with respect to the third objective of the project (Design of the a Strategy on the Promotion of Women Entrepreneurship in Mauritius, including the Structuring and Operationalization of an Appropriate Mechanism for the Development and Promotion of Women Entrepreneurship), it is recommended that this part of the project should continue for the next 12 months. During this extension period, it is also recommended to review it twice at least so as to correct any deficiencies that may crop up during project implementation. Furthermore, the project should develop a set of indicators for assessing the impact of activities on a quarterly basis.
- 8. The project should develop a gender sensitization training package for top corporate management to promote female managers. This should be mainstreamed into the general policy to improve management quality in Mauritius. It is learnt that the quality of top management is emerging as one of the crucial constraints in achieving the second phase of industrialization.
- 9. As regards the further development of women entrepreneurship and on the basis of discussions held at the Indian Ocean Commission (IOC), it is

recommended that a subregional project proposal linked to the present strategy be submitted by the end of November 1994 to IOC for possible funding through the European Union. In this proposal, linkages should be developed (network, study tours, information sharing, etc..) among the countries in the subregion (Seychelles, Comores, Madagascar) as regards Women Entrepreneurship and Gender Mainstreaming.

- 10. The project should incorporate under the strategy for promotion of women entrepreneurship, the promotion of entrepreneurial culture among women with a view to promoting business start-ups in the mainstream areas of the economy and in the new emerging ones.
- 11. Recognizing the need to avoid the Rodrigues isolation syndrome in this project, it is recommended that the Ministry of Rodrigues be full time member of the Advisory Committee and also that representatives of women entrepreneurs should participate in all training and promotion activities. The project should encourage women entrepreneurs from Mauritius to do business in Rodrigues and vice versa.
- 12. Noting that the remaining funds for project activities, with respect to the third objective, are not substantial, it is recommended that Government and UNDP should seek other sources of funding. Parallel funding and cost sharing are normally encouraged by the UNDP, which should now in collaboration with relevant Agencies assist the Government to explore the prospects of bilateral assistance.
- The package of incentives to attract investors in the textile and garment sector should be reviewed by Government in collaboration with the private sector, bearing in mind the desirability of encouraging investment at the certain level of technology with more value added. There are still certain niches in the apparel sector which can still be exploited given the right incentives. At the same time every assistance should be given to help existing enterprises survive if only to maintain employment as otherwise, the social costs to Government will become unbearable if the rate of unemployment was to increase to unacceptable proportions. Affordable funding should be made available to those who are willing to upgrade but cannot afford the fees being charged at present. In this connection, the EPZDA scheme of cost sharing (i.e. sharing cost between EPZDA and a recipient firm) for consultancy services is a move in the right direction, which should be vigorously publicized among the firms.

- Education and Training are of vital importance in respect of productivity improvement and quality upgrading. IVTD should take a leading role in providing training in the various spheres of textile and garment manufacturing activities from machine repair and maintenance to design. The University of Mauritius which has only recently started textile courses and which should be provided with more training facilities in textile and garment manufacture, could be the fertile "breeding ground" for textile/garment specialists in Mauritius in the future.
- The existence in the early 1980s of a pool of unskilled labour, particularly female labour, enabled the pursuit of the strategy of exporting low-cost, low-skilled products. As the competition in the international market is becoming more intense, Government has adopted a strategy of having a well educated Mauritian society with an industrial culture. In this regard, Government is investing more in preprimary, primary and secondary/polytechnic and vocational training as well as university education and also encouraging more intensive and better interaction between educational and training institutions on the one hand and industry on the other. Government's efforts in this respect are commendable and should be reinforced.
- 16. The Government of Mauritius and its relevant Ministries and institutions, the UNDP and UNIDO are urged to see to the implementation and follow-up of the recommendations contained in this Report.

VII. LESSONS LEARNED

- 1. Most of the lessons learned from this project are classic, that is, they are related to project formulation guidelines project implementation and results achieved. However, one particular non-classic lesson emerged from this project which stands out and has profound effect on all development projects, and that is that the exceptionally fast approval of this project clearly demonstrates the importance and the necessity of close cooperation between Government and the UNDP Office in the country and the full understanding of each others aims, priorities and responsibilities.
- 2. The commitment of both parties shown in this project is also evident in the numerous project related meetings whose attendance almost always included Government's high-level policy makers and decisions makers on the one hand and on the other hand, the UNDP Resident Representative and/or the Deputy Resident Representative.

3. Experience from this project has also demonstrated that access to Government officials and the private sector by itself is not enough. Rather, enhanced visibility, undaunted persistence and cultivated goodwill are factors which influence both public and private officials in their conviction to support projects.

The classic lessons include the following:

- This project has shown that it is absolutely necessary in the promotion of projects to consider also to some extent, the social and economic factors of the perceived target groups/beneficiaries. Most of the projects planned target groups could not be assisted due to their financial and economic situation, their perception of the problems facing the garment industry and their readiness and willingness to respond to the assistance offered by a project of this type. Most of these entrepreneurs did not have to invest much in establishing their businesses at that time owing to cheap labour and ready market for their goods so it is not easy for them to understand why they should invest (fees charged for consultancy services) first in order to survive and then grow, eventually (change of mentality: from traders' to that of industrialist). There is need to better understand the local socio-economic inertia, and to take a more realistic longer-term view of project objectives.
- 5. To facilitate implementation of project without friction/constraints, it is necessary for the parties directly involved in the project implementation to have in writing unambiguous and clearly stated Terms of Reference and Job Descriptions.
- 6. Experience from this project has indicated that there is need for project promoters to have adequate knowledge about the mission and mandate of the implementing agency in order to ensure that these coincide with the objectives, outputs and activities of the project being proposed. Furthermore, the issue of the availability of counterparts with the necessary qualifications and capabilities is so important and crucial, in terms of timely delivery of outputs and sustainability, that it needs to be dealt with seriously in any project.
- 7. This project has also shown that project implementation requires not only qualified experts, and appropriate counterparts, but also the following:

- a) realistic estimation of outputs in relation to the project's resources and time frame;
- b) careful, pro-active and high quality monitoring by executing agency, and when called for, remedial action taken without any delays;
- c) project document drafted in accordance with the established guidelines, including a clear, detailed and monitorable workplan from the start and which should be brought forward periodically.
- 8. This project has once again demonstrated very clearly that direct assistance projects cannot be transformed automatically into institution or capacity building projects without making the necessary changes. Experience indicates that most institutions capacity building projects last for more than two (2) years.
- 9. The proposed methodologies of the project were inadequate to address the multi-faceted problems of the small export enterprises of EPZ. The issues and problems pertinent to the small export enterprises of EPZ are more complex, involving such aspects as finance, economics, gender, social, management and technology development and transfer.
- 10. The productivity system has proved to be practical, down-to-earth and profitable as well as rapid-result-yielding. It should be useful in the formulation of the broader strategy of MIIT to provide more efficient consulting services to the other types of SMEs.
- 11. The sustainability of the positive results achieved in this project is explained by the significant and comprehensive level of use of local participation in defining the problems and finding solutions to them.

TERMS OF REFERENCE FOR THE EVALUATION MISSION OF UNDP/UNIDO FUNDED PROJECT DP/MAR/93/002/A/01/37

PRODUCTIVITY IMPROVEMENT IN THE SMALL AND MEDIUM ENTERPRISES IN THE EXPORT PROCESSING ZONE (EPZ)

INTRODUCTION

1. Purpose of the Project:

The purpose of the project is to prepare and organize a consultancy system which can provide direct productivity improvement in the small and medium garment making factories of the Export Processing Zone (EPZ). It will help the EPZ Development Authority in training its own officers and in organizing a first team of productivity consultants; it will start training local consulting firms in productivity methodologies with the aim of disseminating such methods in the whole EPZ. The project is also intended to do for the preparation of the future computerized (CAD/CAM) Pattern making and cutting room. About the same time, the project will prepare and implement a strategy for the promotion of women entrepreneurs.

2. Background of the Project

The Export Processing Zone has been the engine of growth in Mauritius during the last decade. It grew by more than 20 per cent on average annually and firms located in it employ some 87,000 people, contributing about 13 per cent of the Gross Domestic Product and accounting for about 66 per cent of all domestic exports. The sector is characterized by a heavy concentration of textile/garments companies which employ 90 per cent of all EPZ workers and account for more than 80 per cent of all EPZ exports.

The phenomenal increase of textile/garment enterprises in the sector was prompted by the relative abundance of labour at cheap rates in the early eighties and by the easy access to the US and European markets. But the unavoidable upward pressure on wage rates as the labour supply diminished is now seriously eroding the competitiveness of the EPZ sector. The loss of comparative wage has not been compensated by a concomitant productivity growth.

Therefore, for the continued growth of the Mauritian economy, it is imperative that productivity be increased in the textile/garments sector to obtain the maximum returns from existing resources. Various reports have highlighted the weaknesses of the textile sector in terms of equipment, methods of production, marketing and management techniques. The issue is how to increase the efficiency of the sector.

The Government, conscious of the problems specific to the EPZ sector, has set up in 1991 the Export Processing Zones Development Authority with the following main objectives:

- to analyze problems facing the sector;
- to operate a documentation service;
- to commission consultancy services for export enterprises.

The Board of Administration is chaired by a member from the private sector and consists of 6 other members, 3 of whom are from the private sector. The EPZDA has prepared an action plan and the present project is one element of the plan under the heading "Effectiveness and Efficiency Improvement".

Given the weight of textile in the EPZ and given the present problems faced by establishments in that sector, the immediate objective of EPZDA will be the consolidation of that area. This will necessitate capacity building within EPZDA and the provision of advisory services to enterprises in need of support. In the medium term, a Textile Productivity Centre will be created to provide much needed backup in respect of design, product development, innovative marketing and management techniques and state-of-the-art technology.

However, while the focus will initially be on the sectoral problems of the textile sector, attention will also be given by EPZDA to the overall strategy of economic diversification, alteration of the product-mix, development of high-tech sectors and sectors with high value-added and low volume content. In fact, the productivity system to be developed by the project will later be useful for the broader strategy of the Ministry of Industry and Industrial Technology to provide efficient consulting services to all types of export SMIS.

3. Problems addressed by the project (as per Project Document)

The general problem which is addressed by the project is one of lack of productivity in small industries of the garment sector. A quick increase of productivity by means of better organization and technologies is urgently needed, because such industries have to work directly for the export market or for larger companies; the prices to be obtained from both are reduced by the heavy competition; on the other hand, the salaries are continuing to increase.

Productivity in the Enterprises (SMIs):

The EPZDA, the Chamber of Commerce and several members of the employers' associations are aware of the important gaps in productivity which exist in many small

industries dealing with garment making. However, the majority of small entrepreneurs, (who enjoyed a rather easy income increase by using low pay workers some years ago) still have to change their traders' mentality into a real industrial mentality. Because such small industries are now more exposed to international competition (before, they were working as subcontractors) it becomes a vital issue for them to have lower costs and better quality.

Industrial Engineers/Consultants:

The recent activities of the UNIDO SIS Project SI/MAR/90/801 have shown that the number and qualifications of local industrial consultants are not yet adequate to take care of the direct productivity needs of the industry. An important training programme for consultants is needed, mainly in industrial organization, diagnostics and quality control and productivity measurements. This will be the basis of the future Textile Productivity Centre.

Use of Special Attachments:

The small garment factories are not able to buy the special attachments needed to produce the different types of garment required by their clients. There is a need for an organization which will be able to rent special attachments to the industrialists. such attachments are needed in order to secure markets for the small industries.

Computerized Cutting Room:

It was also found by the EPZDA and the UNIDO consultant (of the above-mentioned SIS project) that the small garment factories suffer from the lack of CAD/CAM equipment which would enable them to prepare their patterns and models more quickly and also to reduce considerably the cutting waste. Such systems (i.e. a computerized cutting room) are not within the reach of an individual small company: there is a need for a facility providing this equipment which can be used by many such companies on a fee basis. As far as this project is concerned, it will help the EPZDA in defining the scope and use of such equipment which should be part of the future Productivity Centre.

Promotion of Women entrepreneurs:

The considerable potential of women entrepreneurship is not fully utilized in Mauritius. This is due, among others, to a general lack of technical information/support facilities to assist the promotion of women entrepreneurs.

4. Expected end-of-project situation

At the end of the one year project, the situation should be as follows:

- A team of productivity specialists will be in place at the EPZDA and will be working with adequate diagnostic tools and methodologies, directly at the enterprises;
- There will be a productivity increase of 20 50% in at least 10 small garment making factories, this will have a demonstration effect on the other SMIs of the EPZ (which number more than 400);
- Productivity contracts will have been signed between the SMIs mentioned above and possible with several other SMIs which will start productivity improvements;
- Outside local consultants will know the methodology for productivity improvement;
- Start of activities of sewing machines maintenance and special attachments section; and
- The preparation (blue print) for a computerized cutting room will be completed.

It should be noted that the project will already bring some self-sustainability within the productivity programme by organizing the productivity contracts by which the companies will pay for the services. The sewing machine maintenance and the future cutting room will also be organized on a cost covering basis.

A strategy and a technical/information service in place for the promotion of women entrepreneurs.

Evaluation

The purpose of the evaluation is to assess the achievement of the project, assess and identify the factors which have facilitated the quality of the project achievements, ascertain effectiveness of the project and its impact. It is also to examine what follow-up actions can be taken and what lessons can be drawn at the operational/organizational and policy levels. The

results of the findings should be useful to UNDP/UNIDO and the recipient country determining the preparation of follow-up programmes (with co-financing from other sources than UNDP/UNIDO).

Scope, purposes and methods of the evaluation:-

The primary purposes of the in-depth evaluation are:

- a) To assess the achievement of the project activities against its objectives and expected results;
- b) In particular, to examine how the productivity increase in small export factories has been achieved, what the real increases in productivity are, how the methodologies for productivity increase has been disseminated within the EPZ;
- c) To assess the level of training and efficiency reached by the productivity team trained by the project and by the local consulting firm also involved in the productivity programme;
- d) To identify and assess factors which facilitated or impeded project progress;
- e) To examine the institutional set-up of the productivity programme and sustainability of the same programme;
- f) To indicate priorities for the follow-up of the project based on the result achieved;
- g) In particular, to verify the payment requested from the firms for the costing system for the productivity services and if such services were possibly an obstacle for a large demand of productivity services by the SMEs of the EPZ;
- h) To examine how the preparation of the CAD/CAM Centre has progressed and what possibilities exist for its implementation with the real participation of the beneficiaries;
- To review the situation of the "Library" of special attachments to the garment industries; to examine ways to achieve these outputs of the project;

- j) To assess the establishment of a network of productivity consultants in industrial engineering and productivity,
- k) To assess the progress in implementation of a strategy on women entrepreneurship development.

The evaluation will include a review of the following:

ORIGIN

- i) How did the project fit in the national sector or sub-sector plans?
- ii) Were the project concept, design and institutional arrangements appropriate?
- iii) What was the proposed involvement of the counterpart organization and of agencies including the Ministry of Industry and Industrial Technology?
- iv) Were the proposed methodologies adequate for the problem faced by the small export enterprises of EPZ?

MECHANISM OF APPROVAL

- i) Approval process (approval procedures and criteria);
- ii) Importance of joint financing between the UNIDO/IDDA programme and the UNDP programme;
- iii) Time required for approval by UNIDO and UNDP.

EXECUTION OF THE PROJECT

- i) Implementation of the various project inputs;
- ii) Availability of counterpart resources and personnel;
- iii) Response from SMIs and importance of the productivity contracts signed by EPZDA;
- iv) Basic strategies emerging from the activities carried out under the project;

- v) Preparation of the CAD system-modalities and problems (e.g. relation with the cost-sharing);
- vi) Preparation and implementation of the strategy for Women Entrepreneurs, with the rest of the project and with the specific problems of women entrepreneurs;
- vii) Network and the linkage of trained consultants within firms in the EPZ.

QUALITY OF THE WORK DONE

- i) Quality and extent of the productivity improvements within the various SMIs;
- ii) Quality of training given to the consultants/trainees (from EPZDA and from other local consulting firms);
- iii) Manuals and methodologies: preparation of such manuals, relevance for the existing productivity programmes and assessment of Impact;
- iv) Impact of the project and overall increase of productivity and quality of the export industries.

FOLLOW-UP TO PROJECT

- i) Examination of the work plan for the remaining months of the project;
- ii) What follow-up support and/or activities are called for to ensure the optimal use of projects resources?
- iii) What conclusions can be drawn in terms of project relevance, performance and success?

LESSONS LEARNED

What are the main positive and negative lessons that can be learned from the experience under the project, in particular with respect to:

i) Sustainable development and local participation;

- ii) Development of the sector (small export industries and women entrepreneurs) at policy and programme levels;
- iii) Training methodologies and arrangements for high-level consultancy training in the industrial productivity area.

COMPOSITION OF THE TEAM

The evaluation team will composed of the following:

- One nominee of UNDP (Team Leader);
- Two nominees of UNIDO: (one specialized in productivity programmes and SMEs and the other one on Women's programmes and Gender in Development).

QUALIFICATIONS

- 1. The UNDP Consultant, who will be the Team Leader, should have an Engineering background with extensive industrial experience in planning, organization, overall experience of industrial management for small industries, preferably experience with women entrepreneurship activities. The Consultant should also have experience in the evaluation of Technical Assistance Projects.
- 2. The first UNIDO Consultant should have an Engineering background with specific expertise in productivity schemes for the garment making sector, and with experience in the evaluation of Technical Assistance Projects.
- 3. The second UNIDO Consultant would focus on the evaluation of progress made on the achievement of the third objective of the project which is to design a strategy on promotion of women entrepreneurship in Mauritius including the structuring and operationalization of an appropriate mechanism for the development and promotion of women entrepreneurship.

The consultant should have extensive experience in the promotion of Women's Programmes and Gender-in-Development.

The duration of this consultancy would be for approximately 5 working days and the consultant could join the mission in Mauritius.

The Terms of Reference for this consultant are given under item (a) below. More specifically the tasks of this consultant will include:

SCOPE, PURPOSE AND METHODS OF THE EVALUATION

a) The purpose of the evaluation on the third objective of the project is to assess the progress in the implementation of a strategy on women entrepreneurship development.

In particular:

- i) reviewing the phased implementation of the strategy at policy level as well as operational level including the Support Service Unit for Women Entrepreneurs.
- ii) to review the-institutional set-up of the operational activities of the strategy and the sustainability of the programme, including reviewing the role of the collaborating parties and their composition.
- iii) to assess the framework for operationalization of the strategy in Rodrigues and possible linkages with already existing organizations like: IVTB, SMIDO, Development Bank etc.
- iv) advise on linkages in the sub-region notably with Madagascar, Seychelles and Comores as regards Women Entrepreneurship Development and Gender Mainstreaming.

CONSULTATIONS IN THE FIELD

The mission will maintain close liaison with the Resident Representative of Mauritius, the Ministry of Industry and Industrial Technology and the Ministry of Planning, with the Association of Entrepreneurs, NGOs involved in the project and naturally, with the counterpart organization EPZDA. It will be working in close cooperation with the UNIDO Programme Officer and possibly with the UNIDO Country Director (during his visits from Madagascar).

The mission is expected to visit the project site and to establish those contacts with the small export industries, the ones directly helped by the project and the one which are in the target group.

The team will also spend time at UNIDO Headquarters to review project files and interview relevant officials responsible for the programme in the substantive units.

TIME TABLE AND REPORT OF THE EVALUATION

- The team will receive briefing and carry out desk work at UNIDO HQs to review project documentation: 3 days.
- The mission will undertake a field assignment to Mauritius for a total of 11 days.
- Preparation and presentation of the evaluation report at UNIDO HQs: 3 days.
- TOTAL (including travel time): 3 weeks.

The mission will conclude its findings with an evaluation report according to the UNIDO/UNDP format.

Proposed tentative scheduled:

29 August to 20 September 1994

LIST OF PERSONS AND INSTITUTIONS CONSULTED

SENEGAL

UNDP Mr. Dramane Ouattara Resident Representative

AUSTRIA

UNIDO Mr. Frederic Richard Acting Head. HEPD/SME Division Small and Medium Mr. I. de Pierpont **Enterprises** Ms. Anne Marie Martin Chief, Integration of Women in Industrial Development Unit Ms. Ulusay de Groot Industrial Officer, Integration of Women in Industrial Development Unit Industrial Development Mr. John-Peter Moll Officer Mr. Oscar G. Hernandez Head, Evaluation Staff Office of the Director General Mr. Farooque Imran **Evaluation Section**

MAURITIUS

Mrs. O. Y. Akérélé Resident Representative **UNDP** Mauritius and Scychelles Mr. Mahadev Jalem Deputy Resident Representative National Programme Officer Mrs. T. Yang Kam Wing Mr. Arjen Kool Programme Officer/JPO UNIDO Ms. Rubina Peeroo Project UNIDO - Support Service Officer Mr. R. Yat Sin Ministry of Industry and Permanent Secretary Industrial Technology Mr. Y. Gopaul Acting Permanent Secretary Ms. S. A. Carrim Industrial Development Officer Mrs. C. Seewooruttun **Assistant** Secretary Mr. A. Paul Senior Industrial Officer Industrial Development Mr. A. Soondur Officer Ministry of Economic Mr. G. Wong So **Deputy** Director Planning and Development (MEPD) Mrs K. Bham Singh Senior Economist Mrs. L. Dubois Permanent Secretary Ministry of Women's Rights, Child Development and Family Welfare

| Ministry of Rodrigues | Mr. S. Cassim | Permanent Secretary |
|---|------------------------|---|
| Export Processing Zone Development Authority (EPZDA) | Mr. Nikhil Treebhoohun | Director |
| | Mr. Ehsane Beedassy | Operational Analyst |
| | Mr. S. Mungur | Operational Analyst |
| | Mr. W. L. Goyarts | Expert (UNIDO) |
| | Mr. Marc Kwai Pun | Financial Analyst |
| | Mr. Raj Conhye | Administrative Secretary |
| Mauritius Export Processing Zones Association (MEPZA) | Mrs. Danielle Wong Ng | Director |
| Industrial and Vocational Training Board (IVTB) | Mr. Suresh Munboth | Director |
| Joint Economic Council (JEC) | Mr. Raj Makoond | Director |
| University of Mauritius | Mr. Ramgoolam | Lecturer Textile Unit of the Faculty of Engineering |
| | Mrs. Nalini Burn | Senior Lecturer Industrial Economist |
| Société pour la Promotion des Entreprises Spécialisées (SPES) | Mrs. Hélèna Langois | Chairperson SPES and Vice- President World Crafts Council |
| Wilto:: Associates | Mr. Donald Ha Yeung | · |
| | Ms. Lucy Fook | |
| | ··, | |

FACTORIES

Abdul Ravate Jack Tellor Manager Managing Director Nightingale Ms. Geeta Nundlall Prosimex Industrial Mr. Jean Paul Shi Shun General Manager Co. Ltd Mrs. Caroline Li Manager Victory Cathay Mr. Lee Manager Leather Network Avant Ltd. Tamak Ltd. Mrs. Lily Tsang Mang Kin Manager Safco Ltd. Mr. S. Dassoruth Centre de la Promotion de la Manager/Economist Petite Entreprise (CPPE) Mr. Jairaz Pochun (Ag) Director Small and Medium Industries Development Organization (SMIDO) Mr. c. Bhadhain Director Mauritius Export Development and Investment Authority (MEDIA) Ms. E. Ah Chong Information Assistant Ms. C. Rehaut Desk Officer Legal Advisor Ms. J. Gopaul Women Legal Action Watch Association Mr. J. Bonnelamme Secretary General Indian Ocean Commission (IOC) Mr. H. Jhumka Director Mauritius Chamber of Commerce and Industry

PROGRAMME OF WORK FOR THE EVALUATION MISSION - WEEK 1 September 11 - 16, 1994

(Mr. K. Asiedu, Mr. A. Eraneva)

| Date | Time | Activities | Mission |
|----------------------|---------|---|----------------------------|
| Sunday, Sept 11 | 10.45 | Pick up at the Airport | Mr. Asiedu+ Mr. Eraneva |
| Monday. Sept 12 | 8.45 | Meeting with the Resident Representative, UNDP Office, Port Louis. | Mr. Asiedu+ Mr. Eraneva |
| | 10.30 | Meeting with Mr. N. Treebhoohun Director of EPZDA, Port Louis. | Mr. Asiedu+ Mr. Eraneva |
| | . 13.00 | Meeting with Mr. Gopaul, Acting Permanent Secretary of the Ministry of Industry and Industrial Technology, Port Louis. | Mr. Asiedu+ Mr. Eraneva |
| | 14.30 | Meeting with the Analysis of EPZDA and with Mr. Goyarts. | Mr. Asiedu+ Mr. Eraneva |
| | 15.30 | Meeting with Mr. Wong So, Deputy Director of the Ministry of Economic Planning and Development, Port Louis. | Mr. Asiedu+ Mr. Eraneva |
| Tuesday Sept 13 | 9.00 | Visit to Jack Tellor, Pailles | Mr. Asiedu+ Mr. Eraneva |
| | 11.30 | Meeting with Mr. J. Pochun, Director of SMIDO, Coromandel | Mr. Asiedu+ Mr. Eraneva |
| | 14.30 | Visit to Nightingale Ltd, a factory owned by a woman entrepreneur, Quatre Bornes. | Mr. Asiedu+ Mr. Eraneva |
| Wednesday Sept 14 | 9.00 | Visit to Prosimex | Mr. Asiedu+ Mr. Eraneva |
| | 13.00 | Meeting with Mr. Munbodh, Director of Industrial and Vocational Training Board, Rose Hill | Mr. Asiedu+ Mr. Eraneva |
| | 15.30 | Meeting with Ms. D. Wong, Director of Mauritius Export Processing Zone Authority. | Mr. Asiedu+ Mr. Eraneva |
| | 16.00 | Meeting with EPZDA Consultants. | Mr. Asiedu+ Mr. Eraneva |

| Date | Time | Activities | Mission |
|---------------------|-------|---|----------------------------|
| Thursday Sept 15 | 9.00 | Visit to Wilton Associates, a private Consulting Firm. | Mr. Asiedu+ Mr. Eraneva |
| | 11.00 | Visit to Victory Garments, Port Louis | Mr. Asiedu+ Mr. Eraneva |
| | 14.30 | Meeting with Mr. R. Makoond, Chairman, Joint Economic Committee, Port Louis. | Mr. Asiedu+ Mr. Eraneva |
| | 15.30 | Visit to the Textile Department of the University of Mauritius, meeting with Mr. Ramgoolam, Reduit. | Mr. Asiedu+ Mr. Eraneva |
| Friday, Sept 16 | 9.00 | Visit to Cathay Enterprise. | Mr. Asiedu+ Mr. Eraneva |
| | 11.00 | Visit to Leather Networks. | Mr. Asiedu+ Mr. Eraneva |
| | 14.00 | Visit to Avant Ltd. | Mr. Asiedu+ Mr. Eraneva |
| | 16.00 | Visit to SPES, Mrs. H. Langlois, Director, Quatre Bornes. | Mr. Asiedu+ Mr. Eraneva |

PROGRAMME OF WORK FOR

THE EVALUATION MISSION - WEEK 2

September 17 - 23, 1994

(Mr. K. Asiedu, Mr. A. Eraneva, Ms. B. Gakuba)

| Date | Time | Activities | Mission |
|---------------------|-------|--|---|
| Saturday Sept 17 | 16.00 | Briefing with the UN Resident Representative - Mrs. King-Akérélé, at Angus Road, Vacoas. | Mr. Asiedu |
| Monday Sept 19 | 8.30 | Briefing with Mr. Jalem, Resident Representative a.i. and members of Evaluation Mission, UNDP Office, Port Louis. | Mr. Asiedu Mr. Eraneva Ms. Gakuba |
| | 9.00 | Meeting with Mr. Treebhoohun, Director of EPZDA. | Mr. Asiedu Mr. Eraneva |
| | 10.00 | Visit to CPPE - Moka - Mr. B. Arouff - Director of CPPE. | Ms. Gakuba |
| | 11.30 | Meeting with Mr. S. Cassam, Permanent Secretary of the Ministry for Rodrigues. | Ms. Gakuba |
| | 13.00 | Visit to Nightingale Ltd - Enterprise headed by Ms. G. Nundlall, a woman entrepreneur, Quatre Bornes. | Ms. Gakuba |
| | 13.30 | Visit to Tamak Ltd, enterprise headed by a woman entrepreneur - Mrs. Tsang Man Kin in Quatre Bornes. | Ms. Gakuba |
| | 15.00 | Meeting with Mrs. L. Dubois, Permanent Secretary of the Ministry of Women's Rights, Child Development and Family Welfare, Port Louis. | Mr. Asiedu, Ms. Gakuba |
| | 16.30 | Meeting with Mr. Dassoruth, Economist of CPPE, Moka. | |

| Date | Time | Activities | Mission |
|----------------------|-------|--|---|
| Tuesday Sept 20 | 9.00 | Meeting with Ms. Burn, Senior Lecturer at the University of Mauritius. | Mr. Asiedu Ms. Gakuba |
| | 14.00 | Meeting with Mr. Bonnelam, Secretary General, Indian Ocean Commission, Quatre Bornes. | Mr. Asiedu Ms. Gakuba |
| | 15.15 | Meeting with Mr. H. Jhumka, Chairman, Mauritius Chamber of Commerce and Industry - Port Louis. | Ms. Gakuba |
| | 16.00 | Meeting with Ms. J. Gopaul, Secretary of the Women Legal Action Watch Association. | Ms. Gakuba |
| | 19.00 | Working session with Ms. Burn, Senior Lecturer at the University of Mauritius. | Ms. Gakuba |
| Wednesday Sept 21 | 9.45 | Meeting with Mr. Munbodh, Director of the IVTB, Rose Hill. | Ms. Gakuba |
| | 11.30 | Meeting with Mr. C. Bhadhain, Director of MEDIA, Post Louis. | Ms. Gakuba |
| | 17.00 | Working session with Ms. Burn, Senior Lecturer at the University of Mauritius. | Ms. Gakuba |
| Thursday Sept 22 | 10.30 | Meeting with Mr. Yat Sin, Permanent Secretary of the Ministry of Industry and Industrial Technology. | Mr. Asiedu Mr. Eraneva |
| | 13.00 | Internal Briefing at the UNDP Office, Port Louis. | Mr. Asiedu Mr. Eraneva Ms. Gakuba |
| | 14.30 | Meeting with Mr. Yat Sin, Permanent Secretary of the Ministry of Industry and Industrial Technology, Port Louis. | Mr. Asiedu Ms. Gakuba |

| Date | Time | Activities | Mission |
|---------------------|-------|---|---|
| Friday Sept 23 | 9.00 | Working session with Ms. Dubois, Permanent Secretary of the Ministry of Women's Rights, Child Development and Family Welfare, Port Louis. | Ms. Gakuba |
| | 11.00 | Debriefing of the Evaluation Mission, UNDP Office, Port Louis. | Mr. Asiedu Mr. Eraneva Ms. Gakuba |
| Saturday Sept 24 | 11.00 | Discussion on Draft Report at UNDP Office. | Mr. Asiedu Ms. Gakuba |
| | 15.00 | Discussion with UNDP Resident Representative | Mr. Asiedu Ms. Gakuba |

Saturday morning, September 24: Departure (Frankfurt) Mr. Eraneva Saturday afternoon, September 24: Departure (Madagascar) Ms. Gakuba Sunday morning, September 25: Departure (Vienna) Mr. Asiedu

LIST OF DOCUMENTS REVIEWED OR CONSULTED

- 1. National Development Plan 1992-1994
 - Volume 1: Programmes and Policies. Ministry of Economic Planning and Development (MEPD), (Port Louis, Mauritius, March 1993).
- 2. First Quarterly Report (April 01, 1994 June 30, 1994) of the Support Service Unit for Women Entrepreneurship Development in Mauritius: Rubina Peeroo, Port Louis, Mauritius.
- 3. Fifth Country Programme for Mauritius. Governing Council of the United Nations Development Programme (UNDP) DP/CP/MAR 5. (22 April, 1993).
- 4. Dossier on Strategy for Women Entrepreneurship Development in Mauritius, UNDP Port Louis, Mauritius, May 1994.
- 5. Report on the Field Office Project Appraisal Committee (PAC) on Project MAR/93/002 Establishment of a Consultancy System for Productivity Improvement in the Small and Medium Garment Industries. (02 September, 1993.
- 6. Project Document (DP/MAR/93/002/A/01/37): Establishment of a Consultancy System for Productivity Improvement in the Small and Medium Garment Industries.
- 7. Terminal Report of the Project on Efficiency and Effectiveness Improvement in the Export Processing Zone Mauritius SI/MAR/90/801. (14 December 1992 17 July 1993).
- 8. Intermediate Report of the Project XA/MAR/93/619/11 (Productivity Improvement of the Small and Medium Industries of the garment making sector in the Export Processing Zones of Mauritius) 02 August to 17 December 1993 prepared by UNIDO.
- 9. Annual Report (1992-1993) of the Export Processing Zones Development Authority (EPZDA)
 Port Louis, Mauritius.
- 10. Project Performance Evaluation Report (PPER). Reporting Period 01 August 1993 10 June 1994. Project Number: DP/MAR/93/002.
- 11. Reorganizing Garment Manufacturing in Mauritius Technical Report to Guide Reorgnisation Efforts prepared for the Government of Mauritius by UNIDO, Vienna, (undated).

- 12. Mauritius at Crossroads: The Industrial Challenges Ahead. Ministry of Industry and Industrial Technology, Port Louis, Mauritius February 1991.
- 13. Industrial Vocational Training Board (IVTB) 5 years 1989 1994, Rose Hill, Mauritius, July 1994.
- 14. Small and Medium Enterprises in Rodrigues prepared by Jean Paul Colin, August 1994
- 15. The Situation Analysis of the Socio-Economic Status of Women in Mauritius- Condensed Version 1968-1982, Department of Social Studies, School of Social Studies and Humanities, University of Mauritius, August 1993.
- 16. Minutes of the Advisory Committee Meeting on Women Entrepreneurship Development in Mauritius July 1994
- 17. Activities of the Support Service Unit for the Women Entrepreneurship Development Unit from July-September 1994; prepared by Rubina Peeroo.
- 18. Brochure on the Centre de Promotion de la Petite Entreprise (CPPE), 1993.
- 19. The United Nations Development Programme in Mauritius: A Catalysing Force A Historical Perspective 1972-1992 published in March 1994 by UNDP Mauritius with the collaboration of Mr. Jacques Dinan as PR Consultant.
- 20. Asiedu, J.J. Kojo (1994) Reorganizing Consultancy in Africa for Resources Mobilization for Effective Science-Led and Technological Development. Unpublished Document prepared for RANDFORUM Second Presidential Forum 21-22 July 1994 in Maputo, Mozambique.