UNITED REPUBLIC OF TANZANIA - ZANZIBAR

PROGRAMME ELEMENTS ARISING FROM THE REPORT OF AN INDUSTRIAL HUMAN RESOURCES DEVELOPMENT SURVEY FOR ZANZIBAR

INDUSTRIAL HUMAN RESOURCES DEVELOPMENT SURVEY
IN ZANZIBAR

PART II

MINISTRY OF TRADE, INDUSTRY AND MARKETING

UNITED NATIONS DEVELOPMENT PROGRAMME

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

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INTRODUCTION

The eleven programme elements, which comprise Part 2 of this Report, are primarily standard technical assistance projects, but two pilot plants with a training component have been included, together with a small business dairy milk operation, which is primarily an investment project.

Although this Report has been prepared by UNIDO, it has been prepared for UNDP and the Government of Zanzibar. The projects herein are not projects, which will be implemented, necessarily by UNIDO, although they will be examined by UNIDO for possible implementation (bar one project). One project, No.4, on the handling of fish is designed specifically for execution by a non-governmental organisation. The other programme elements can be implemented by bilateral, multilateral or NGO donors.

PROGRAMME ELEMENT I:
NON-FORMAL SECTOR SURVEY

Introduction and background

In 1990, the Government of Zanzibar gave high priority to the development of a policy for the Informal Sector. An essential part of the development of this policy was to conduct the first informal sector survey. The survey was a joint activity of the Department of Statistics and the Department of Labour, co-ordinated by a steering committee chaired by the Planning Commissioner. Assistance was given by UNDP/ILO Project URT 85/011, and a Report on the Survey[1], "Background, description and analysis of survey results, constraints and policy recommendations" was prepared by Dr. M.S.D. Bagachwa of the Economic Research Bureau in Dar-es-Salaam. The constrains identified in the Report covered:

a. Obstacles faced when establishing business.
b. Problems faced when operating business
c. Problems associated with institutional and policy environment

Policy suggestions and recommendations were made in the following areas:

a. Need for informal sector support
b. Creating an appropriate institutional framework
c. Specific informal sector support programmes
d. Strengthening and updating informal sector data collection

Problems to be addressed

The last recommendation identified above emphasised the urgent need to establish and continually maintain a set of core data on the informal sector, with surveys carried out a 3-year intervals, in order to provide to policy makers a better understanding of the informal sector. While some of the constraints facing informal sector business establishment and operation, as well as defects in the institutional and policy environment, have been removed, the 1990 Report remains the only relatively comprehensive source of information on the sector.

Since 1990 the economic, policy and institutional environment has changed considerably. Agriculture has lost its former dominant role to be replaced by tourism as the driving force in the economy; the command economy and its loss making parastatals has given away to the private sector and liberalisation including trade liberalisation, and the once powerful MTIM has made, through its Department of Industry, small and medium-scale industry and micro-industry operated by co-operatives, NGOs and the informal sector, the centre of its development thrust. As a result of these changes, the economy has grown by 3 per cent per annum – 4 per cent per annum over the past 10 years. However, with population growth at about 3 per cent per annum, increases in per capita incomes have been modest. The major objective in the new millennium for Zanzibar is how to make better use of Zanzibar's human capabilities so increasing its human welfare. Since most Zanzibaris find their livelihoods in the non-formal sector, reaching the above-mentioned objective depends fundamentally in understanding the sector. A key instrument in this understanding is the preparation of a new non-formal sector survey, and its analysis in the light of the changes, which

[1] Zanzibar. The Informal Sector 1990, prepared by the Department of Statistics and the Department of Labour.

have occurred in Zanzibar's economy and policy. Thereafter, recommendations for policy and institutional change can then be made on a basis of the proper understanding of facts-on-the ground.

Scope of the non-formal sector survey

As in the 1990 survey, the aim of this survey is to give basic qualitative and quantitative information on the composition and structure of non-formal sector enterprises of the widest range of types possible. The main objective is to give policy makers information for formulating and evaluating suitable policies for both assisting existing units and also encouraging new activities in the sector. This objective will identify and encourage income generating activities and employment, on an individual, household, NGO, and co-operative basis. The main difference between this non-formal sector survey and the 1990 informal sector survey is to expand the coverage of the survey to include specific information on NGOs and co-operatives.

Specific aspects to be addressed by the survey will include, inter alia:

a. The provision of quantified data on current employment in the sector
b. To provide data for national accounts estimates of the non-formal sector
c. To provide data which will facilitate the development and reform of policy by policy-makers and planners on the development of the non-formal sector.

Project activities

The methodology adopted for the 1990 survey was excellent, as was the scope of that survey. The changes reflected below provide a greater emphasis and recognition of tourism as the driving force in the economy, and on the possible impact of tourism linkages on the informal sector.

It is suggested that activity codes reflect the provision of tourism services, and that the classification procedures adopted facilitate comparisons between activities in tourist and non-tourist areas.

The suggested listing sheet and activity codes are as follows:

Manufacturing/repair/mining/quarrying	1
Construction	2
Transportation (tourist)	3
Transportation (domestic)	4
Restaurants	5
Hotels	6
Other services	7
Keeping livestock (only urban enumeration areas)	8
Make textile products (tourist)	9
Make textile products (domestic)	10
Sewing and repair textile products	11
Other straw products, baskets, mats etc.	12

The topics included in the survey should include:[2]

(i) Qualitative data on the enterprise, i.e. activity, ownership, location, year started, etc
(ii) Quantitative data on the enterprise, i.e. initial capital investment, source of capital, value of capital etc.
(iii) Employment of the enterprise, i.e. number, sex and age, type, etc.
(iv) Information on the head of activity or enterprise etc.

Team composition and other inputs

A multi-disciplinary team would be required to carry out this study. The team composition and estimated time inputs may be as follows.

	Work months	
Professional Staff		
International Experts	2 w/m	US$ 30,000
Research Economist (team leader)	local sub-contract	Approximately US$ 80,000
Labour economist		
Statistician		
Support staff (Special Service Agreement)		
Survey enumerator		US$ 48,000
Supervisors		
Data coding assistants		
Equipment		
4 computers and peripherals		US$ 15,000
Miscellaneous		US$ 3,000
Estimated Cost		**US$ 176,000**

[2] Details are shown on p.4 –12, 1990 Report, op.cit.

PROGRAMME ELEMENT No. 2:
HRD IN TOURISM: EMPLOYMENT SURVEY OF THE TOURISM INDUSTRY

Introduction and background

It is essential to undertake an employment survey of the Tourism Industry in Zanzibar. It is only on the basis of data collected by such a survey that the country will be in a position to determine what education and training should be provided and encouraged, in order to maximize the benefits arising from this important sector.

Between 1995 and 1999 the number of hotel beds increased from 1704 to 4981, and the number of hotels, guesthouses, lodges etc. increased from 56 units to 168 units. The number of tour operatives has grown from 16 to some 96, and the number of international tourists has increased from about 56,400 to over 86,000. Yet most of the management and supervisory staff, as well as certain specialist staff in resorts providing an 'all inclusive' vacation are expatriate. Moreover, the quality of hotel and vacation services do not quite corresponds with the stated and legitimate desire of the authorities to compete at the high end of the international tourist market.

Policy that places an emphasis on high value and low volume tourism has far-reaching implications for the development and promotion of tourism, and for the education and training of staff engaged in providing tourist services. Above all, the major implication is that the type of tourism products developed and the staff and facilities that support them must be able to attract visitors that are prepared to pay a premium price. The success of such an approach depends very much on the quality of the overall visitor experience: strong product attractions, levels of accommodation and cuisine and high standards of the accompanying service. Moreover, a policy that seeks to draw the small business sector into providing tourism services implies that it would be desirable to have in place supporting advisory services (to the small business sector) as well as training schemes to ensure that the appropriate level of skills were available.

Problems to be addressed

At the present time, the training need for the hotel and tourism sector is not known in relation to quantity, skill levels, or occupations of existing staff in the industry for the annual replacement of existing staff, or for staff for new operations and the expansion of existing operations. One step towards planning for this requirement is to ensure that information is collected periodically (say every 5 years) on the type and number of people currently employed in tourism. With this data to hand, and a knowledge of the scale and direction of tourism in the years ahead – which ZIPA has – the number of people needed to serve the industry, and the skills they require can be identified.

Project objectives and activities

The aim of the survey will be to present information on the existing employment structure of the industry, to determine the need for the retraining of the existing staff in the industry, to determine the educational and training skills and the numbers required, at various levels in various sectors of the industry in the future, as well as to obtain information on tourist managers perceptions of the education and training of all their work force.

The survey should cover the following establishments:
(Management must be assured that all answers will be treated in confidence)

Hotel, guesthouses, lodges etc.
- All 4 and 5 star accommodations
- 1 in 2 of all 3 star accommodations
- 1 in 4 of all 2 and 1 star accommodations

Restaurants and bars
- 1 in 2 of all top quality providers
- 1 in 4 of all other quality providers

Tour operators
- 1 in 4 of all providers of travel and safari services etc

Other tourism services (sports, entertainment and recreation services):
- 1 in 4 of all quality providers

Specific aspects to be addressed by the study will include, inter alia:

- Nationality of the owner
- Total number of employees
- Classification of the enterprise, i.e. 1,2,3 star hotel, restaurant, etc.
- For all staff:
  - (1) name of worker
  - (2) type of worker
  - (3) sex
  - (4) age
  - (5) occupation
  - (6) education level
  - (7) training formal and informal
  - (8) language skills
  - (9) payment (per day, week or month)
  - (10) monthly value of payment in kind (food, accommodation, clothing)

scending

The manager of the business should be asked whether management was satisfied:

(i) with the education and training of all staff (a scale of 1 to 5 is suggested, in des order), Zanzibari and foreign;

(ii) with the competence and diligence of all staff (Zanzibari and foreign);

(iii) with the previous experience in tourism of all staff (Zanzibari and foreign);

The manager should be asked also:

(i) if any training was provided in the business establishment;

(ii) if so, to briefly describe this training;

(iii) whether staff were encouraged to obtain training or education outside the business;

(iv) whether management was aware of education/training facilities outside the establishment;

(v) whether management would support staff undergoing training outside the business;

(vi) if so, how? By promises of promotion, of more responsibility, by paying fully or partially fees and transport costs, by agreeing to day/week/month release on pay or otherwise to participate in education/training programs relevant to the business;

(vii) whether management would be interested in providing advice to those institutions educating and training tourism workers;

(viii) whether management would be willing to provide work-experience to tourism students for periods of 1 months, 3 months or 6 months. Would a stipend/allowance be paid? At any particular time of the year?

(ix) (To managers from subsidiaries of international hotel chains only). Whether management has provided in the past (a) training, and (b) work experience to Zanzibari senior staff at their subsidiaries outside Zanzibar;

(x) if answers to (ix) above are positive, have they been satisfied with the result;

(xi) if answers to (ix) above are negative, can they give the reason;

Team composition and input

A multi-disciplinary team would be required to carry out this study. The team composition and estimated time inputs may be as follows:

Professional Staff		
Labour economist (team leader)	2 w/m	US$ 30,000
Hotel/tourism trainer	2 w/m	US$ 30,000
Support Staff		
Interviewers (x3)	6 w/m	US$ 12,000
Data coding assistants (x2)	4 w/m	US$ 8,000
Equipment		
2 computers and peripherals		US$ 8,000
Vehicles rental (10 months)		US$ 30,000
Miscellaneous		US$ 10,000

PROGRAMME ELEMENT No. 3:
UPGRADING AND STRENGTHENING FOOD SAFETY/CONTROL ACTIVITIES IN ZANZIBAR

Introduction and background

The existing food control system, including food safety and quality control, procedures and laws, are totally inadequate to address the many present and future needs of Zanzibar. In particular, export/import food quality control needs strengthening: upgrading skills/training, equipment and modernised laws.

At present there is no systematic food quality control activities, with such activities spread over different ministries (health, agriculture, industries etc.). Only rudimentary food control measures are practised.

For many years, various industries processing food for domestic use and export have relied on the government laboratory. However, since this laboratory lacks facilities and the associated trained staff, food-processing industries are establishing their own food control activities. In some cases, to ensure export market acceptability, testing takes place outside Zanzibar, increasing production costs.

Moreover, the government has emphasised export processing zones and free port activities, and the development of tourism; consequently much food is imported, making certification and the cross checking of certification essential. The increased use of pesticides and chemical fertilisers in growing food processed in the EPZ will require effective quality control measures.

Problems to be addressed

Modern procedures and legislation

The Health Ministry's food laws enacted in 1956 are inadequate and outdated. Moreover, various ministries have their own food control activities. The effective management of food control activities requires the co-ordination of these activities under a single national food law, which government recognises. Thus a Committee has produced a daft of a new food law, but a review of this draft is required to enlarge its scope towards a much broader food controls function. Thus, an expanded committee has the potential to significantly change food control activities in Zanzibar, so providing the direction and leadership necessary to sustain progress and further build and strengthen the quality of food for export and domestic consumption. These circumstances make it imperative to establish an efficient laboratory so as to safeguard public health and enhance economic growth by making food exports more competitive.

Project objectives:

(i) to safeguard public health in Zanzibar by ensuring a safe food supply.

(ii) to enable public rebuilding and strengthening of the food control activities related to free trade zones.

Specific objectives:

(i) To upgrade the skills of the food control personnel, through training of laboratory personnel (inspectional sampling, microbiological/ chemical analyses, good laboratory procedures and practice, etc.) health authority, customs, agriculture and municipality officers and inspectors, concerning food safety and quality control measurements.

(ii) To assist in the design and rehabilitation of the Central Government Chemist Laboratory, including provision of equipment and chemicals.

(iii) To strengthen the food law reform committee in achieving effective changes by broadening its scope in to all food control fields in Zanzibar.

International inputs:

(i) Expert services

International consultant in food laboratory, sample analyses, equipment and supplies etc. – (4 work/months)

International consultant on food quality law and regulation, food control procedures, systems and management (2 work/months)

(ii) Training

Local training courses for food control staff, e.g. for laboratory personnel training in microbiological/chemical analyses, quality control and food safety.

Long-term training (3-6 months) of 5 technicians in modern laboratory practice.

Study tour (1 month) for the Government chemist and 4 food inspectors, to learn how food control laboratories have been established, operated and maintained and to acquire skills in food control and food management for export and imports.

Budget:

International consultants (Food Analyst)	4 w/m	US$ 60,000
International Expert (Quality Control)	2 w/m	US$ 30,000
National Experts	18 w/m	US$ 36,000
Training (Long term, in-service and study tours)		US$ 85,000
Equipment (Laboratory, chemicals, books, journals, computers, etc) + Vehicle – 4 wheel drive		US$ 180,000
Miscellaneous		US$ 15,000
Estimated Total		**US$ 406,000**

PROGRAMME ELEMENT NO.4: LEARNING BY DOING: THE HANDLING AND STORAGE OF FISH

Background and justification

This is an innovative proposal which aims at increasing the income of those engaged in fishing; increasing the consumption of fresh fish in Zanzibar; through a demand linkage with wood construction increasing the income of those in the informal wooden products industry; and through a supply linkage increasing the incomes of those engaged in the informal sector transport, storage and retailing of fresh fish.

Zanzibar's inshore fishing area is estimated to extend for 4,450 sq km in water 0 to 10 metres deep. Fishing is almost exclusively an artisinal activity but it plays a major role in the economy where it provides a source of employment and income for more than 10 per cent of the work force. Fish is the most important source of animal protein for about two-thirds of the population. Fishing contributes about 2.5 per cent of GDP, and about 6.3 per cent of agricultural GDP. As the economy has grown in recent years, these shares of GDP have fallen from about 6 per cent and 10 per cent respectively.[3]

The fish catch seems to be on a slightly upward trend as shown in table 1 below, through an increase in fish consumption. Note however that there reportedly are errors in the recording and computing of data shown below, significant amounts of fish are consumed by fisher households (subsistence production), and some fishers transport unrecorded amounts of fish to mainland Tanzania and to Mombasa in Kenya.

Table 1:

Year	Catch (tonnes)
1994	10,225
1995	9,789
1996	11,034
1997	9,996
1998	13,639

Source: Sulieman, op.cit.

The slight upward trend in the catch is reportedly due to an increase in investment in fishing equipment (primarily in boats and engines), which has allowed fishers to venture beyond the inshore waters towards the continental shelf, which is more resource rich than inshore waters. Indeed, there are fears that inshore fishery stocks have been stagnant or falling. Information from a 1997 Survey suggests that there were 254 landing places for fish catches in that year, and that 5,149 fishing craft were in operation, of which 391 were equipped with engines – primarily the outboard type. Most fishing vessels are traditional and made by artisinal production: canoes, dugout canoes, and out-rigger canoes some equipped with sails. Only relatively few boats have decks made of wooden planks and only decked engine powered vessels can venture into the deeper waters of the continental shelf.

[3] These data are taken from the Report, Fisheries in Zanzibar, prepared by Mr. Sulieman, UNIDO National Consultant, Dept. of Fisheries, Dec. 1999.

The Zanzibari consumer, and the tourist hotels consider fresh fish a premium product, and hardly any processing takes place. The small quantity of processing is artisinal and of very poor quality, occurring only when these catches are landed in the evening or when fish is on the verge of spoilage.

Organisation of the industry follows two patterns. In the first pattern, fishers are grouped into cooperatives, NGOs and Community Organisations, numbering more than 200 in total, with group membership numbering 5 to 10 chiefly, but some groups are larger. In the second pattern, individual fishers or unregistered groups own their boats, or boats (and equipment) are provided by traders or small business, with proceeds from the catch being shared.

Project description/activities

The essence of this project is that a foreign NGO, together with 2 or 3 local NGOs and with the participation of the Zanzibar University Centre for African Business Research and Development take the initiative in the following activities:

(a) Select the 24 most used fish landing locations for the appropriate time of the year

(b) Provide training and advice on the storage, handling and transport of fish, from the time of catch to the time of retail sale;[4]

(c) Contract with a selection of wood working small firms or informal groups the manufacture to an agreed specification of wooden or plastic insulated containers;

(d) Contract with KTC engineers the design, specification and testing of these containers, and the selection of manufacturers;

(e) Contract with one or two small traders in the small business or informal sectors the activity of the inspection, purchase and storage of fish over an agreed period, say one month, with these contracts to be renewed on the same or changed terms, for further periods;

(f) Contract with 12 transport firms in the small business or informal sector (i) to transport an agreed quantity of ice from a manufacturer as in (i) below and (ii) to purchase an agreed quantity of fish of a specified quality, and to transport this fish in simple storage containers. [Designed, specified etc. and manufactured as in (c) and (d) above.] to vendors and hotels as in (g) and (h) below. Training will be provided as in (b) above;

(g) Select and contract with 25 retail fish vendors in the informal sector and with 4 small business in the Stonetown and other markets to purchase an agreed quantity and quality of fish for sale to the public;

(h) Select and contract with 4 hotels/restaurants to purchase an agreed quantity and quality of fish for their own operations;

[4] Properly chilled/stored and handled fish remain in good condition for about 5 days. Each kilo of fish requires about a kilo of flake ice per day to keep fish in good condition. Useful information on the handling, storage and distribution of chilled fish can be found in Ice in fisheries, FAO Fisheries Report, no. 59, FAO, Rome, 1968.

(i) Contract with AFICO (a major commercial fish business based in Dar es Salaam which produces ice at a Zanzibar plant) and with Zanzibar Bottlers Ltd., the purchase of an agreed quantity of ice for use in the operations and activities described above.[5]

(j) Depending on a realistic estimate of demand and purchasing power -- through market testing -- undertake the trial production and sale of ice storage/insulated containers to the Zanzibar public.

Lessons to be learnt: learning by doing

All the activities identified above should be closely monitored and results recorded of the success/failure of each activity operation. This information should be analysed to determine where and how each activity/operation should be redesigned and improved etc. This is why the proposal has been titled 'Learning by doing'. It is envisaged, also, that depending on the success of the project there may be justification for the purchase and operation of an ice manufacturing plant by a small business operative. There are two significant risks that the project faces:

(i) That the value added by the correct handling of fresh fish along each step of the value chain results in a selling price that the ordinary Zanzibari consumer cannot meet because of low purchasing power;

(ii) That participants in the various activities of the value added chain are dishonest and/or do not live up to contractual obligations; for these reasons, the activity of monitoring, (and if necessary monitoring by the prime organisers of the monitors) is essential. However, one of the useful spin-offs from the project should be an analysis of difficulties, which would be of value in the design of other projects targeted at the poorer sections of the community.

Overview of project activities and costs

The proposed project will have to be carried out after agreement with the Zanzibar authorities. But apart from agreeing to the project, and facilitating the project through appropriate public announcement, the granting of licenses/permissions etc. where necessary, none of the costs nor activities in the project are expected to incur the expenditure of public funds.

Furthermore, as is suggested above, the project should be implemented by a foreign NGO, and it is this foreign NGO, which should provide funding for the whole of the project. As indicated earlier, it is envisaged that 2 or 3 Zanzibari NGOs as well as the Business Research Centre will participate also in the operation of the project. The main beneficiaries to the project would be some of the poorer groups in Zanzibar, although probably not the very poorest groups except indirectly, since the poorest groups are found in the non-coral rag areas and are therefore some distance from fishers communities. The first task, on the ground in Zanzibar, will be to identify and make preliminary arrangements with suitable Zanzibari NGOs, including women's groups.

The major external inputs, apart from funding, is estimated to be the use of two experts for 6 months' periods who will implement the project, and one expert for a 1 month period who should

[5] Current retail sales prices are Tsh 50 per kg flake ice from AFICO and Tsh 30/kg block ice from Zanzibar Bottlers.

analyse the project's results and make recommendations, in cooperation with the long-term experts, for its improvement.

Project inputs	*Work months*	
Expert in fish wholesale, retail distribution (split missions)	5 w/m	US$ 75,000
Economist, sociologist with experience in Micro business, the informal sectors and small Businesses	2 w/m	US$ 30,000
Experts in Community Relations and Development/ Small Business/Informal Sector (National Experts)	12 w/m	US$ 24,000
Equipment		
4 wheel drive vehicle		US$ 25,000
1 computer and peripherals		US$ 6,000
Office equipment, fax etc.		US$ 6,000
Working capital		
For the initial financing of business operations		US$ 200,000
Contingencies		US $ 24,000
Estimated Cost		**US$ 390,000**

PROJECT PROSAL No. 5:
CAPACITY BUILDING IN THE BUSINESS FINANCE SECTOR: BUSINESS PLAN AND IMPLEMENTATION STUDY OF A MICRO CREDIT AND SMALL BUSINESS FINANCE FACILITY

Introduction

It is recommended that a Business Plan and Implementation Study of a **micro-credit** and small business financing facility be prepared, and that soft financing be sought from bilateral and multilateral sources for the carrying out of such a study. The details of this recommendation are shown overleaf.

Much evidence exists showing that there is a pressing need and unsatisfied economic demand for credit from the rural areas and the small business community.[5] Krain found that the non-existence of a formal and comprehensive agricultural credit system was a serious constraint to agricultural development. Both D.I.D. and the Ministry of Agriculture have presented compelling evidence that the absence of a micro-credit and small business finance facility virtually blocks significant development in the rural areas and prevents the growth of the small business and informal sector micro-enterprises in providing goods and services to the tourism sector.

Problems to be addressed

In the planning for a micro-credit and small business lending facility the following are among the policy issues, which have to be considered:

(a) What should be the relationship of such a finance facility with a restructured PBZ, with the National Micro-credit Bank (on the mainland) or with the Cooperative and Rural Development Bank (1996) [the majority shareholders of CBRD (1996) is the Danish International Development Agency] or with other Mainland private banks which may consider opening branches in Zanzibar;

(b) Is it a feasible option that one or more of the above mentioned finance intermediaries should serve as financing channels for a line of credit focused on micro-finance and small business, provided by bilateral or multi-lateral funding sources;

(c) Can the finance facility established by BOT (The Central Bank) to assist Commercial banks in meeting seasonal demand for agricultural credit, in November 1998, be accessed by Zanzibari borrowers from the micro-credit and small business sectors.

(d) What should be the relationship of such a facility to the major sectoral departments of tourism, industry, agriculture, livestock and fisheries;

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[5] See, for example: pp.95-103 Krain, *op.cit.* pp.20-23 Entrepreneurship development within the context of industrial development in Zanzibar, by A. Andah, UNIDO Project Report DP/URT/91/027/11-60, 1997; Industrial Development Support Fund for private entrepreneur development for micro, small and medium scale industries, Department for Industrial Development, Zanzibar, March 1997; pp.182-195 Industrial Development Policies and Strategies for Zanzibar 1998-2008, D.I.D., Zanzibar, 1997; p.15, Agriculture Sector Policy, Final Draft, by the Ministry of Agriculture Livestock and Natural Resources.

(c) Would it be economically efficient to provide a portion of a soft loan finance package i.e. a grant, to the departments in (d) above, to enable these departments to provide effective promotion, extension and other support services to borrowers from the small business, group and cooperative sectors;

(f) Is it reasonable to assume that a soft-loan from a multilateral or bilateral agency will insist, as a condition of lending, that the activities in (e) above, be divorced from the activity of loan operations and loan supervision;

(g) What should be the interest spread on loans from the financing facility, assuming that this spread should cover the costs of loan appraisal, loan default, as well as the overhead costs of loan disbursements, loan supervision, and loan repayment;

(h) Since it is necessary to encourage savings in Zanzibar, is it feasible that the rate of interest at which finance is made available to the financing facility should be less than the rate of inflation?

(i) What should be the minimum loan amount from the financing facility, given that the costs of loan default, as well as loan appraisal, supervision and recovery will have to be recovered from the interest spread arising from on-lending.

Project description

1. **Summary**

1.1	Client:	Government of Zanzibar
1.2	Project:	Business Plan and Implementation Study
1.3	Estimated Cost:	US$ 125,000
	(28 work weeks, travel, DSA)	

2. Schedule of outputs

2.1	Stage 1:	Demand/Supply market survey
2.2	Stage 2:	Logistics and operational studies
2.3	Stage 3:	Consultant's review report of business plan prepared by the client

2.4 NOTE :

- The consultant's review report of the Business Plan will be used to support funding proposals presented to investors and lenders
- Stage 1 is expected to be completed within four (8) weeks of start of project.
- Stage 2 should be completed within eight (10) weeks of start of project
- Stage 3 should be completed within four (4) weeks of submission by the client of the draft Business Plan to the consultant
- The client will present the Business Plan to potential investors and lenders within six (6) months of the start of the project

N.B. This project is probably best commissioned to a consulting firm. Note also that this is not an exercise that can be consigned to a bookshelf: the project described here requires the client (GOZ) to participate through the appointment of a project team. This project team will be required to react to an interim document between stage 2 and 3, identified above.

3. Objectives

The principal objectives of the Business Plan and Implementation Study are to:

- Determine and evaluate the key policies, strategies and systems that will ensure the effective and profitable operation on a sustainable basis of the proposed micro-credit company
- Determine the operational systems and business processes that will minimise transaction costs in respect of loans of very small amounts
- Identify the strategies and processes for originating and completing loans in the Zanzibar market
- Provide a comprehensive business Plan that will be presented to potential investors in Zanzibar Microfinance Limited (ZML)

4. Activities

4.1 Initial briefing with client

4.1.1 The consultant will meet with the client's project team in Zanzibar for four (4) days for the following purposes:

- to be briefed on the proposed operations including proposed scope, tentative policies, draft financial projections and proposed sources of funding
- to agree on the format and content of the draft Business Plan
- to decide on the format and content of funding proposals to be included in the Business Plan

4.2 Interactive working between the client's projects team and consultants

4.2.1 Stage 3 requires the consultant to review the draft Business Plan prepared by the **client's project team** following receipt of the consultant's reports from stage 1 and stage 2. This will require close collaboration between the consultant and the project team. **Discussion of these two reports and input/feedback between the client and consultant will be crucial.** It is envisaged that a consultation meeting in Zanzibar will be required prior to the start of stage 3 but subsequent to the delivery of the reports from stage 1 and stage 2.

4.3 Presentations to investors and lenders

4.3.1 The consultant will be required to assist the client in presentations to selected investors and lenders as follows, in sequence:

a) In Zanzibar after completion of stage 3 - one day
b) To Dar-es-Salaam - one day
c) To African Development Bank in Abidjan - one day
d) Other parties in other cities - maximum of four days

5. Terms of reference

5.1 GOZ plans to establish a licensed financial institution to carry out microfinance operations in Zanzibar. The new company will be called "Zanzibar Microfinance Ltd" (ZML).

5.2 The operations will involve direct lending to individuals as well as lending to groups and co-operatives.

5.3 The work of the consultant will be in three stages, the first and second of which require reports to be submitted to the client.

5.4 The second stage requires:

- An understanding of the proposed characteristics and plans for the microcredit operation as currently envisaged by DID and Other Government Departments
- Completion of the first stage (demand/supply market survey) .
- The third stage (Review of Business Plan prepared by client) requires a review of the Business Plan for presentation to potential investors and lenders and cannot effectively be started until the consultant has provided the reports required to complete stages 1 and 2.

5.5 STAGE 1:
Carry out a demand and supply study in Zanzibar using an agreed basis of (a) available reports and data and (b) fieldwork[7]. The study will be based on the following terms of reference:

5.5.1 Business, demographic and social characteristics of existing entrepreneurial activity at the small and micro levels in key areas.

5.5.2 Potential types of micro business opportunities associated with characteristics of potential demand in terms of loan size, use of loans and term of loan.

5.5.3 Survey of access by small entrepreneurs to suitable financing instruments and the potential availability of funds from savings.

5.5.4 Estimates of existing supply and levels of services provided by established institutions involved with micro credit and a listing of such institutions with notes on how these institutions are funded.

5.5.5 Preliminary identification of one or two institutions in both Zanzibar and mainland Tanzania with which ZML may consider it worthwhile to form a business relationship, including equity partnership or a partnership providing certain technical support services.

5.5.6 The Demand and Supply Study will indicate and include appropriate sections, which may be included in the Business Plan.

[7] Industrial Development Support Fund for private entrepreneur development for micro, small and medium scale industries, D.I.D., Zanzibar, March 1997; Industrial development Policies and Strategies for Zanzibar 1998-2008, D.I.D., Zanzibar 1997 and other relevant reports.

5.5.7 Completion of this first Stage requires submission of a Report detailing conclusions and providing data and analyses.

5.6 STAGE 2:

5.6.1 Specifications of policies, operational structure and business processes designed to achieve optimal yield, cost efficiency and effectiveness.

- Proposed lending policies and borrower criteria
- Determination of lending rate policies
- Loan origination, documentation and disbursements
- Loan administration and collections
- Staffing and office location needs
- Transaction cost management at low levels of lending
- Identification and estimation of operating costs

5.6.2 Specifications for company structure, and start-up requirements as follows:

- Recommendations on structuring the company and its operations in view of the issues identified in Stage 1
- Identification and estimation of establishment and pre-operating costs
- Identification of suitable sources of funding
- Outline of proposal for technical services agreement with a mainland or other institution
- Staff training requirements and recommended programme

5.6.3 The logistics study will indicate and include appropriate sections, which may be included in the Business Plan.

Completion of Stage 2 requires presentation of reports detailing the related conclusions and specifications.

6. STAGE 3:

Review of the business plan prepared by the client based on the reports provided by the consultant in stages 1 and 2.

6.1 The Business Plan will cover:

- Ownership and corporate governance
- Programmes, partnerships and alliances
- Demand analyses
- Future development of the business
- Financing plan and funding proposals
- Financial objections
- Implementation plan and schedule
- Other matters as recommended by the consultant

6.2 The Consultants review of the Business Plan will be a Report in suitable form for presentation by the client and the consultant to potential investors and lenders in Zanzibar, Dar es Salaam, Abidjan, Washington etc.

PROGRAMME ELEMENT No.6:
STRENGTHENING AGRIBUSINESS,
CLOVES: PRODUCTION CUM-TRAINING UNIT

Introduction and background

Principally clove cultivation is done by smallholder farmers, mostly in pure stand clove area but also very common to find inter-crop with fruit trees. The production of cloves requires fertiliser, chemicals, hand tools, drying mats, and sisal bags; all are imported resources while coir rope and coconut leaves woven baskets are locally available. Fertiliser and chemicals are expensive and not used by farmers.

Current degree of processing and source of growth:

There are several commercial processed products of clove plants, which are mainly for export demand as local demand for cloves is negligible for both processed and unprocessed products. The current processed products are clove buds, the most important product of a clove plant.

Picked fresh cloves are de-stemmed; sun dried for 4-14 days; cleaned to remove dirty and defective cloves; and then bagged.

Other products of significance for external demand are essential oils made from clove buds, clove stems and clove leaves. These clove products are steam distilled from buds, clove stem and leaves.

The Pemba distillery plant is still running and in good condition. Current capacity is 50-100 tons per year. This capacity has not been achieved due to shortage of raw material. The degree of oil production depends on the market price of cloves. Currently the clove market price has increased from 600 to 3000 US dollars per ton, while the market price of oil is low and is therefore not produced.

Production figures for the past six years, 1993-1997

Year	Cloves (tonnes)	Clove stem (tonnes)
1993	1,843	39
1994	4,927	450
1995	1,576	251
1996	10,339	1,624
1997	2,506	1,624
1999	7,000 (up Nov.)	771

The role of informal and formal sectors:

Informal sector deals with the primary functions of production, harvesting, initial processing and packing, creates employment and generates income.

The formal sector is involved in grading, re-bagging, marketing and export. Cloves remain a confined/controlled product and Zanzibar State Trading Corporation is the **monopoly buyer,** processor and exporter (ZSTC).

Future growth:

The export demand has suffered from competition in the world market. Production is declining because of aged trees. Dying and cutting rate of trees is high about 40 per cent. Farm gate price is very low and ZSTC overhead costs are very high. Consequently ZSTC does not offer an attractive price to farmers.

The marketing personnel at ZSTC are either not well trained, or they lack the incentives to aggressively search for alternative markets or innovative products. All these factors in combination make the long-term future growth for clove exports bleak.

Existing policy for both formal and informal sectors

So far there is no officially written policy related specifically to cloves industry. However, some government regulations stipulate that cloves remain a monopoly of ZSTC. Thus the informal/private sector cannot market the crop in anyway. Likewise the individual farmer cannot decide to uproot or cut the clove tree for any reason without the permission of ZSTC.

Recently, a new agricultural policy has been drafted. This draft policy, which is yet to be passed by the House of Representatives, proposes a gradual liberalisation of clove marketing. If this occurs, the informal sector and the formal private sector may market cloves.

Skills offered in existing level of production:

- Crop husbandry techniques
- Grading of cloves

These are provided through the extension services of the Ministry of Agriculture.

Skills required for future upgrading

- Grading of cloves. This technique is a source of disagreement between the monopoly buyer (ZSTC) and sellers (farmers)
- Marketing
- Processing of new clove products
- Quality control procedures

Existing training facilities:

Extension agents – for farmers on crop husbandry and grading.

Kizimbani Agricultural Training Institute – for extension agents who are awarded certificates, also for special designed course for upgrading extension agents and special tailored courses for farmers. ZSTC staff mostly is trained outside Zanzibar even for training in upgrading.

Problems to be addressed

Production is expected to increase from the government efforts of reviving the clove industry. A big replanting campaign will be launched with a programme of seedling production to meet special targets annually. This programme aims at offsetting old aged and cut-down trees. The programme is awaiting ZSTC loan approval.

Review of existing degree of skills:

Some basic skills-workers have some basic/practical training but most of the technical personnel and managerial staff require either training or an effective incentive system from top management. It is not clear what incentives the most senior management at ZSTC faces.

Although Zanzibar is known for the production and processing of cloves, however, the most modern technologies are not used. A few Asian countries such as Indonesia and Malaysia have adapted the new/improved processing technologies in their production units. Consequently, they are much more efficient in the production of good quality processed clove products. Zanzibar could adapt these new technologies to upgrade their products rapidly, provided finance is available for investment.

Improvement of existing products:

- Zanzibar State Trading Corporation (ZSTC) should improve their outdated export standards (1960) to meet international standards. ZSTC exports only standard quality cloves: a mixture of first, second and third grade.
- Production of special quality hand picked selective head cloves. This product is very labour intensive but it is a premium product fetching higher prices.
- Low quality clove standard to be used in production of essential oils, and form part of ingredient in masala, lotions and soap industries.

Scope of the study for a pilot project: production-cum-training project:

A pilot project should be installed in the clove production area of Zanzibar. However, in order to make this pilot plant a success the synchronised inputs of the local Government through Ministries of Industries and Trade, Ministry of Agriculture and UNIDO by providing the consultants, processing materials etc would be required. A food-processing technologist should prepare a detailed study for the establishment of this pilot plant. There are no major problems in installing and starting this pilot production unit rapidly.

The estimated budget for a detailed study for the establishment of a training-cum-pilot plant is estimated at US$ 60,000. This is the first step required to revive the clove industry. A second step would require significant investment in new technology at the Pemba distillery.

PROGRAMME ELEMENT No.7:
CAPABILITY BUILDING IN DAIRY MILK PRODUCTION:
DEMAND LINKAGES WITH THE POOREST COMMUNITIES

Introduction and background

The dairy cattle herd in Zanzibar numbers about 150,000 animals; about 2/3 are poor yielding Zebu animals which yield about 350 kg of milk per lactation period, while the remaining one-third comprises mainly Fresian or Jersey, or their cross-breeds, which yield about 2,800kg of milk per lactation period. The present estimated milk consumption amounts to about 25 kg per capita, and the current retail price of milk is about 300 Tsh per kg.

At the present time (1999) dairy farming is primarily a smallholder business, and state dairy farms have either been leased or are in the process of being leased (most land in Zanzibar is owned by the Government).

There is hardly any processing of diary produce in Zanzibar, since the parastatal dairy processor ceased operation in 1995. Significant quantities of milk are sold directly from the smallholder producers to (primarily neighbourhood) consumers without being processed in any way. Milk vendors, in the informal sector, play a vital role of transporting milk directly from producers to consumers. The smallholder sector, which owns more than 6,000 head of crossbred cattle, plays a leading role towards prosperous dairy farming in Zanzibar.

The domestic demand and preference for fresh milk over milk powder in the country is increasing. Dairy by-products have become increasingly important in the informal sector: hides for leather shoemakers, and manure as an organic fertiliser. Meat has become an important part of household diets, with beef consumption estimated at 5.3 kg/capita/year in urban areas.[8]

In Zanzibar, most rural households keep much of their savings in livestock and jewelry rather than in bank deposits. Money in bank deposits loses real value because interest rates are generally lower than inflation rates: there is considerable financial repression. Moreover, some households disagree with bank deposits paying interest because of religious principles. Thus, to a considerable extent, livestock constitutes a significant 'store of value' for rural households. Some of these households have savings available, but either have no time available to care for livestock, or live in urban or semi-urban areas. At the same time, there are rural households with available labour power, but lack the financial means for the initial investment of a dairy cow. These mutual interests are brought together in Zanzibar in an arrangement known as *'Kuchunga wanyama'*, translated as caretaking/ acting as guardians of livestock, in effect a type of sharecropping, or more precisely the **share keeping** of livestock. Krain estimated that about 70 per cent of rural households had livestock, with about one-third of these households involved in the share keeping of livestock, sharing between ownership and looking after livestock equally. About one-third of all the cattle and goats in rural areas are kept under share keeping arrangements.[9]

It cannot be said with certainty that the people involved in looking after cattle and goats are the poorest people in Zanzibar, but these herdsmen (because, seemingly, this is an exclusively masculine activity in Zanzibar) involved in share keeping arrangements probably come from the

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[8] The information shown above was prepared in a report by Maryan Juma Abdallah, UNIDO National Consultant, Ministry of Agriculture, Zanzibar, December 1999.

[9] See: pp. 116-118, Krain, op.cit., from which this information is taken.

non-coral rag areas of the country, since cattle are for the most part pasture fed and pastures are poor in the coral rag areas.[10] The people in the non-coral areas are among the poorest in Zanzibar. Moreover, in these share-keeping arrangements, the herdsman is allowed to retain and sell the milk. It should be noted that the share keeping of livestock should not be seen from only a commercial point of view. Reportedly in about two-thirds of these arrangements for share keeping, the owner and the herdsman are close relatives: father and son, uncle and nephew, elder brother and younger brother. Strong ties and mutual obligation exists.[11]

Problems to be addressed

Zanzibar's economy is based primarily on tourism and subsistence agriculture. Small industries based on raw material supplied by peasant agriculture, for the most part in the poorest rural areas, i.e. the non-coral rag areas, will increase the income of these people. The supply of dairy milk to the population at large will increase nutritional and health levels among poorer groups of the population. The price of milk available to the neighbours of cattle owners and herdsmen may rise; but there is also the likelihood of unprocessed milk being made available to these poorest consumers at a price which is significantly less than the retail price of dairy processed milk. A stable market and price for milk from the dairy processor is likely to act as an incentive for the livestock keeping small holder, and the number and size of cattle herds can be expected to increase, thus increasing incomes in the poorer rural areas. Once dairy production is established, the opportunity will exist for the supply of higher value added milk products such as yoghurt, butter and perhaps cheese to the tourist industry.

Project activities

An important feature of this project is that the collection of milk at the village level is envisaged to be the responsibility of women's groups; milk collected at this level will be transported to district milk collection centres, or directly to the dairy processor. This last activity may require a government subsidy; we regard this subsidy as justified because of the impact of the project on the income of the principal beneficiaries in the rural areas.

The salient features of the project are shown below. This table was prepared principally by Mr. Ashish Kumar, the ITEC expert on assignment to the Government of Zanzibar; modifications have been made to his calculations to incorporate one further stage of processing beyond chilled pasteurised and homogenised milk, to incorporate the production of 'long life' or UHT milk. This product will be a second best product for many Zanzibaris who prefer fresh milk, but it has a long shelf life. The capital cost envisaged amounts to approximately $53,000; the project is financially and economically feasible, and further details of the project can be found in volume II of Developing and strengthening resource-based industries in Zanzibar, by Ashish Kumar, 1999 available in the Department of Industrial Development, Zanzibar.

[10] See: Report no. 14982, World Bank, op.cit.
[11] See: Krain, ibid.

Project Summary

Product	Milk processing plant	
Capacity	2,500 litres (2.5 kl) per day i.e. 900 kl per year	
Capacity utilisation	1st and 2nd year – 40% i.e. 1,000 ltrs per day 3rd and 4th year – 60% i.e. 1,500 ltrs per day 5th year onwards – 100% i.e. 2,500 ltrs per day	
Location	Zanzibar	
Fixed investment	Building-rented-200sq.mtrs @ $27/sq metre	
	Machinery	$34,000
	Furniture & fittings	2,000
	Pre-op. Expenses	1,000
	Contingency	3,000
	Total	$40,000
Initial working capital		$ 8,000
Capital structure	Owner's equity	10,000
	Debt	34,000
	Working capital	4,000
Employment	12 persons	
Main raw materials	Fresh milk – 1.05 kl/day in the 1st and 2nd year	

Source: Based primarily on Developing and strengthening resource-based industries in Zanzibar, Vol. II by Ashish Kumar, Indian Technical and Economic Cooperation Programme, December 1999. The estimates for capital costs have been increased by $5,000 to take account of one additional piece of equipment to produce one product in addition to fresh milk: this product is 'long-life' or U.H.T. milk which some consumers will purchase because they do not have refrigeration.

Challenges:

- poor farming technologies
- poor yielding varieties
- poor quality of the harvested sea weed/product, mainly with the problem of contamination by other sea weeds/green algae
- poor technical informations
- inadequate institutional support
- scarcity of investments
- poor industrial processing facilities

Project objectives

- To upgrade the skills of sea weed farmers and introduce new farming and clean processing technologies through a pilot plant operation
- A well-structured and reliable/sea weed farming operation
- Post-harvest and micro-scale sea weed processing technologies introduced in several coastal zones of Zanzibar
- Training and extension facilities for the sea weed sector strengthened

Technology

The technology choices are tied to the finished products and to the size of the plant

- Improved farming system
- Harvesting
- Drying treatments
- Packaging and storage

Technological options

Unit A: A family/micro unit, cost: $ 5,000 to $ 10,000; labour: about 5 persons

Unit B: A small unit for a village (2 to 50 farmers), cost: $20,000 to $ 30,000; labour: 30 to 50 persons

Unit C: A medium size unit for 8 to 10 villages (a cooperative unit), cost: $50,000 to $ 70,000; labour: 50 to 60 persons

Project activities

Equipment

Manual and/or mechanised farming, one small tractor, one solar dryer plus two gas/or electrical dryers, a small packaging unit, jute bags, etc.

Personnel

- Sea weed farming requires unskilled workers
- Processing treatment is more delicate and requires specialised technicians, training in seaweed processing factory
- When seaweed is processed and packed, a marketing manager/technician is necessary

Quality control

- Degree of humidity
- Microbiological tests to check the contamination with fungi/bacteria etc
- Test for the performance of equipment, and of the quality of the processed seaweed

Distribution and commercialisation

- For export, products are sold to industrial processors in good hygienic and well packaged bags
- For strategic export, an introductory commercial partner/user is recommended

Financing

The investment/turnover ratio is not high.

Other specific problems: No waste management is required, as the processing technology leaves no waste.

Agro-processing alternatives

A pilot and training plant for seaweeds processing: technological options

A. Upgrading the sea weed production and harvesting technologies
B. Upgrading drying of sea weeds: simplest to most modern processing technologies

Harvesting of sea weeds

(Only fresh seaweeds – brown and whitest/yellowish should be dried)
⇓
Sorting and inspection
⇓
Discard green and damaged weeds
⇓
Washing with sea water
⇓
Draining
⇓
Cutting by hand
(Options: seaweeds may be dried whole/entire branches
⇓
Placing /spreading in thin layers on trays
(about 3 to 5 kg/m2)
⇓

Solar, gas or electrical - Drying Chambers (with controlled Temperature 50 to 60°, and air flow humidity, no contamination/ infection)

Drying - Sun (open air)
(To moisture content not >6%, Infections with bacteria, fungus, insects)

⇓
Dried sea weed
(whitish/brownish in colour)
⇓
Packaging
(preferably in jute/airy bag)
⇓
Storage in dry places
⇓
Delivery

International inputs

	Work months	
Food processing technologist (split mission 1 month x 2, 4 months advice via email; 1 ½ days per week)	3 w/m	US$ 45,000
Multidisciplinary design and construction team (design engineer, food technician [local recruitment, KTC etc.]) (Sub-contract)	12 w/m	US$ 40,000

Equipment

Prototype dryers (KTC construction, Type A and B dryers)	US$ 50,000
Computer and peripherals	US$ 4,000
4 wheel-drive vehicle	US$ 25,000
Other equipment (humidity, temperature, etc)	US$ 5,000
Miscellaneous	US$ 10,000
Estimated cost	US$179,000

PROGRAMME ELEMENT No.9:
STRENGTHENING THE CAPACITY
OF THE CONSTRUCTION INDUSTRY AND THE BUILDING MATERIALS INDUSTRY
(CLAY)

Introduction

It is essential to undertake a detailed study of the building construction, and of the feasibility of production of clay based building materials (bricks, roofing tiles) in Zanzibar. Both industries can employ significant numbers of unskilled and semiskilled workers. Government policy places a high emphasis on the domestic supply of goods and services to Zanzibar's tourist industry. These two sectors have the possibility of supplying very significant inputs to the construction phase of tourism investment.

Problems to be addressed: building construction

Between 1995 and 1999 the number of hotel beds increased from 1,704 to 4,981, and the number of hotels, guesthouses, lodges increased from 56 units to 168 units. The construction industry has grown rapidly and in 1997 its share of Zanzibar's GDP (at factor cost) amounted to about 16 ½ per cent; over this same period growth of GDP has been about 5 per cent per annum. Currently a number of hotels are under construction increasing the stock of hotel beds by 500, and reportedly planning is well in advance for a number of new hotels. Some $60 million has been invested in the tourism sector in recent years in new hotels. Moreover, of the existing stock of hotel rooms, some 20 per cent are in need of major or minor renovation and repair.

Reportedly, however, Zanzibar building contractors are not much involved in resort hotel construction. This is despite the fact that Zanzibari beach hotels, although attractively designed, do not present formidable construction difficulties; most are single story, very often on the bungalow pattern, i.e. basically small 2 or 3 room houses. In few cases do hotel buildings exceed two stories. Reportedly, domestic contractors find their main source of business on domestic dwellings and commercial buildings for Zanzibaris. Reportedly, hotel owners proceed on the basis of (foreign) architect's plans, and they directly employ engineers, supervisors and manual workers, these latter often on a daily paid basis.

The banking system in the country is in great difficulty. The two major banks are technically insolvent (NCB and ZPB), and scheduled for restructuring and privatisation. Credit – essential in the construction industry worldwide – is almost unavailable; where available its price is high. Moreover, worldwide, civil construction is recognised to be risky; bankruptcy is frequent. All these factors represent serious barriers to be overcome in the sector. It is also likely, however, that in the relatively near future the banking sector could be placed on a sound footing, and this will alleviate one of the major constraints on the construction sector.

Objectives

The issue is whether there are other factors, which deter the domestic construction industry from fully participating in booming resort hotel construction. This is the focus of this suggested study: to determine the most important factors facing the Zanzibari civil construction industry and how these factors can be overcome.

Specific objectives to be addressed by the study will include, inter alia:

a. The current situation regarding the success of domestic civil construction contractors in successfully competing for hotel building contracts particularly for foreign owned hotels;

b. The extent to which the poor financial state of the banking system presents a major barrier in obtaining working capital and/or guarantees for financing work-in-progress;

c. The likelihood of operators in the industry successfully accessing credit from a re-invigorated Zanzibari banking system;

d. The likely position of building contractors from Zanzibar vis-à-vis competitors from the mainland and from Kenya.

e. Other relevant factors pertinent to the competence and competitive ability of Zanzibari building constructors, such as skills in preparing building estimates, planning and technical skills, availability of basic equipment etc.

Problems to be addressed: clay-based building materials

It is perfectly feasible for part of the proposed study on clay-based building materials to be carried out independently of the study on the building construction industry. However, if this is done, it is emphasised that both studies should be done concurrently and that there should be close co-operation between staff responsible for the required analysis of the market and marketing of building materials, and staff responsible for analysing the economics of the construction industry. This is because the construction industry is the main purchaser of building materials.

Reportedly, the country has deposits of good quality clay and attempts have been made by micro-operations in the informal sector to manufacture clay bricks. However, possibly because of poor mixing of the raw clay, and/or the use of incorrect and uneven temperature in crudely made clay kilns, the resulting bricks are of very poor quality. There may also be a further technical problem, namely the method used to dry the formed but unburnt clay bricks prior to their baking in the kiln, the moisture content of the raw bricks, the homogeneity of the clay etc.

As indicated below, under 'scope of the study', two innovations are incorporated in this study as follows:

a. The study will be used to implement co-operation between the domestic higher education system and domestic industry. Both the Karume Technical College and the University of Dar-es-Salaam have on their staff highly qualified professional engineers and their laboratories contain some of the equipment required.

b. In Zanzibar, potentially both the informal/co-operative sector and the small/medium-scale business sector can be engaged in brick and roof-tile manufacture. Both types of potential producers require relatively simple R&D assistance, and will require in the future testing services (e.g. compression tests on clay bricks, moisture content tests etc.). However, the implications of two types of potential producers,

manufacturing bricks on two different scales of operation, are that two types of technology will be used. It should be recalled here that clay bricks have been manufactured, worldwide, for hundreds of years. The technologies used can be very simple to fairly complex (i.e. using tunnel kilns, automatic temperature control, automated drying and firing, automatic monitoring of moisture content, etc.). An essential part of this study are two recommendations on technological choice linked to market conditions

Project activities

Specific activities to be addressed by this study will include, inter alia:

Technical

a. Identification of at least six clay deposits in Zanzibar, approximate estimate of the volume of each deposit, and the testing of clay samples from each deposit; it is desirable that two or more of the clay deposits should be in the non-coral rag area;

b. The laboratory testing and manufacture of clay bricks and tiles from samples collected as in para a. above to determine optimal rates of drying, kiln temperature and rate of temperature increase and other technological parameters.

c. The selection of two or more technological processes, one of which should be within the competence of operators from the informal sector (at an educational level equal to that of a graduate from one of Zanzibar's technical secondary schools).

d. The selection of a second technological process which might be attractive to a small business firm, employing say, less than 25 workers.

e. An indication of the countries, and approximate costs, of all equipment required in the manufacturing processes identified above. Due account should be taken of the availability of equipment produced in other developing countries.

Economic

a. An estimate of the existing and future market for bricks and tiles produced on (i) a micro-industrial scale, possibly intermittent production etc.; and (ii) a small/medium industrial scale, with the hotel construction and upmarket domestic/commercial Zanzibari market as the major purchaser.

b. Preparation of brief business plans, taking into account capital and operating costs derived from the 'technical' section above, of the various technological processes. In these business plans, the cost of short-term credit should be taken to be the current rate of inflation plus about 7 per cent per annum.
[N.B. This (economic) part of the scope of the study should be undertaken in consultation with those responsible for the study on the building construction industry.]

Team composition and input (construction industry)

A multi-disciplinary team would be required to carry out this study. The team composition and estimated time/inputs may be as follows:

	Work-months	
Building/construction business economist	3 w/m	US$ 45,000
Building/construction engineer	1 w/m	US$ 15,000
External process engineer (mechanical or chemical) (2 x 1 week split mission; e-mail advice between missions)	1.5 w/m	US$ 22,000

Team composition and input (building materials industry)

Team of civil and mechanical engineers, Geologist, drawn from Karume Technical College & D es S University	12 w/m	US$ 36,000
Local travel – Tanzania		US$ 10,000

Equipment

Computers and printers x 3 (and peripherals)	US$ 12,000
Other equipment (testing)	US$ 10,000
4-wheel drive vehicle	US$ 25,000
Miscellaneous	US$ 10,000
Estimated Total	US$ 185,000

Overview environmental assessment

NOT APPLICABLE

Building materials industry (clay)

The small/medium business operator of a brick/tile works will be located close to or next to a clay deposit. Overburden removal and quarrying operations will be unsightly but relatively minor. Chimney smoke (probably from an oil-fired kiln) will pollute, but localised pollution can be minimised by chimney height.

The volume of lorry traffic in the vicinity of the brick works will increase.

Environmental management plan

The EMP must consider the following:

a) Proper plant design/chimney height etc to minimise smoke pollution in the vicinity
b) Alternative siting of plant involving trade-offs between costs associated with plant location and unsightly but small quarry.

PROJECT PROPOAL No.10:
CAPACITY BUILDING:
A TRAINING POLICY AND PROGRAMME FOR STAFF TRAINING AT GOVERNMENT AGENCIES IN ZANZIBAR

Introduction

An outline is provided below of a training policy and programme for staff training together with measures for strengthening the capabilities of two government departments/agencies. These suggestions are based on for the most part brief discussions with officials, together with a critical examination of background policy documents, which may or may not reflect official policy. In the main body of this Report, i.e. Part I, and especially in Chapter 5, a number of policy-oriented shortcomings have been criticised. In part these shortcomings reflect the requirement to build up the capability of staff and the resources that they use. In addition, it may be the case that these shortcomings may be inherent in all government departments; we do not know, since our contact with officials of other departments was very much briefer than with the departments cited. Furthermore, policy documents and information relating to these other departments were not analysed. Almost certainly, policy targets are constantly shifting: Zanzibar is in a state of policy transition and economic transformation; some documents date from 1997. And lastly, some shortcomings may reflect disagreements/ incoherence at the political level, since these departments fall within different ministries.

Problems to be addressed

A. Strengthening the Capability of Department of Industrial Development

Zanzibar has moved a long way towards a marked based economy and a reliance on private initiative. Yet, as spelt out in Chapter 5, policy signals and proposals are identified which appear to remove control of initiative away from the private sector. Staffs seem to lack important economic knowledge and information relevant to investment decision-making.

The main policy thrust in the department is towards providing an enabling environment in which the small scale and micro-enterprise sector can thrive. Staffs do not appear to have the required economic/business skills, or other necessary skills, to create this environment in support of industry particularly at the micro-enterprise level.

There appears, also, to be a lack of understanding of the risks private investors face from competition, whether from products manufactured in Zanzibar, or from products, which are imported from the Mainland or elsewhere. The implications of trade liberalisation seem to be misunderstood. Lastly, there seems to be a lack of coherence and focus between the activities and responsibilities of DID and ZIPA. Examination of documents reveals an uncertainty of the precise role of both agencies, especially in regard to the promotion of small business and investment by domestic investors.

Zanzibar's small business and micro-enterprise sector is virtually starved of working capital and term financing. When conditions in the banking sector change, DID will be bombarded with calls for advice; DID must strive to ensure that it has the capability to deliver this advice

There is also the problem of accessing current economic information and change in the wider world. Zanzibar is small; its economy is relatively open. The staff of DID must be in the position to anticipate economic changes outside Zanzibar where these changes impact upon their domestic clientele.

There is the further problem of staff management skills, i.e. personnel management in ensuring staff provide motivated and competent services in a business-like fashion when interacting with the small business/micro-enterprise sector.

Project objectives

These problems can be overcome only on the basis of specialised education and on-the-job training, re-education and retraining and experience, and further recruitment. The need to train and retrain, etc. will not be a one-off occurrence; it will recur periodically in response to change within the economy. There will be the constant work related need to update knowledge, information, capability and skills, as has occurred indeed in response to the economic changes of the last 10-15 years.

Both problems, i.e. education/training for specialised business skills, as well as keeping up to date and 'on top of' current economic trends and economic information, can come near to being solved through the use of the desktop P.C. and the Internet as well as other distance learning arrangements. Moreover, this solution can be relatively cost effective in the area of specialised education and training; no costly airfares, tuition fees, maintenance expenses away from home etc.

The only exception to distance learning arrangements is with respect to on-the-job training and the gaining of practical experience in assisting micro-enterprises to access finances.

An elaboration of the problems identified above is contained in Part I of this Report, particularly in Chapter 5. An outline is provided below, under 'Project Activities', which go some way towards overcoming the problems described above. These project activities link the provision of cost-effective, tightly focused, training arrangements to incentive arrangements for staff performance; the supply of modern equipment to the Department will strengthen its ability in providing the enabling environment for private sector industry in Zanzibar.

Specific objectives

(a) A departmental training policy and manpower plan consistent with support of government industrial development priorities.
(b) A computer literate staff.
(c) Departmental staff equipped with the necessary skills in providing services supporting industrial development policy.
(d) A motivated staff.
(e) The provision of resources supportive of the objectives above.

Project activities

(a) The provision of basic training in the use of the computer for e-mail, Internet access, information search and retrieval etc to all staff members.

(b) The provision of staff training in specialised areas, i.e. tightly focused course modules, through distance learning arrangements, for all staff members.

(c) The design of a departmental incentive system through the provision to specialised training i.e. in personnel management and motivation, to a senior departmental officer using the arrangement in (b) (This Officer) will serve as national counterpart to the project)

(d) On-the-job training for 3 staff members, 3months each, with an adequate educational background (a diploma or first degree in economics, business studies etc) at an appropriate mainland agency engaged in micro-credit advice or provision.

(e) Providing and scheduling access by staff to departmental computers during out of duty hours.

(f) Design of a draft provisional departmental training policy during the first month of the project by the international expert and the national co-ordinator. This draft should be finalised in the 12th month of the project, together with a manpower plan for DID.

(g) The international expert and the national co-ordinator shall interview all staff to determine their training and skill requirements against a background of the department's policy priorities, at an early stage of the project.

An indication is given in Annex 1 of this programme element of the structure of the DID and provides a summary of the educational qualifications of the staff of the department.

International inputs

International inputs comprise three components: (a) expert assistance; (b) resources to be used for distance learning tuition costs and to defray the costs of on-the-job training in Mainland Tanzania; and (c) equipment costs.

External Expert Assistance

	Work months	
1 Economist with experience of specialised economic training and short courses in economics (Split mission over 1 year, 1 months, 1 month, 1 month, over 9 months period available to provide advice over the Internet, equivalent to 4 days per month)	6 w/m	US$ 90,000

Training

Resources for distance learning etc over 3 year period	US$ 250,000

Equipment costs

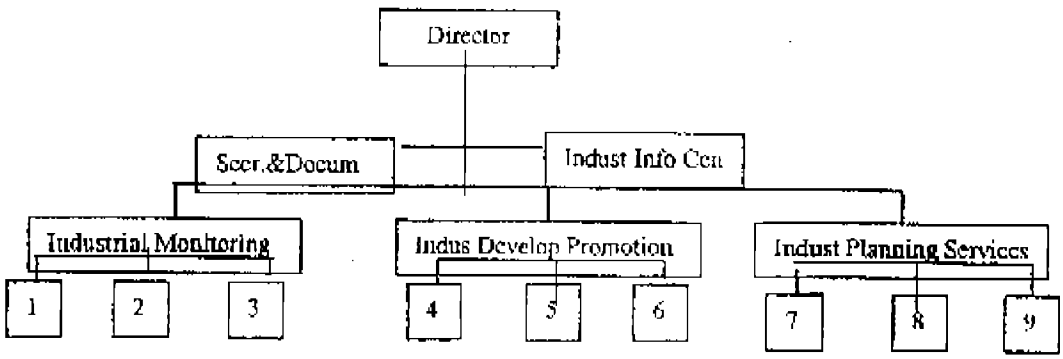
4 computers and peripherals/other office equipment	US$ 16,000
Other office equipment, FAXs etc.	US$ 5,000
1 4x4 drive Vehicle	US$ 25,000
Miscellaneous	US$ 10,000
Estimated Cost	**US$ 396,000**

DEPARTMENT FOR INDUSTRIAL DEVELOPMENT

Name of country: Zanzibar Tanzania

Name of organisation: Department of Industrial Development
Trade: Industry and Marketing

Position: Department Staff (Manpower allocation)



Organisation Chart for the Department of Industrial Development

1. Industrial licensing
2. Industrial monitoring
3. Norms and standard

4. Women in development
5. Promotion and entreprencurship development
6. Industrial extension service

7. Programme and credit
8. Industrial statistics
9. Project preparation and appraisal

Department for Industrial Development (cont'd)

a. Industrial monitoring: BSc(Eng); Diploma Food Processing; Advanced Diploma Taxation

b. Industrial Promotion Services: MSc(Ind Man/Eng); BA (Economics), Adv. Cert. of Secondary Educ.; Diploma in Languages

c. Industrial Planning Service: MAC (Economics), Advanced Cert of Secondary Education; Advanced Diploma in Accounting

d. Direction: MSc (Engineering)/ MSc (Metallurgy)

B. Strengthening the capability of the Zanzibar Investment Promotion Agency

Problems to be addressed

ZIPA's main function is the promotion of domestic and foreign private investment in Zanzibar.

Since the implementation of the Investment Promotion Act in 1986, ZIPA has been successful in obtaining letters of intent from prospective investors who have envisaged the investment of $4.4 billion of their resources in Zanzibar. While a number of important investment projects are still under active consideration by these private investors, and construction/ implementation is underway in a small proportion of the sum identified above, so far actual investment has been of the order of $131 million, or 3.1 per cent of $4.4 billion.

ZIPA is of the view that this low percentage of investment funds actually implemented may be the result of poor appraisal and monitoring techniques. ZIPA takes the view that "new strategies need to be conceived and laid down in promoting, appraising and creating an investor friendly environment. For this reason, it has proposed a strengthening of the capabilities of ZIPA. We concur only partially with this view, as indicated in Part 1 of the Report, especially in Chapter 5. There is a degree of incoherence between the activities of ZPA and DID. Moreover, the role of both institutions needs to be more sharply focused.

ZIPA needs to focus more sharply on its main role, of promoting investment, whether from the domestic private sector or the foreign private sector. Its crucial role is the promotion of investment. This role, in successful investment promotion agencies elsewhere in the developing world, or among 'economies in transition, in Eastern Europe', does not include the appraisal of private investment or the 'Privatisation of Divestiture Enterprises'[12] Investment appraisal is a role usually reserved for those – in the private sector or in Government – whose resources are put at risk in some proposed investment project. With regards to the privatisation of State-owned assets (e.g. Zanzibar's Electric Power Utility), major decision-making is usually reserved for a core department in the Ministry of Finance and/or Planning, or Government Agencies in which these Ministries are strongly represented. These Ministries have to be very much aware of any costs and benefits involved in the disposal of state assets. In contrast, any Investment Promotion Agency must be, as it were, on the side of the domestic or foreign private investor. The two functions, i.e. being on the

[12] See: Project Proposals for Assistance to Zanzibar Investment Promotion Agency, ZIPA, Government of Zanzibar, September 1999.

side of the private investor, and care in the disposal of state assets, cannot be performed, satisfactorily, by the same agency. This is not to say that ZIPA should not promote the sale of the State Electricity Company; but this role does not in any way involve negotiation of this sale.

There is a similar blurring of the role of ZIPA with regard to the responsibilities of the DID. Moreover, there is no role for ZIPA with regard to 'entrepreneurial development'.[13] Why should a state funded agency provide cautionary advice to a private investor willing to place, say, $100,000 at risk in an investment? Such an Agency should be very active in persuading such an investor to take such risks. These private investors have no difficulty, and can afford, to access advice from their own financial consultants and lawyers. The promotional services ZIPA should provide to rich investors are unrelated to the essential services that DID should provide to the small business and micro-enterprise sector. DID stands in relation to these small investors as financial consultants and lawyers stand in relation to rich investors.

If the staff of ZIPA were better trained, it is certain that more private investment would be made in Zanzibar. It should be noted, however, that such training though necessary is in no way sufficient in persuading private investors to implement prospects. Other factors (as indicated elsewhere in Part I of this report), are outside the control of ZIPA, will also be necessary.

ZIPA has proposed a training programme, which involves the provision of short courses and long courses to staff. These courses all involve travel and residence outside Zanzibar; this is not cost effective, i.e. the volume of resources spent on this type of training activity, whether derived from the Zanzibar Government or from a bilateral or multilateral donor, would be better spent elsewhere in the Zanzibar's economy (e.g. in subsidising, say, the collection and transport of milk in the non-coral rag areas, see Programme element No.7)

ZIPA has proposed that 23 short courses be provided outside of Zanzibar for officers, in the following areas:

(i) Appraisal of investment projects;
(ii) Promotion of investment opportunities;
(iii) Monitoring of investment projects;
(iv) After-care services

In our view, as noted above, the activity of investment appraisal has no place in ZIPAs activities. The other areas are legitimate -- promotion, monitoring and after-care. But investment promotion is much more important that the other two areas. As with the training programme we have proposed for DID, the most cost-effective way of providing this training is through the use of distance learning arrangements, including both correspondence courses and online training courses via the Internet. Moreover, such arrangements would provide the valuable experience of what other developing countries do to attract private investment – the most successful countries all have WebSites providing information on the advantages of investing in their countries. Moreover, the use of the Internet will allow also staff to access much useful practice and up-to-date tested research which would allow them to perform their work related tasks more effectively. A well-designed WebPage can provide information on Zanzibar to prospective investors.

With regard to the long course proposed by ZIPA for their staff, these twelve courses are all at the post-graduate level, and include six at the Masters Degree level. No doubt, all the staff involved

[13] See: ZIPA, op.cit.

would perform their job related tasks more effectively should they receive such post-graduate training. But again, such training would be much more cost effective if provided through correspondence courses and online distance learning. A variety of such course programmes are available online. In particular, we would suggest that the two officers selected to follow Master's Programme in Economics, by research, focus on the possibilities offered by globalisation in inserting a production location in Zanzibar into the global production chain and on the factors which define an enabling environment for private sector growth. Two Masters Degree dissertations investigating these issues with respect to Zanzibar would be valuable to ZIPA, and the participation of these two graduate students in the discussion forums online, which accompany such courses, would be unique.

The strategy adopted in providing training to ZIPA should be similar to the strategy with DID, i.e. an effective computer and office system, plus distance learning. As with DID, a similar objective should be an elaboration of a training policy, manpower plan, and a senior officer in ZIPA (the counterpart) taking responsibility for training within ZIPA.

Specific objectives

(a) A departmental training policy and manpower plan consistent with support of government industrial development priorities.

(b) A computer literate staff.

(c) Departmental staff equipped with the necessary skills in providing services supporting industrial development policy.

(d) A motivated staff.

(e) The provision of resources supportive of the objectives above.

Project activities

(a) The provision of basic training in the use of the computer for e-mail, Internet access, information search and retrieval etc to all staff members.

(b) The provision of staff training in specialised areas, i.e. tightly focused course modules, through distance learning arrangements, for all staff members.

(c) The design of a departmental incentive system through the provision to specialised training i.e. in personnel management and motivation, to a senior departmental officer using the arrangement in (b) (This Officer) will serve as national counterpart to the project).

(d) Design of a draft provision departmental training policy during the first month of the project by the international expert and the national co-ordinator. This draft should be finalised in the 12th month of the project, together with a manpower plan for ZIPA.

(e) The international expert and the national co-ordinator shall interview all staff to determine their training and skill requirements against a background of the Agency's policy priorities, at an early stage of the project.

International inputs

International inputs comprise three components: (a) expert assistance; (b) resources to be used for distance learning tuition costs; and (c) equipment costs.

Expert Assistance

	Work months	
1 Economist with experience of investment promotion and business/economics formal courses (Split mission over 1 year, 1 months, 1 month, 1 month, over 9 months period available to provide advice over the internet, equivalent to 4 days per month)	6 w/m	US$ 90,000

Training

Resources for distance learning etc over 3 year period	US$ 100,000

Equipment costs

3 computers and peripherals/other office equipment	US$ 12,000
Other office equipment	US$ 5,000
Miscellaneous	US$ 10,000
Estimated cost	**US$ 217,000**

C. Workshop on economic transformation and transition

Problems to be addressed

There needs to be a better understanding by the staff of DID and ZIPA, as well as other government institutions, of the problems presented by the change in the economy to one governed by free market principles and liberalisation, while being restructured from a peasant based agricultural production system to a tourism based economy.

These wide ranging problems (discussed in Part 1 of this Report, especially in Chapter 5) relate to issues such as:

(a) The impact of trade liberalisation.
(b) The supply of infrastructure services
(c) The regulatory and promotional systems
(d) Provision of new arrangements for education and training
(e) The role of the banking and financial systems on the supply and allocation of resources
(f) Policy coherence and the focus of various government agencies

Specific objectives

(a) A better understanding of the implications of the two major economic changes in Zanzibar, identified above, by the staff of DID and ZIPA, as well as other government agencies;

(b) Greater effectiveness of the staff of the two agencies identified in (a) in providing administrative services, which support the major policy priorities of the Zanzibar Government.

Project activities

The delivery of a series of lectures and the presentation of two case studies at a Workshop mounted for the staff of the Department of Industrial Development and Zanzibar Investment Promotion Agency, as well as the staff of other Ministries; participation in the discussions which form an integral part of the workshop.

The workshop should take place over a 5-day period, from about 15:00 each day, which should allow adequate time for the presentation of the lectures etc as well as for the ensuing discussions, which are an essential element of the workshop.

An outline of the workshop is shown below:

Outline of the Workshop

1. (a) Investment promotion, investment appraisal and investment regulation; their similarities and differences.

   (b) Which agency does what, and why:
   - (i) Promotion agencies
   - (ii) Investment partners and banks
   - (iii) Regulators

2. Elements of an enabling environment:
   - (i) The macro-economic environment
     - The rate of inflation
       The interest rate
   - (ii) The regulatory environment:
     - Transparency
     - Licenses: discretion and non-discretionary
     - The physical infrastructure
       - Transport
       - Utilities
     - The legal infrastructure
       - Treaty commitments and enforcement
       - Contracts and their stability
     - The efficiency of the legal system
     - Policy stability

(iii) The social environment
- For foreign direct investment
- For domestic investment
- Necessity for education and training

(iv) Support for the small business and micro-enterprise sector
- Extension services
- Advice on borrowing
- Advice on technology
- Advice on quality
- Advice on market and marketing

3. Overhead and other costs
- In production enterprises
- In services providers
- In banks

4. Inflation rates, interest rates and the risk premium in bank lending in a modern economy and in a poor economy.

5. Commercial risks and political risks in borrowing, lending and investment.

6. The economic implications of moving from a command economy to a market based economy in a least developed countries with an open trading system

- Incentives in the market for products
- Utility costs
- Monopoly and monopsony
- Employment and employment opportunities
  - Performance incentives and disincentives
  - Training and retraining
- Problems of the transition

7. The economic implications of moving from an economy based on agricultural and agro-industry to an economy based on tourism and manufacturing linked to globalisation.

- The supply of services to tourism
- Implications for education and training
- Cultural risks and opportunities
- Problems of the transition
- The role of the civil administration
- The performance of the civil administration

8. The presentation of two case studies, loosely based on Zanzibar Projects to illustrate the above:

- Sugar project (unsuccessful)
- Dairy milk (successful with subsidies)

International inputs

	Workweeks	
2 Experts in economics, (with experience of the issues identified above)	1 w/m	US$ 15,000
(Split mission: 1 expert 2 weeks, for collection of case study information and discussion with DID and ZIPA, and	0.5 w/m	US$ 10,000
2 experts 1 week each for the training workshop) and for private discussion with senior officials	0.5 w/m	US$ 10,000

Domestic inputs

- Provision of workshop facilities, facilitating staff participation in the workshop.
- Mission of one senior official from DID or ZIPA to discuss the organisation and focus of the workshop with the organisers of the workshop (costs approximately $5,000 to be borne by the workshop as above)

Estimated costs US$ 40,000

PROGRAMME ELEMENTS No.11: STRENGTHENING THE CAPABILITY OF THE KARUME TECHNICAL COLLEGE

Problems to be addressed

KTC is a well-organised technical college with a well-qualified teaching staff that have been able to keep the equipment and workshops of the college in good condition. The college faces the following problem areas:

i) The need for flexibility in course structure and course delivery
ii) Direction of expansion
iii) Renewal and expansion of facilities
iv) Industry/education linkage for applied research and development

Flexibility

Currently there are 220 students enrolled at KTC. That 220 students have been attracted to KTC is due to the fact that almost all these students are in receipt of tuition scholarships from G.O.Z. In the medium term, this is unsustainable in a country with per capita incomes in the region of $300 p.a. Moreover, the Government of Zanzibar has accepted the principle of the use of price mechanisms for tuition costs.

One way out of this dilemma is the expansion of work and study programmes, since at present students spend 10 weeks each year on supervised on-the-job training; these work and study programmes can range from 1 day plus 3 evenings study per week, to 6 months study and 6 months work per year; it is essential to combine work with study, for both civil servants and for ordinary Zanzibaris. This is one of the implications of reliance on private initiatives.

There is also the need for flexibility in course structure, i.e. content, to allow within the five departments greater choice of subjects, particularly in the second and third year of the course. Students also need to be kept informed of career patterns, especially opening and closing of future jobs opportunities.

Direction of expansion

KTC is looking, currently, at the following possibilities:

a) A diploma and advanced diploma with the aim of providing advanced studies of those who are successful in existing Full Technician Certificate (FTC) courses
b) Automotive drivers' education
c) Commercial cooking
d) Diploma in computer science
e) Computer maintenance workshop
f) Department of quality control
g) Establishing of vocational training centres
h) Improving sports complex
i) Improving the hostels
j) Improving the library, laboratories and workshops

As elaborated in Part 1 of this report, we have major reservations regarding (a) and (d). The most important item is (j), and in decreasing order of priority (h), (e), (c), (b), (g), () i.e. as follows, with the most important issues at the top of the list:

- improving the library
- improving the laboratories and workshops
- improving the sports complex
- computer maintenance workshop
- commercial cooking
- automotive drivers education
- establishing vocational training centres

In addition to improving the sports complex, sports should be brought into the mainstream of KCTC, with the training of sports instructors in those areas relevant to the tourist industry in Zanzibar, e.g. Water sports, other sports offered in the resort hotels etc. KTC needs to be equipped with a gymnasium.

With regard to library improvements, the most essential aspect of this is the provision of facilities for modern technology aided study: computers and modems, microfiche readers etc, as well as the provision of books and journals.

Perhaps the most important problem is associated with the future vision of KTC; there are two possible visions of KTC; there are two possible trends:

- more advanced instruction in the existing areas, leading perhaps to the transformation of KTC into a University
- a wider spread of courses, at the existing level of instruction, leading KTC in the direction of a broadly based polytechnic, delivering instructional services in cost-effective fashion to wherever in the community there is a demand for these services

Many of the machines used in workshops are near antiques; others have broken down beyond repair. The same holds for laboratory equipment. There is the fact also that many new types of hand-held power tools are of increasing use in Zanzibar.

In any further education institution the importance of excellent instruction is equally only by the importance of good library facilities; currently these are almost non-existent at KTC. Moreover, libraries in the year 2000 must be equipped with modern computer and telecommunication facilities, as well as books and journals. The library also allows provisions or self-teaching and private initiative in a vast range of self-improvement programmes.

New types of equipment will be necessary also for new types of instruction as envisaged in the preceding section of this Programme element, e.g. sports instruction, computer maintenance, commercial cooking, etc.

Industry/education linkage for applied research and development

Industry is in a transition stage at the present time in Zanzibar, and it is difficult to precisely identify the areas in which applied research and especially technological development are essential.

However, there are problems, which have been identified in 3 programme elements in this report, in Building Materials (clay), Seaweed Processing and Ice Containers. The budgets for these 3 projects all contain elements to fund testing and design in these product areas. An essential part of KTCs infrastructure in delivering services of this type and indeed in the development of new courses envisaged under 'Direction of Expansion', is that each staff member has to have easy access to global scientific and industrial information via an Internet connection. And each staff member should be computer literate.

One further problem area needs to be considered: to enable potential partners in the outside world to have easy access to KTC. These may be partners (from industrialised or developing countries) who wish to engage in some joint technological activity, such as selling or buying testing services, or wishing to have links with an institution which has KTCs locational advantages, i.e. climate (temperature, humidity, wind speed); insular/coral etc. Information can be provided to these potential partners through a well-designed WebPage, providing information about KTC, what KTC can offer, what Zanzibar can offer; KTC should in a short time be in a position to select various types of partners and increase the resources available for all activities.

Specific objectives

(a) A computer literate staff
(b) Updated library, workshop, and laboratory facilities
(c) New courses designed in the following areas:
- Sports instruction
- Computer maintenance
- Commercial cooking
- Automotive drivers

(d) A new gymnasium
(e) The introduction of new types of work and study programmes
(f) The initiation of cooperation in testing and design services with third parties in the economy
(g) A senior staff member trained in careers guidance
(h) A WebPage on the Internet

It is suggested that these objectives can be met via a phased programme of assistance over a 3-year period.

Project activities

(a) The provision of basic training in the use of the computer for e-mail, Internet access, information sources etc for all staff members

(b) Accessing training in careers guidance via the Internet by a senior instructor

(c) The design of new courses, assisted by a foreign expert where necessary, and initial delivery of these courses towards the middle of the project period

(d) The self-design and self-construction of a gymnasium using building materials supplied under the project

(e) Procurement and installation of a range of new library, laboratory, workshop and gymnasium/sports equipment

(f) The design and testing of new types of work and study programmes

(g) Cooperative activities with industry in design and testing

(h) The design and presentation of a WebPage for KTC

(i) Cooperative activities with academic institutions outside Zanzibar in research, design, testing etc.

International inputs

International inputs comprise three components (i) expert assistance; (ii) resources to be used for distance learning via the Internet in career guidance; (iii) resources to be used for distance learning of more sophisticated computer applications such as WebDesign, necessary types of software etc; (iv) building materials costs for a gymnasium; and (v) costs of journals, books, and equipment.

Experts:		
1 expert in sports instruction (preferably water sports; as well as providing instructions to staff and students, the expert should initiate cooperation with a foreign academic institution in this field regarding exams, standards, etc.	6 w/m	US$ 90,000
Training:		
Resources to be used for distance learning and the purchase of specialised software and applications		US$ 20,000
Equipment:		
- Building materials, plumbing etc (gymnasium, 60 sq metres)		US$ 20,000
- Journals, books etc (3-year period)		US$ 50,000
- Computer equipment and peripherals, library equipment (25 sets in number)		US$ 800,000
- Workshop, laboratory and other equipment		US$ 50,000
Miscellaneous		US$ 15,000
Estimated Cost		US$1,045,000