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Promotion of Vocational Education and Training

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REGIONAL VOCATIONAL TRAINING AND SERVICE CENTRE (RVTSC) CHANG'OMBE, DAR ES SALAAM

ASSESSMENT AND PROPOSALS REGARDING THE FUTURE ROLE OF THE RVTSC

On behalf of: Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, Eschborn, Germany

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ABBREVIATIONS

AfDB African Development Bank

ADVET Advanced Diploma in Vocational Education and Training

ATE Association of Tanzania Employers

BVT Basic Vocational Training

DANIDA Danish International Development Assistance

DSM Dar es Salaam FM Fitter Mechanic

FTC Full Technician Certificate

GTZ Gesellschaft für Technische Zusammenarbeit (GmbH)

ILO International Labour Organisation

IS Informal Sector

KfW Kreditanstalt für Wiederaufbau LMIS Labour Market Information System MoEC Ministry of Education and Culture

MoLYD Ministry of Labour and Youth Development
MVTTC Morogoro Vocational Teacher Training College

NABE National Business Examination NGO Non-Governmental Organisation

NPF National Provident Fund

NVTC National Vocational Training Centre (previous name for RVTSC

Chang'ombe)

NVTD National Vocational Training Division

RVTSC Regional Vocational Training and Service Centre

SAP Strategic Action Plan

SIDA Swedish International Development Authority

TAC Technical Advisory Committee
TEC Technical Engineering Course

TM Truck Mechanic
TP Training Provider

TSS Technical Secondary School

VET Vocational Education and Training

VETA Vocational Education and Training Authority
VETB Vocational Education and Training Board
VETF Vocational Education and Training Fund

VTC Vocational Training Centre WF Welding and Fabrication

Exchange rate (January 1998): 640 Tsh = 1 US \$

1. INTRODUCTION

1.1. Background and purpose of the Mission

The Vocational Education and Training System in Tanzania has undergone important changes over the last 4 years. These are briefly:

- a new Vocational Education and Training Act (1994),
- the introduction of a training levy,
- the establishment of an autonomous body responsible for all VET in Tanzania (VETA),
- the decentralisation of VETA to respond to regional training needs.

The GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit GmbH) advises VETA at the national and regional level (DSM Region) and has agreed to field a mission with a view to assisting the VETA Regional Director in her efforts to improve the efficiency and effectiveness of the VET system and in particular the Chang'ombe Regional Vocational Training and Service Centre (RVTSC) in Dar es Salaam.

The two consultants appointed by GTZ:

Mrs Karin Schramm (Team leader) and Mr. Dieter Moll

were entrusted with the following assignment:

- assessment of the RVTSC Chang'ombe in terms of training programmes, staff, materials, testing and financing,
- elaboration of proposals regarding the future role of this Centre within the new VET System and in relation to other training providers (see detailed Terms of Reference in <u>Annex 1</u>).

The consultants who sojourned in Tanzania from 20 January to 4 February 1998, proceeded in the following way:

- study of all relevant documents available,
- discussions with VETA management at national and regional level,
- interviews of some 25 instructors, teachers, Heads of Section and
- training managers employed at Chang'ombe (on the basis of questionnaires),
- overall assessment of facilities (buildings, equipment and tools),
- establishment of fact sheets containing the most important data for each of the 15 trades being offered at Chang'ombe,
- discussions with donor representatives (GTZ, DANIDA, SIDA, Irish Aid),
- visit to training institutions other than Chang'ombe (MVTTC, Bandari College, RVTSC Kihonda).

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Annexes 2, 3 and 4 provide details of the work programme, persons contacted and sources used.

At the end of the mission a meeting was held and the consultants presented their findings and recommendations to the VETA Regional Director Mrs. B. Ndunguru, the GTZ Chief Technical Adviser to VETA Mr. E. Gold and the GTZ Adviser DSM Region, Ms. P. Johnson. A copy of the Interim Report is attached (Annex 5).

1.2 Socio-economic context

Various documents have analysed the socio-economic situation of Tanzania in detail. The more salient features relevant in the context of this report are being recalled here (see also Annex 6).

Tanzania, one of the five poorest countries in the world, has a total population of some 27 million, 46% of whom are under 15 years. 80% of the population live in rural areas.

The economy is characterised by:

- a large agricultural sector, generating 49% of GNP, whilst industry provides 18% and the service sector 33% of GNP,
- an official unemployment rate of 13% (1993/94) to which a high rate of underemployment has to be added. Female unemployment is 16%, but estimated at over 35% in urban areas,
- formal wage employment is mainly in the public sector (65%) civil service accounting for 43% and parastatals for 23% of the formal sector work force, whereas 35% are employed by private enterprises,²
- 2 million persons work in the informal sector (1991), of whom only 2.1% have had formal skill training.

The transformation of the Tanzanian economy from a state planned to a market oriented economy is still underway. The liberalisation and privatisation process has not only meant retrenchment and unemployment for a great number of Government officials and employees of parastatals, it also implies:

- financial constraints in the social sectors (incl. education and training),
- no more automatic absorption of graduates by the public sector which in 1991 still offered 63% of all in-plant training places,3
- less and less VET graduates (21% in 1993/4) get in-plant training places to continue their 3 to 4-years' training (apprenticeship),
- an increasing number of private training providers etc.

³ Source No. 25

2

¹ Source No. 28 (Annex 4)

² Source No. 28

Furthermore, with the liberalisation of the economy, the labour market undergoes important changes. Whilst agriculture still accounts for some 80% of the employed population, the private sector is growing - from 23% of total formal sector employment in 1984 to 35% in 1991.⁴ New jobs and job profiles are being introduced (e.g. in the hotel and tourism sector, in information technology etc.), accelerated technological change has a bearing on skill requirements and levels of training (e.g. in printing and commercial/secretarial training).

The ILO estimates that "there is a need to expand technical education promotion to reach more than 44,200 technicians required by the year 2000" and suggests that the ratio between engineers/technicians/craftsmen should be improved from 1:2:14 to 1:3:18, (i.e. 1,000 engineers, 3,000 technicians and 18,000 craftsmen).⁵

The most important effect of all: formal sector employment is shrinking (less than 10% approximately) whereas self-employment and employment in the informal sector are growing: around 15% according to various sources, and up to 38% of the urban work force. 75% of all IS employment is due to self-employment. Job creation in the modern sector seems to have gone down to 10,000 p.a. However, other sources predict that employment in the private sector is likely to grow quite fast.

On the other hand, some 300,000 young people leave primary school every year. Altogether a total of approximately 600,000 to 700,000 new job seekers enter the labour market every year, including persons without school certificate with no or few skills.

2. Summary of the present VET System

2.1 Legal and organisational framework

A new Vocational Education and Training Act was introduced in 1994. The Act provides for the establishment of the Vocational Education and Training Authority (VETA), an "autonomous government agency" which took over the functions of the former governmental NVTD. VETA's role is twofold: it has a service as well as a provider role. It is the Authority responsible for the promotion of the entire VET to meet LM and social demand in all sectors of the Tanzanian economy and for the implementation of training in its own vocational training centres.⁸ A multi-partite VET Board, composed of Government, employers, workers' representatives, and non-governmental training institutions) oversees the performance of VETA and is responsible for developing VET policies and procedures. The National Board is assisted by Training Advisory Councils and 8 Regional Boards, one for each Region (a decision has been taken to increase the number of Regions/Zones to 10

⁷ Source No. 28

⁴ Last labour force survey

⁵ Source No. 27, Vol. 2

⁶ Source No. 9

⁸ At present, there are 8 RVTSCs, 8 VTCs and the MVTTC

to cover the whole of Tanzania), which determine training priorities and co-ordinate all VET at regional level.

The new VET system is financed by means of a training levy set at 2% of the wage bill of enterprises with 4 or more employees.

A Strategic Action Plan (SAP) developed in 1996 for the period 1996-1999 (Phase 1) is the basis for the implementation of the provisions of the Act and has 4 development components:

- Development of institutional structures and management systems,
- Development of Regional Boards and core RVTSCs,
- Development of the Training System,
- Developing the Vocational Teacher Training College in Morogoro.

The VET Act of 1994 sets the national policy framework for government interventions and donor assistance. The SAP has been formulated more narrowly than the Act by focusing mainly on the formal sector. Considering the significance of the informal sector for absorbing new LM entrants, this bias should be reconsidered either on the national or on the regional level in the Regional Action Plans.

2.2 VET supply

The VET infrastructure is made up of a range of private training providers (PTPs), company training centres, mission trade schools, training institutions of line ministries and 17 training centres under VETA, of which eight are RVTSCs.

In 1995, the national vocational training capacity was estimated at 46,689 places, 88% of which were in private (35%), company (22%) and mission trade schools (31%). Line ministries provided 4% and VETA centres 8% or some 3,500 training places. The RVTSC Chang'ombe with a capacity of about 700 trainees in basic training represents some 20% of all VETA training places and 43% of the existing 8 RVTSCs. Another RVTSC is under construction at Mtwara. 10

These figures do not say anything about types and length of training provided. But it is obvious that the capacity available does not meet the huge social demand (600,000 to 700,000 young people entering the LM each year). On the other hand, the existing training capacity appears to be underutilised, one of the reasons being that many training providers charge fees that cannot be afforded by trainees.

⁹ Source No. 3

¹⁰ Financed by Government

2.2.1 Training concept and programmes

Up to now, the training programmes are supply driven; but, in line with the VET Act, are expected to become demand driven in the future. The SAP stresses formal basic training combined with apprenticeship training in collaboration with firms.

The VET programmes are offered countrywide in 31 trades, varying from centre to centre though.

<u>In principle</u>, the duration of training is 3 to 4 years: 1 to 2 years of basic training in a vocational training centre and 2-3 years of practical training in a company (apprenticeship) accompanied by evening classes (theory only) preparing for trade tests grade 3, 2 and 1. <u>In reality</u>, however, very few young people find apprenticeship places after their basic centre-based training. They nevertheless enrol in evening classes (2,283 in Chang'ombe in 1997), with a view to sitting the tade tests certifying them as semi-skilled/skilled workers although most of them have little or no workplace experience.

2.2.2 Quality aspects

The quality of vocational training provided by VETA, and by other TPs is determined by:

- largely centre-based training, which is hindered by inadequate training infrastructure, lack of appropriate instructional materials and often under-qualified, poorly paid and demotivated training and management staff,
- training which does not correspond to workplace requirements since it is designed, implemented and evaluated without the active participation of employers,
- a centrally administered trade test system which is not competency based, not flexible enough and doesn't correspond to job requirements, be it in the formal or in the informal sector.
- standards and occupational profiles are outdated or do not exist at all,
- insufficient financial resources to upgrade the existing facilities and to offer training in up-to-date technology,

Under these circumstances the effectiveness of the training provided is questionable.

2.3 Labour market vs. social demand

So far, VET has been supply driven, i.e. training is organised according to infrastructure/equipment available and/or number of applicants. Also, there seems to be a tendency to increase the number of trainees in order to generate more income from fees.

As already mentioned above, the economy of Tanzania is still in a process of transformation. A quantitative as well as a qualitative appreciation of the labour market is extremely difficult as there is no established labour market information system in Tanzania and recent enterprise surveys in the DSM Region did not yield the expected results. Indeed, both DANIDA and GTZ have attempted, in collaboration with VETA and local consultants, to obtain information on the demand of skilled labour at the regional level (Dar es Salaam). The results are poor and unreliable.

There is namely no information on trade areas which should receive priority in future training programmes, nor is there an indication of type and levels of competency required, e.g. semi-skilled, skilled workers, craftsmen, supervisors, technicians etc. Employee turnover rates and replacement needs have not been clarified either.

- The requirements for a demand driven VET System and a market oriented Chang'ombe RVTSC are therefore difficult to fulfil at the moment. The consultants tried to overcome this difficulty drawing a certain number of conclusions based on the following information:
- There is a concentration of <u>formal sector employment</u> in the <u>Dar es Salaam Region</u>, evidenced by two facts: 52.3% of all VET levy registered employers are in the DSM Region and the DSM Region is the major VET levy contributor (75% of all VET funds collected between January and October 1997),¹¹
- The present <u>level of education</u> of the labour force is extremely low: "...just over 8 percent of the labour force has received any formal training" 12. This proportion is even lower as far as the female labour force is concerned (3.8%),
- Of all enterprises interviewed in a VETA/GTZ study¹³ offering some sort of inhouse training to their employees, 75% declared to do so <u>on-the-job</u>, 15% offer formal apprenticeship training and only 10% formal vocational training courses,
- 79% of these employers questioned are hence interested in sending their employees for short <u>upgrading</u> courses,
- Employers also indicated that they favour <u>formal training and job experience</u> when recruiting,
- 89% of them say that graduates should have multiple skills,
- Out of 2,031 recruits over the last 6 months, 15% were for commercial/clerical/business and general administration positions. Employment problems seem to be less acute in these areas than in traditional craft trades.

To summarise, it is under the given circumstances not possible to quantify labour market demand in terms of individual trades or levels of competency. However, it is beyond any doubt that:

¹² Source No. 27

¹¹ Source No. 17

¹³ Source No. 30

- the formal (private) sector needs better qualified staff to improve its productivity and survive in a highly competitive world. The need for <u>in-service training</u> is therefore expected to increase,
- the needs of the <u>informal sector</u> have to be taken into account. Areas, types, duration and contents of training as well as equipment/tools need to be adapted to this growing sector.

The pressure coming from **social demand** should not be underestimated though. Every year, 300,000 primary school leavers (Standard 7) cannot continue into secondary education. The transition rate in Tanzania is extremely low: 3% as compared to an average of 20% in the Sub-Saharan Africa. In addition, a great number of Form IV and Form VI leavers and school drop-outs join the labour market every year. Without the necessary skills, all these young people will find it virtually impossible to enter formal employment. With a minimum of skills they stand a better chance to find a "job" or make a living being self-employed. The population being over 80% rural, most of these young people will need <u>community based training</u>. In the urban areas, some VET training providers (e.g. mission trade schools) try to respond to the social demand.

The challenges facing the VET System are hence huge:

- a need for better qualified labour force for the formal private sector,
- training programmes more geared to the needs of the informal sector,
- a need to find an answer to the social demand,
- financially sustainable training programmes.

2.4 Financial aspects

The financial aspects will be examined at three levels:

- the VET System (2.4.1),
- the VETA Budget for the DSM Region(2.4.2),
- the RVTSC Chang'ombe (3.6).

2.4.1 Financing the VET System

Until recently, the Government (MoLYD, MoEC, MoA and other line ministries) provided and paid for all VET in Tanzania. Various donors (SIDA, DANIDA, Switzerland etc.) supported the system through their technical co-operation programmes.

Following the tight budget situation and the privatisation of enterprises, the idea of <u>cost-sharing</u> amongst the various stakeholders was introduced: trainees pay fees and the users¹⁶ are liable to pay a 2% training levy.

¹⁴ Source No 27

¹⁵ Respectively 4 and 6 years of secondary education

¹⁶ Enterprises with 4 employees and more

At the same time, the number of other training providers has gone up. These are financed by either fees from trainees or funds collected/donated (mission schools).

Following the VET Act of 1994, the establishment of VETA as an independent body and the introduction of the training levy) 17 as from 1995, the Government has withdrawn her financial contribution to the system, apart from the training provision under the line ministries.

The annual budget of VETA relies on two major sources of income as can be seen from the table below (in '000 TShs):

SOURCE OF FINANCING	1996 BUDGET ¹⁸	1997 BUDGET	1998 BUDGET PROPOSALS ¹⁹
Training levy	2,090,000	3,710,000	5,580,000 ²⁰
Fees from trainees	181,450	204,880	464,226
Income from production/servic es	79,240	194,320	296,762
Donor assistance	1,441,421	8,560,000	4,370,658
Soft loan	1,600,000	nil	nil
Miscellaneous	63,388	153,696	nil
TOTAL	5,455,499	12,822,896	10,711,646

These two sources are the levy (52% for 1998) and donor assistance (41%), the remaining 7% come from other sources such as fees and production activities.

In 1998, the total estimated budget of VETA is 10,711.646 million TShs remaining nevertheless 100% over the 1996 budget. Whereas the levy is continuously growing, donor contributions, which are development project related, vary from year to year. Hence the variations in the overall VETA budget: plus 139% in 1997, minus 19% in 1998.

¹⁸ Centralised budget

¹⁷ 2% of the total emoluments of enterprises with 4 employees and more

¹⁹ For the first time the budget is "activities based"

²⁰ Including arrears of 880 million TShs for 1997

It must be recalled that the VET System generates little income so far: school fees are low and income generating activities (production, renting of facilities and other services) are few. If an increase in fees and/or an increase in levy cannot, for social and economic reasons, be envisaged at present, such an increase may become necessary in the medium/long term. It is important that VET training institutions deliver quality training first, before asking stakeholders (employers, trainees etc.) to increase their contribution to the cost of training.

There is nevertheless a steady increase in:

- <u>levy</u> collection from 2,090 million TShs in 1996 to an estimated 4,770 million TShs in 1998. The levy collection projected for 1998 is for the first time slightly above the amount anticipated by the SAP for the same year,
- fees paid by trainees from 181.450 million TShs in 1996 to an estimated 464.226 million TShs in 1998, due to an increase in the number of trainees and not to an increase in the annual fee,
- income from production and service activities from 79.240 million TShs in 1996 to 296.762 million TShs anticipated in 1998. This represents a substantial increase although remaining modest in absolute figures or related to the income from levy.

Despite the steady increase in levy, its collection raises a number of problems:

- by mid 1997, only one third of the 12,000 companies estimated to be liable to pay the levy, had actually registered,
- levy collection was lagging behind by 11% for the period January June 1997,
- so far, SAP projections of levy collection revealed to be overoptimistic.

VETA therefore intends to apply a more aggressive approach to levy collection and even to undertake the collection herself, thus saving the 5% commission paid to the collecting agency (NPF).

On the **expenditure** side, it is noticed that, in 1998, total expenditure is budgeted at 10.5 billion TShs, which represents an overall decrease of 20% over the 1997 budget. This reduction in expenditure is above all due to a decrease of 45% in development expenditure as compared to the increase in recurrent expenditure of 43%.

The 1998 budget proposals foresee that **recurrent expenditure** will amount to 4,951,076 billion TShs or 46.2% of the total budget, the other 48.8% being devoted to development expenditure.²¹ The income from levy, fees and production/services will allow VETA to cover the foreseen recurrent expenditure (not taking into account the arrears).

<u>Staff emoluments</u> represent 35% of all recurrent expenditure. Although this percentage does not appear to be excessive, it could be reduced if instructor/trainee ratios were increased from the present 1/9 to 1/12. In 1998, the recurrent expenditure distribution is foreseen to be as follows:

²¹ Including the construction of a new RVTSC in Mtwara

RECURRENT EXPENDITURE 1998	In '000 TShs	%
VETA Head Office	1,594,644	32.2
RVTSCs ²²	2,706,525	54.7
VTSCs ²³	649,907	13.1
TOTAL	4,951,076	100.0

In the 1997 budget, the percentage of funds spent in VETA Head Office was 46% against 32.2% foreseen in 1998. This confirms that an effort is being made in favour of decentralisation. But further downsizing of the central VETA administration in favour of the regions is desirable.

2.4.2 VETA Budget for the DSM Region

The proposed 1998 **budget for the Dar es Salaam Region** amounts to 1,072 million TShs, i.e. about 40% of all VETA regions, but the RVTSC Chang'ombe receives 43% of all RVTSC trainees. This amount is distributed as follows (in '000 TShs):

ESTIMATED BUDGET 1998	In '000 TShs	% and REMARKS
DSM Regional Office: (Administration: 110,910) (Development: 400,460)	511,370	47.7% incl. a total of 247,450 for extension services/other training providers
RVTSC Chang'ombe	494,269	46.1%, see details under 3.6 below
Investment/fixed assets	67,000	6.2% for vehicles (RVTSC + Reg. Office)
TOTAL	1,072,639	100%

²² Including the VETA Regional Offices and RVTSCs (8)

²³ Eight VTCs remain after the establishment of Kihonda RVTSC (incl. Dakawa, Mikumi, Kihonda and Morogoro - so-called Day School)

The above figures show that the RVTSC Chang'ombe is supposed to receive 46.1% of the total regional budget, whereas 47.7% go to the Regional VETA Office. The latter amount includes, however, 247.750 million TShs (23.1%) for extension services. Extension services cover various activities (training of trainers, workshops, studies, surveys etc. involving private training providers as well as the informal sector, gender-training etc. The actual administrative cost of the VETA Regional Office amounts to 10.3% of the VETA budget for the DSM Region. This percentage is likely to increase when the RO will be fully functioning.

3. Assessment of the Chang'ombe Regional Vocational Training and Service Centre (RVTSC)

The RVTSC in Chang'ombe was originally founded in 1969. The Chang'ombe (ex-National Vocational Training Centre) was created to cater for the training needs at the national level in a centralised economy dominated by Government and State enterprises. It has over the years benefited from technical co-operation of various national and international donors: ILO/UNDP, DANIDA, SIDA, Switzerland, CIDA, AfDB, GTZ ...

At present the RVTSC in Chang'ombe is faced with the challenge of adapting to the new socio-economic environment asking for demand-driven training for both the formal modern and informal sectors.

The assessment which follows looks at the most important aspects with the above-mentioned objective in mind. Relevant information regarding the RVTSC and its 15 training sections has been summarised in the Annexes 12 and 13.

3.1 Training facilities: Buildings and equipment

As a result of intensive use and limited maintenance, the physical facilities and equipment are inadequate or in poor condition in all those sections not having benefited from recent donor inputs. In almost all workshops the curricula cannot be implemented properly due to equipment that is not functioning or missing altogether. In addition to the regular basic courses, the RVTSC offers evening classes, leading to trade tests grade III to I. Due to lack of equipment and tools in the workshops, e.g. for electrical installation, masonry, laboratory assistants (and even printing), neither the basic training courses nor the trade testing serve any useful purpose as they are disconnected from the world of work.

In the workshops for electrical installation and for motor rewinding, equipment does not exist at all and the masonry and tailoring sections for example are lacking adequate workshops. All buildings are in unsatisfactory condition and must be renovated. In particular, the sanitary installations are insufficient in number and in quality and the water and sewer connections do not meet hygiene standards. Because of a lack of maintenance or termite infestation, windows, doors and other wooden parts need to be replaced. In addition to minor repairs such as broken glass, plastering of cracks and improvement of appearance by painting, major repairs such as replacement of structural elements, renovation of the electrical system and roofing (roofs are largely made of asbestos, which no longer meets international health standards) need to be done.

Several workshops lack appropriate cross ventilation and in the workshop panel beating (spraying and welding) a fumes absorber is missing. For more details on physical infrastructure and equipment, see <u>Annex 13</u> (Fact Sheets).

The overall use of the RVTSC (see site plan of RVTSC in Annex 9) is affected by the following:

- parts of the site are occupied by the VETA Regional Office for administrative purposes,
- there is no utilisation plan for all buildings.

As a result, there are construction activities going on that may meet immediate ad hoc needs, but do not lead to a rational distribution of the available space and facilities. For instance, trying to accommodate a national Trade Testing Centre and the Regional Office of VETA in the former Instructor Training Unit situated in the middle of the RVTSC, reflects a lack of rational planning.

It should be mentioned here that additional construction (2 classrooms, hostel and office accommodation and a graphic computer centre) is foreseen under the request for extension of the Graphic school.

3.2 Training programmes

Training programmes offered since 1969 in the skill areas of motor vehicle mechanics, fitter/turner and carpentry/joinery have been supplemented by programmes for related occupations such as panel beating, motor rewinding etc. In addition, new training programmes were introduced for office machine mechanics, laboratory assistants and in secretarial and computer technology, to be followed in the near future by graphic trades.

At present, the RVTSC with its capacity of about 700 training places offers basic training in 15 trades. In 1997, there were 672 trainees, of whom 154 (23%) were females. Most of these trainees, i.e. 466, were in their 1st year of training. 198 trainees were in their 2nd year in one of the 5 trades offering two-years' training

courses: fitter mechanic²⁴, office machine mechanic, truck mechanic, welding and fabrication, secretarial and computer technology. Furthermore, eight trainees were participating in an "unusual" third year in the field of Fitter Mechanics.²⁵ See details in Annexes 7, 8 and 12.

Curricula call for 60% practical training and 40% theory sessions, but this cannot be achieved due to a lack of equipment and training materials. In addition, related subjects such as technical drawing, English, mathematics and civics are taught.

In addition to the basic courses mentioned, the RVTSC organises also evening classes in some 20 trades with an enrolment in 1997 of 2,283 trainees, of whom 191 (8%) were women. Following the basic centre-based training, these evening classes cover theory only, the practical training being, in principle, provided on-the-job under apprenticeship arrangements with an employer.

Evening class programmes are intended to prepare apprentices and indentured learners²⁶ for trade test examinations grade III to I (see enrolment details in <u>Annex 8b</u>). It is noteworthy that in 1997, grade III classes with 1,232 trainees and grade II classes with 660 trainees were well attended, whereas there were only 316 trainees in classes leading to the grade I trade test. One reason for this may be the difficulties experienced by trainees regarding language and technical requirements (English, engineering science and workshop management).²⁷

Owing to the economic situation, apprenticeship contracts between trainees and employers are rare. Therefore, discussion is going on, on how to promote apprenticeship training and to motivate employers to collaborate more actively.

3.3 Curricula and training materials

The current curricula are applied nationally, they are not only followed by VETA training institutions, but also by other TPs. However, most of them are outdated and meet neither labour market nor social demand. They are in no way geared to the needs of the informal sector. A "non-modularised" training structure has led to the present training duration of up to 2 years, without necessarily improving employment opportunities.

This being said, the MVTTC/VETA (together with DANIDA and SIDA) are engaged in an on-going curriculum revision exercise. Indeed, attempts are being made to "modularise" the curricula. However, this very often only means breaking the curriculum down into learning units and not in self-contained

²⁴ In the area of fitter mechanics, training is divided into fitter mechanic and fitter turner in the second year

²⁵ For this third year, a kind of "Praktikum" (practical experience) is offered for trainees, using facilities formerly established under Swiss technical co-operation

²⁶ Young people trained on-the-job without a proper apprenticeship contract

²⁷ Source No. 24

training modules preparing for an occupation or for gainful activities. The consultants saw curricula, often called syllabi, of differing types and quality. Some had been revised, but could not be applied because of lack of equipment, staff etc. (e.g. in printing, tailoring etc.).

In most of the RVTSC workshops only 50% of the curricula are covered for reasons of lack of: training materials, equipment and tools, buildings (masonry, painting) and/or underqualified staff and organisational problems (poor timing of trade tests).²⁸ In some trades, the curriculum covers several skill areas or occupations. In masonry, for instance, in addition to bricklaying, the topics of drainage, wall and floor tiling, plastering, concrete work etc., are included, each of which is an occupation in its own. While the enterprise survey in the DSM Region mentions a preference for multiple skills and although such a comprehensive multi-skill approach may be appropriate for rural areas, from the point of view of cost, specialised modular training would be preferable.

As far as secretarial training is concerned, it was confirmed by teaching staff that shorthand, for instance, continues to be included in the curriculum although it is barely used on the job. And NABE regulations still require shorthand as an exam subject. Trainees who want to be recognised as qualified secretaries have to pass the shorthand exam. Needless to say that many hours are spent teaching a subject which is of no/little use in the job, the only reason/advantage being that shorthand-typists seem to receive higher salaries than computer-typists.

Instructional materials (teaching/learning elements) are inadequate, insufficient or simply non-existent in some places. Training materials being, in principle, in English, this creates language problems because of most trainees' limited knowledge of English. This is not surprising, since up to Standard 7 (completion of primary school), Swahili is the main language of instruction. Since some instructors also have difficulties with the English language, consideration should be given to using bilingual instructional materials. This will, however, involve additional cost.

According to the Department of Training of the RVTSC, transport problems and the fact that there was only one procurement and supplies officer in 1997²⁹ further delayed matters. There was no allocation of training materials in the 4th quarter of 1997. It was suggested by most of the trainers in the RVTSC workshops that they would need twice as much money for consumables than was available in the previous year.

It must be underlined that the introduction of the training levy has not, according to centre staff, substantially improved the provision of consumables.

²⁸ Source No. 22

²⁹ There are two now

3.4 Selection and testing

3.4.1 Selection

The minimum entrance requirements for the 1 to 2 year basic training courses are:

- Standard 7 (for the trade areas); Form IV (for laboratory assistants and secretarial/computer trainees),
- minimum age: 15,
- being successful in the entrance test.

The entrance test covers mathematics, science, English and "abstract" - logical thinking. It is the same for all RVTSC candidates, whether they apply for masonry or secretarial training, which is not realistic taking into account differences in educational levels, training objectives and contents. In 1997, there was a different entrance test for the secretarial candidates, apparently an exceptional measure, not likely to be repeated.

Applicants can voice three choices as to the training they want to undertake, but it is the RVTSC which decides in which section he/she is to go.

In autumn 1997, 1,739 candidates participated in the selection examinations, of whom 234 (13%) were women. Only 447 (26%) passed and were admitted to the 1998 training courses, including 108 (24%) women. This implies that some 1,300 candidates were rejected. Those have little chances to undertake their training in another training institution, because of considerably higher fees.

Admission to <u>evening classes</u> at grade II and I levels requires that the candidate has successfully passed the previous test: e.g. trade test III is needed to attend evening classes grade II and trade test II to attend evening classes grade I.

3.4.2 Testing

At the end of their 1 to 2-years' basic training course, trainees sit an internal exam, the so-called proficiency exam. In 1997, 421 of the 436 trainees finishing their basic course³⁰ passed the final examination successfully (329 boys and 92 girls). Out of the 198 trainees in their second year of training, 152 took trade test grade III. This test can earliest be taken after 2 years of training. Success rates were not yet available.

³⁰ The drop-out rate was 6% approximately

Secretarial trainees, in addition to the internal RVTSC <u>proficiency exam</u>, can also sit the NABE³¹ stage 1 and stage 2 exams³² which are organised on subject basis (e.g. English, typing, shorthand etc.). Pass rates vary according to subjects and stage level from 40% to 86%. Surprisingly low are the results for shorthand, whether English or Swahili which were 3.7% and 12.5% respectively in 1997 for stage 3 (highest level). It is recalled that this skill is no longer used on the job.

Various difficulties in administering the trade tests were encountered. These were due to lack of facilities and consumables, bad communication with candidates and language.... Since the official language of instruction is English, most of the trainees had opted for examinations in English and received the exam papers in Swahili instead.

Other problems concern a certain mismatch between the contents of the curricula and the trade test, lack of practical projects for test purposes etc. Under these circumstances it is difficult to test practical skills. As most trainees do not have apprenticeship places where they learn these skills, the trade testing system becomes purely theoretical and fairly meaningless.

3.5 Management, instructors and support staff

From the start, it must be recalled that virtually all of the staff at Chang'ombe have been taken over from the previous NVTD in the MoLYD. They have gained all their experience under the conditions prevailing in a planned economy, without being prepared to function as trainers for either the private (formal) sector or the growing IS. They therefore have important deficiencies in terms of:

- background (technological updating),
- experience (industry experience),
- attitude (work habits, motivation etc.).

They are, to some extent, disconnected from the world of work.

3.5.1 Management

The Regional Director of VETA (DSM Region) is at present also managing the RVTSC. The VETA Regional Office being responsible for the co-ordination and supervision of all VET and the promotion of other training providers in the region and the RVTSC being a training provider along with other training providers - public and private - in the region, this inevitably leads to confusion of roles and responsibilities. Therefore, the RO cannot be involved in the management of the RVTSC and, at the same time, act independently. Also, the Regional

³² NABE stage 3 exams are taken after additional training and experience, they are the equivalent of trade test grade I

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³¹ NABE is the equivalent to trade tests at the craft level. Since 1996, Chang'ombe is one of the 11 NABE examination centres in Tanzania, 9 of which are in the DSM Region

Chairpersons meeting in Iringa in January 1998 has recommended³³ that the RO premises be outside the RVTSC thus stressing a clear distinction of the two entities. This recommendation is fully endorsed by the consultants, but needs to be approved by the National Board.

At present, the RVTSC is organised into 3 major trade groups (mechanical, electrical and civil trades),. The 4th group "other trades" is a mixture of various training programmes - tailoring, secretarial & computer, laboratory assistants, printing and motor rewinding.³⁴ In the absence of the two <u>training managers</u>, presently undergoing vocational teacher training at the VTTC in Morogoro, there is an acting training manager (mechanical trades) responsible for the day to day operation of the Centre as a whole. None of them seems to have had any managerial training and it is doubtful whether they would be recognised as competent discussion partners by private sector employers.

In fact, the 1998 budget provides for 5 managerial positions at Centre level, including 3 training managers, but no Centre Manager. This set-up is obviously not satisfactory and needs to be reviewed (see proposal under 6.1 below and <u>Annex 11</u>).

3.5.2 Instructors

The present official denomination is "vocational teacher". In this report, "instructor" is being preferred, even if sometimes "teaching staff" or "vocational teacher" is used indistinctly.

As far as quantity is concerned, in 1997 the RVTSC had 73 skill/workshop instructors plus 12 related subjects teachers for a total of 672 trainees in 14 trades. The average instructor/trainee ratio was therefore 1/9.2 for skill instructors. This ratio is higher than indicated in other reports, but could certainly be improved further. The Report of the Training Department claims a shortfall of 5 instructors/teachers, 2 of whom in English language teaching. Usually, there are 1 to 3 instructors per section, with a few exceptions:

fitter mechanic: 28 instructors
truck mechanic: 14 instructors
welding & fabrication: 6 instructors
printing: 6 instructors
office machine mechanic: 4 instructors.

Regarding <u>quality</u>, the picture varies a lot. The minimum educational background is Primary School Certificate (Standard 7). But about half of the instructors/HoS have attended secondary school up to Form IV and even Form VI (O- and

³³ Source No. 18: Iringa Resolution, 27th January 1998

³⁴ Source No. 22

³⁵ Without the Graphic School which is not yet operational

A-levels respectively). Whilst most of the instructors have passed trade test grade I, some 25% hold the Full Technician Certificate awarded by the Technical College (post-secondary education) under the Ministry of Science, Technology and Higher Education.

The majority of instructors have received some kind of instructor training and have often also had some industry experience. 188 vocational teachers (mainly for fitter mechanics, truck mechanics and welding and fabrication) have, between 1980 and 1992, received instructor training organised by the NVTD/MoLYD.³⁶ In 1992, the responsibility for instructor training was transferred to the VTTC in Morogoro, at least as far as training methodology is concerned. Others have benefited from staff development measures implemented under the Swiss technical co-operation project (1979/93). 25 instructors received further training in either Switzerland or Great Britain. In 1993, 18 of them still remained at Chang'ombe. However, according to the Swiss end-of-project evaluation, the instructor upgrading was too short and salaries too low, so that instructors often had a second job or left.

At present there is little skill upgrading or further training in the technical sections apart from the printing trade and the computer training area, where some upgrading takes place. It is generally admitted that the present instructors who have limited industry experience are not capable of training for the modern private sector. Another problem is that the staff often lacks the necessary drive and the motivation. Mentalities reed to be changed. It should be recognised though that with the given training environment (infrastructure, curricula, training materials, salary structure etc.) there is little incentive to do more and better.

3.5.3 Support staff

In 1997, there were 15 support staff at the Centre, including 4 drivers. In the budget proposals for 1998, there are a total of 16 support staff mentioned. There is no proper secretariat at Centre level as the Regional Director acts as "Centre Manager" at present.

3.6 Budget and financing

The <u>budget of the RVTSC</u> comes under the consolidated DSM regional budget which amounts to 1,072.639 million TShs. There is no strict separation of the two entities in terms of budgeting which might create some confusion.

The RVTSC Chang'ombe represents 46.1% of the overall VETA budget for the DSM Region, the remaining 53.9% are spent on:

³⁶ Source No 20

- the administration of the RO,
- extension services/other training providers,
- fixed assets/vehicles.

The total **expenditure** for the RVTSC is estimated at 604.531 million TShs. As can be seen from the table below, the Training Department accounts for 57.5%, the Administration Department for 39.7% and Trade Testing for 2.7% of the total expenditure.

ESTIMATED EXPENDITURE 1998	AMOUNT in '000 TShs	TOTAL
Training Department:		347,809 ³⁷
Personnel emoluments Cost of training	191,699 156,110	
(600 basic trainees, 2,000 evening class trainees,		
Administration Department		240,177 ³⁸
Personnel emoluments Other staff expenses General operations/other (electricity, water etc.)	81,448 66,161 92,568	
Trade testing		16,545 ³⁹
(4,400 applicants, plus 600 NABE candidates)		
TOTAL EXPENDITURE (Gross) ⁴⁰		604,531

For the first time in VETA budget forecasting, an attempt has been made to determine the **cost of training** with a breakdown according to the type of activity:

³⁷ Income of TShs 107,270 million not taken into account

³⁸ Income of 2.992 million TShs not taken into account

³⁹ Against an estimated income from trade test fees of 13.590 million TS hs which do not cover expenses for trade testing

⁴⁰ Excluding 67 million TShs for fixed assets/vehicles for RO and RVTSC

TYPE OF TRAINING	AMOUNT in '000 TShs	%
Workshop training	90,431	57,9
Classroom training	19,049	12,2
Evening classes	10,543	6,8
Short courses	21,751	13,9
Other (games, sports, first aid etc.)	14,336	9,2
TOTAL	156,110	100, 0

The budget line "cost of training" includes all direct trainee related training costs exclusive of staff emoluments and overall administrative cost. Cost estimates are based on some 600 basic trainees and 2,000 evening class trainees. The estimated number of participants in short courses is not known.

The total training cost is estimated at 156.110 million TShs, of which 109.480 million TShs or 70%, are earmarked for the basic training of some 600 trainees, i.e. 182,466 TShs 41 per trainee/year.

However, if staff emoluments (191.699 million TShs) are added, one arrives at a training cost per trainee/year of approximately 502,000 TShs⁴². This amount is, however, misleading as indeed, a number of instructors, but not all, also teach in evening classes and participate in short courses and trade tests, for which they are paid an incentive in addition to their monthly emoluments. Furthermore, depreciation and overall administrative cost are not included. The above figures are hence to be taken with great precaution.

The amount available for training materials⁴³ for basic trainees, exclusive of evening and short courses, is approximately 110,000,000 TShs, i.e. 183,333 TShs (or 286 US\$) per trainee/year. The provision of training materials did raise problems in 1997, in part because of long and cumbersome approval and procurement procedures. There seems to have been a lack of training materials at certain moments, due to late procurement, and/or because of insufficient funds.

⁴¹ Equivalent to DM 536

⁴² Equivalent to 1,476 DM

⁴³ This includes minor tools, reference books, text books, stationaries, learning materials and workshop materials

The overall budget of the RVTSC Chang'ombe foresees a total **income** from fees etc. of 110.262 million TShs (an increase⁴⁴ of 121% over 1997 income). This income represents 18,2% of total gross expenditure (604.531 million TShs). At the level of overall VETA budget this percentage is 7% only.

DISTRIBUTION	%
Fees from short courses	37,7
Fees from basic skill training	25,4
Trade test fees	26,7
Production work /trainee projects	10,2
TOTAL	100

It is desirable that income from production work/services be increased over time through:

- income from a great variety/number of short courses (billed at unit cost taking into account deductions for levy paying employers),
- income from renting out workshop facilities to other training providers,
- increase of training/trade test fees.

However, there are limits to how much income can be collected in this way. The remainder of the expenditure needs to come from the levy.

4. The future role of Chang'ombe RVTSC

4.1 Economic and social rationale

Until recently, Chang'ombe was a National Vocational Training Centre catering for pre-service training needs at national level and offering training mainly geared to the needs of the public sector. The placement of apprentices and the employment of graduates was "automatic", irrespective of the relevance and quality of training provided. In 1992, 70% of the apprentices found employment (mainly in the public sector) according to a tracer study under-taken. Furthermore, funding was ensured by the Government.

⁴⁴ Obviously due to various fees paid by trainees, trade test candidates etc. which were previously accounted for under the budget of VETA Head Office

⁴⁵ Source No. 24

In the new situation, Chang'ombe is expected to have a training as well as a service role at <u>regional level</u>. In the new economic context, the RVTSC is asked to cater to a greater extent for <u>in-service training needs</u> of employees in the <u>private sector</u>. In addition to offering demand driven training in a difficult changing economic environment, with limited formal employment possibilities and no more Government funding, it is expected to also respond to the training needs of the IS and to the <u>social demand</u> for training (school leavers).

The proposals which are being presented below have been elaborated with this economic and social rationale in mind. It was felt, that under the present circumstances, Chang'ombe can no longer continue organising 1 to 2-years' preemployment training courses in areas offering limited possibilities for subsequent practical in-company experience and/or formal employment. It is believed that the need for in-service training will be growing, whereas the demand for basic preservice training is decreasing, as far as abour market demand is concerned. The SAP estimates that "in the long term, the demand for basic vocational training could again start to increase, as industry expands". 46

As the RVTSC Chang'ombe is situated in a Region where 52% of all levy contributors are established and therefore operates in a special context of enterprise concentration, it is believed that the RVTSC should have the role of a pilot centre in regard of certain activities to be developed (co-operative training, inservice training activities, IS training, organisation of production activities etc.). This being said, the rehabilitation and development of Chang'ombe should be undertaken with the following objectives in mind:

- better linkage with employment/self-employment possibilities,
- an expansion of production/service activities for purpose of more work related training and income generation,
- better utilisation of facilities, by offering modular pre-employment as well as short in-service training courses.

Greater attention needs to be paid to the training and upgrading needs of <u>the expanding informal sector</u>. This must be kept in mind when planning for infrastructure, training equipment and programmes which need to be adapted to the various types of trainees.

In the medium term and in order to improve the relevance of training at the RVTSC, it is suggested to give priority to training areas with good possibilities of leading either to employment or self-employment. These might be training areas already offered by the RVTSC or new ones such as servicing and repair of household appliances, shoe-making etc. Others have to be identified according to the above-mentioned criteria. A decision as to which areas to retain for Chang'ombe will depend on the results of regional labour market surveys and should take into account training programmes already offered by other training

⁴⁶ Source No. 3

providers in the Region in order to ensure economies of scale and avoid, as far as possible, overlapping in the supply of trained labour.

Notwithstanding the identification of future training areas, the consultants are of the opinion that the following areas, some of which are presently offered at the RVTSC, are the most promising in terms of self-employment, since one can work in these areas with few tools and little equipment:

- carpentry and joinery,
- masonry and bricklaying,
- plumbing and sheet metal,
- welding and fabrication,
- electrical installation,
- office machine maintenance and repair,
- · refrigeration and air-conditioning,
- · radio and TV repair,
- · painting and sign-writing,
- · secretarial services,
- servicing and repair of household appliances and equipment,
- shoe-making.

The latter five or seven areas are particularly suited for self-employment of women.

4.2 Target groups

The following target groups have been identified to benefit from training to be offered by the RVTSC:

- Standard 7 and Form IV school leavers (co-operative training of apprentices).
- Employees in the modern sector (in-service training of skilled workers, foremen, supervisors, in-plant trainers),
- Informal sector operators (self-employed and employees of micro-enterprises),
- Women interested in new training areas, entrepreneurial skills, etc.
- Instructors of the VET System (all TPs),
- Technicians.

Whilst the **female participation** rate in primary and secondary education as well as in teacher training is relatively high (between 50% and 40%), this percentage drops however sharply at University level (16%) and in technical training (6.5%). The average participation rate of women in basic training at Chang'ombe stands at 23%. However, there is a great imbalance according to trade areas. Whilst in tailoring and secretarial/computer training women constitute respectively 85.7%

⁴⁷ Under certain conditions, for certain training activities, persons with less than Standard 7 should be accepted

and 96.6% of the trainees, they only represent 37.5% in motor rewinding, or 22.4% in electrical installation. There are no women in laboratory training, panel beating, masonry and bricklaying, nor are there in carpentry and joinery.

On the other hand, 40% respectively 61% of the trainees in the 1st and 2nd year in the Office Machine Mechanics Section are women. This training programme was conceived in co-operation with SIDA as a special measure in favour of women.

It is, therefore, firmly believed that other such initiatives in favour of women might attract more females into certain technical streams. Possible <u>additional areas of technical training</u> for women are:

- Servicing and repair of household appliances,
- Radio and TV repair,
- Refrigeration and air conditioning,
- Painting and signwriting.

The RVTSC in Chang'ombe could launch pilot programmes in favour of women in these areas if it is confirmed that women (as well as men) have good chances to find employment or be able to go for self-employment in these areas.

This should not preclude RVTSC Chang'ombe from implementing further modules in the textile areas (other than tailoring), ⁴⁸ namely textile design, print, batik, tie and dye, embroidery etc., if there is a demand (LM or social demand) for such training. A change from tailoring to "clothing technology" as suggested by the TAC concerned would reflect a revalued trade area.

The number of female instructors at Chang'ombe is very low at present (less than 10% of all skill instructors). Female instructors in the before mentioned areas can serve as role models and facilitate the integration of more female trainees in technical streams. This is expected to contribute to a reduction of the unemployment of women in the DSM Region. It is recalled that the female unemployment rate is 35% in urban areas.

The availability of qualified technicians - with practical as well as theoretical training - is a vital factor in the development of the modern sector. It is believed that Chang'ombe could play a role in the <u>practical</u> training and upgrading of <u>technicians</u>. At present, technician training is offered at the DSM Technical College⁴⁹, under the Ministry of Science, Technology and Higher Education. VETA is responsible for the organisation of TEC exams leading to the Technician Certificate.

⁴⁸ See new modularised curriculum

⁴⁹ As well as at the Arusha Technical College

4.3 Development and organisation of alternative training programmes

As mentioned above, the present training programmes are not relevant in terms of labour market needs, nor are they effective in terms of employment chances. Alternative approaches have therefore to be developed. The most relevant ones are being described hereafter. It is believed that the RVTSC Chang'ombe could play the role of a model or pilot centre in the development and implementation of these alternative training programmes.

Tax relief or partial reimbursement of the levy tax for enterprises actively engaged in training (levy-grant system) should be considered for promoting such an approach.

4.3.1 Co-operative training programmes

The cost of centre-based training, which only rarely meets workplace requirements and has difficulty keeping pace with technological change, is the major problem of VETA and the RVTSC. This is true in particular for training in industrial occupations such as fitter mechanics, truck mechanics, welding and fabrication etc. In the long term, it is recommended for cost and quality reasons to improve significantly the apprenticeship training as the best alternative to centre-based training. This was already suggested by the Task Force on the New Training System.⁵⁰

Such a concept which must have the world of work as its point of reference could, with an increasing development of the private sector, be the core of the new vocational training system. Expensive and mostly theory oriented centre-based training should - gradually and as far as possible - be replaced by the new cooperative training arrangements.

Taking into account that enterprises in Tanzania presently undergo important changes and have to adapt to a difficult economic environment, such a co-operative model will need to be promoted actively.

During earlier visits to enterprises⁵¹ responsible managers showed great interest in participating in a co-operative training model, in which credit would be given for active training measures. They indicated to be ready to train for more than their immediate needs if they were granted a reduction of their levy contribution.

It is suggested that as a first step a survey be undertaken among potential enterprises (to participate in the co-operative training programme) followed by a pilot project (possible under the GTZ/VETA Project) in order to introduce and develop the concept in the Tanzanian context. It should also be investigated in how far co-operative training could be extended to the informal sector in the Dar es Salaam Region.

⁵⁰ Source No. 4

⁵¹ Source No. 32

This implies that the present system needs to be revised from a levy system to a levy-grant system. New VET Fund regulations⁵² will have to be established stipulating criteria for reimbursement of the levy tax. The reimbursement should be gradual according to:

- the number of apprentices trained by the enterprise,
- the number of apprentices successful in the recognised national apprenticeship/trade test examinations.

Employers could also be asked to sponsor trainees by paying their training fees. This would, however, necessitate bonding arrangements.

Thought might be given to models such as the one used in Portugal, where the Government pays part of the trainees' wages during the training period, in order to reduce unemployment.

To sum up, co-operative training will benefit:

- the trainee, because he/she receives quality practical, job related as well as theoretical training and thus increases his/her chances for being employed or self-employed,
- the enterprise, because a better qualified employee can help increase productivity and also, because the company would be entitled to a tax return (under a levy-grant system) for participating in the co-operative arrangements,
- VETA, because the burden of expensive long term centre-based training and the constant need for updating expensive machinery is taken away.

4.3.2 In-service training of staff in the modern and informal sectors

The economy being what it is, the demand for skilled workers is expected to stabilise whereas the need for in-service training, i.e. for further training of the labour force already in employment will increase. A rehabilitated Chang'ombe should therefore use the new facilities to offer more and more specialised training in response to LM demand. By doing so, it will contribute to raising the quality of employees and hence the productivity of the enterprises.

This means elaborating together with the employers in the <u>modern sector</u> short training courses, either for a group of enterprises or geared to the needs of one specific employer. The need for such upgrading should be determined in close consultation between the RVTSC and the employers. The RVTSC will need to be extremely flexible when planning for such training and the staff of the Centre would have to act in a professional way to ensure the success of these training programmes.

⁵² For present regulations see Source No. 8

Such tailor-made courses should also be offered to the <u>informal sector</u>, although it might not be easy to create the necessary awareness amongst the self-employed and to overcome their possible psychological barriers to participate in short courses at the Centre. However, it is believed that with time, trade associations could become a useful lever to voice training needs of the informal sector employees. Flexibility is a must when involving the informal sector in training, and fees will need to be adapted to their financial capacity.

There are four categories of staff who would benefit from in-service training:

- skilled workers and foremen,
- foremen/supervisors,
- in-plant trainers,
- "master craftsmen" in the IS.

The modern sector, if it is to develop and expand needs continuous updating (new technologies) and upgrading (higher level skills) of the staff already in employment. The majority of the skilled workers and foremen have received their training under the old public sector oriented VET System or on the job. It will therefore be necessary to organise short modular training courses covering various technical fields, including preventive maintenance. These should take place at the time and pace suitable for the enterprise, i.e. either on a block release basis or in evening sessions.

The need for <u>supervisory training</u> was confirmed by the ATE who offers from time to time such training. It would therefore be advisable to consult with the ATE first who could also help mobilise the respective employers, making them aware of the advantages of this type of training. A rehabilitated Chang'ombe (in terms of infrastructure and staff) would be an attractive venue for such training.

As explained under 4.3.1 above, co-operative training has many advantages over entirely centre based training. However, a certain number of conditions need to be fulfilled to ensure quality co-operative training. The most important one for co-operative training to succeed is that the enterprise environment is receptive and that there are enough qualified staff (n-plant trainers) in charge of in-plant training of apprentices. This category of employees have seldom received advanced technical training and even less so, training in instructional methodology enabling them to transmit effectively the knowledge and skills they possess to the young apprentices.

The same is true for self-employed "master craftsmen"⁵³ in the informal sector. These "master" craftsmen need first of all technical updating and skill upgrading in order to develop their micro-enterprises. One may expect, that as these enterprises develop, they would participate in the co-operative training arrangements. This means that the craftsmen not only need higher level skills (than the apprentices), but also require some instruction in training methods and techniques. This is considered to be a longer term objective.

⁵³ The consultants are aware that there is no such culture of real master craftsmen, however there are all those who play this role

To sum up, the above activities will have advantages for both the RVTSC and the employers:

- trainers will be able to establish and maintain useful contacts with the world of
 work and above all with the supervisors with whom they will need to collaborate in
 the implementation of the envisaged co-operative training arrangements,
- the courses will generate additional income for the RVTSC,
- employers will get something in return for the levy, as their workers, foremen, supervisors and in-plant trainers become more qualified and productive,
- IS craftsmen will be able to improve their own skills, make a better living and eventually create more jobs and train more apprentices more effectively.

4.4 Upgrading of instructors/vocational teachers for all TPs

A refurbished and reoriented Chang'ombe could play an important role in the continuous upgrading of vocational instructors for both public and private training providers. The majority of them are in the DSM Region, whilst the only vocational teacher training institution in the country is in Morogoro, offering mainly 1 and 2-years' training programmes. From time to time 4-weeks' instructional methods courses seem to be offered.

Private TPs in the Dar es Salaam Region could play an important role if the quality of their training were improved⁵⁴. They have indicated that they are interested in skill upgrading and updating of their instructors. However, during a workshop with private TPs in autumn 1997, the following reasons were given for the low level of attendance by private TPs in the VTTC courses in Morogoro:

- The teacher training programmes at the MVTTC are considered to be too expensive and cannot be paid by private TPs, 55
- The duration and timing of the training are inadequate, since teachers would have to be replaced if training takes place outside the holiday periods. It would be necessary to offer instructor-training programmes during vacation periods.

The RVTSC does not have any expertise at present to develop and implement such a train the trainer concept. Therefore, professional advice (long and short-term expertise) would be required as well as some capital investment.

⁵⁴ Source No. 19

⁵⁵ 600,000 TShs for a 1-year course, 90,000 TShs for a 4-week' course

4.5 Development and implementation of production activities

Training centres tend more and more to set up some kind of production activities the purpose of which being twofold:

- training becomes more practical and related to the world of work,
- income is generated to help cover the increasing training cost.

Production activities could be organised in two ways:

- as independent units, separate from training and therefore exclusively aiming at income generation,
- as training-cum-production workshops where the requirements of the one and the other have to be reconciled.

It is the second alternative which is recommended for the RVTSC. Carrying out productive work or producing services has furthermore a highly motivating effect on the trainees, giving them a feeling of usefulness and pride. The staff of the centre (management and instructional staff) will be more motivated as well, if they receive a percentage of the income generated as an incentive.

This may be a possibility to lower the financial burden on VETA's budget, under the condition that the appropriate rules and regulations are fixed and enforced. The usual practice that an instructor produces goods on his/her account, paying a portion of the income back to VETA compensating for the use of the workshop and machinery, is risky as training will take a "back seat". On the other hand, when the income from production flows back entirely into the Centre's budget or disappears elsewhere, this generally leads to demotivation and production finally stops.

Autonomous financial structures would be necessary to avoid this. In cases where productive work or the provision of services are provided to meet the Centre's own needs (furniture making, renovation and repair work, for the refurbishing of the RVTSC Chang'ombe for example), the financing of these activities must be ensured under the Centre budget.

Difficulties usually occur when production performance (time pressure etc.) has priority over the training mission and the pressure to deliver in order to satisfy a customer leads to lower training quality.

The creation of independent production units, with staff engaged for this purpose, often leads to the same result as training necessarily becomes secondary and is considered a disturbing element.

In some trade areas, the problems engendered by training-cum-production can be minimised to a certain extent if, instead of contract work, small scale production lines for items like standardised doors, windows, wheel barrows etc. are set up. But productive work also means "providing services" in areas like office machine maintenance and repair, printing, secretarial work etc. which in essence are contract based.

It is believed that the RVTSC could serve as a pilot centre for the above described training-cum-production activities.

4.6 Co-operation with other training providers (TPs)

The role of VETA Regional Office and RVTSC is unclear to many TPs, including enterprises. The tasks and responsibilities as well as the relationship between the VETA Regional Office, RVTSC and the TPs, need to be spelled out clearly and communicated to the outside. The accreditation of training institutions raises some problems.

Other important problems identified in the TP survey⁵⁶ and workshops conducted in 1997 are:

- Lack of infrastructure/equipment,
- Budget problems,
- Student-related problems,
- Lack of training and teaching materials,
- Teaching and administration constraints,
- Problems with VETA.

TPs expressed the view that VETA, instead of playing a supervisory role, should rather support and co-ordinate all VET activities.

It is believed that the RVTSC could assist in finding solutions to some of these problems, for instance by:

- offering advanced training for managerial and instructional staff,
- organising the reproduction of training materials (graphic school),
- developing models for tailor-made and specialised courses,
- developing models, incl. rules and regulations, for production activities,
- co-ordinating regional trade tests and/or crafts examinations,
- organising specific practical training for trainees from smaller TPs who do not have the required machinery and equipment.

Such co-operation/collaboration should be laid down in a contract between the RVTSC and the respective TP concerned. These and other opportunities for co-operation should be further investigated, but will of course depend on improved RVTSC facilities, staff etc.

⁵⁶ Source No. 19

4.7 Implementation and co-ordination of trade testing

As mentioned above, the present trade testing system is not satisfactory and even becomes meaningless when related to job requirements. In order to achieve more objective test results, more competent instructors of other (public and private) training institutions should be involved. It should be noted in this regard that the allowances of invigilators and trade testing instructors will need to be increased in order to provide the required motivation.

At present, the Trade Testing Section at VETA Headquarters is overburdened with the administration (registration, certification, statistics etc.) of some 13,000 trade test candidates/year. A regional approach to trade testing appears necessary. Occupational analysis, curriculum revision and the determination of trade test contents must be undertaken together with the employers concerned, paying particular attention to varying regional production materials and techniques.

Before undertaking a general revision (linked to the new modularised curricula), it is suggested that the RVTSC serves as a pilot centre for the implementation and coordination of all trade testing in the DSM Region. Indeed, Chang'ombe is the main trade testing centre (out of 18) and is situated in the heart of an economically important region.

This would, of course, require refurbishing of the physical facilities and the provision of appropriate equipment and tools to match trade-testing requirements.

4.8 Inclusion of entrepreneurial skills in all basic training courses

Entrepreneurship awareness raising and subsequent skill training should be undertaken in a more systematic and professional manner. The best would be to proceed in stages. The entrepreneurship component must be properly planned - timing is important. The young and inexperienced trainee should first be acquainted with the idea of self-employment and enterprise creation. It does not serve any useful purpose to train young apprentices in entrepreneurship skills as such. This should be done in a second phase towards the end of or subsequent to their training period. Also, entrepreneurial skill training should be accompanied by other measures like credit facilities, tool kits, counselling services etc.

This being said, <u>all</u> instructors⁵⁸ should undergo proper training in this field to be able to impart the necessary message and skills. Learning materials⁵⁹ need to be developed and reproduced, possibly in both English and Swahili.

In addition, former RVTSC graduates should have the possibility to return to the Centre to follow short upgrading courses dealing with various subjects such as:

establishing cost estimates,

⁵⁷ In 1997, 13,214 out of 14,427 who registered initially

⁵⁸ At present, 4 instructors only have followed a 2-week' seminar

⁵⁹ The trainer's manual available now is not enough

- simple book keeping techniques,
- finding market niches,
- marketing techniques,
- new technologies etc.

It would be desirable to collaborate with other training providers (namely NGOs) who are active in this area already, especially with the Small Industry Development Organisation (SIDO). There are some 19 organisations/institutions involved in vocational training and focusing on the informal sector.

4.9 Reproduction of curricular and training materials for the VET System

The suggestion to use the RVTSC for the reproduction, at national level, of curricular and training materials, is not new as the Graphic School project, financed under AfDB loan arrangements was planned with this perspective in mind. It is recalled here, because the infrastructure available (when completed!) will serve several important objectives of the RVTSC:

- income generation through productive work, i.e. printing for the outside and for VETA (against payment!),
- organisation of short upgrading courses in new printing techniques for employees of the printing industry,
- provision of training materials on a large scale for the whole VET System.

The above responsibilities are many and complex for a new "school". Therefore, additional staff development and expert services should be put into place as foreseen in the extension proposal which was submitted by the VETA Regional Office in January 1998.

5. Major recommendations for the VET system

The purpose of the consultants' Mission was to assess the RVTSC Chang'ombe and to assist in defining its new role and responsibilities. However, as the RVTSC is part of an overall VET System, it is considered necessary to comment briefly on the improvements required at system level as these facilitate, if not condition the implementation of the proposals regarding Chang'ombe.

5.1 Revision of the legal and organisational framework

The present legal and organisational framework was developed in 1994/95 and has hence been implemented to a great extent. Implementation has made apparent a certain number of shortcomings and a need to strengthen the legal and organisational framework in order to increase its efficiency. The most important of these changes are addressed hereafter. It is believed that they will enhance the relevance, effectiveness and efficiency of the training programmes to be developed at the RVTSC.

- The SAP (Phase 1: 1996-99) will have to be adapted, taking into account the IS and other more recent developments.
- The present training levy system should be changed to a <u>levy-grant system</u>, in order to foster a more active participation of employers in the training undertaken.
- The <u>apprenticeship regulations</u> (1997) will need some adaptation, if the new cooperative training arrangements are to be implemented.
- The <u>decentralisation policy</u> will need to be enforced; respective roles and responsibilities of central and regional authorities will have to be clarified and implemented. Regional Offices should be given the means to play the role which is expected of them. Their functions are numerous and complex and require additional staff. This could be achieved through a transfer of funds from VETA Head Office to the regions. Regional Vocational Training and Service Centres should be given a certain degree of autonomy in terms of planning, organisation and management of training, leaving it to the Regional Offices to co-ordinate all VET activities at regional level (including those offered by other training providers), to assess training needs, develop alternative training approaches and concepts etc.
- <u>Labour market linkages</u> should be established and LM analysis done on a continuous basis. The responsibility should be shared between the TACs, the VETA Regional Boards/Regional Offices.
- A new <u>salary scheme</u> with incentives linked to responsibilities and results achieved will be necessary. A demand driven VET can only function effectively if the training environment is favourable. A quality infrastructure will only be effective if the trainers are qualified and motivated. This implies staff development measures and adequate salaries. However, most of the present instructors have reached their level of competence and, therefore, it will be necessary to carefully select the instructors to be retained at the "new Chang'ombe" and otherwise recruit the "right people".

• And last but not least, it is recommended that the Government reviews her present policy to leave the financing of the VET System entirely to the private sector. Government should assume her responsibility regarding the social demand in the country. Formal sector employers may sooner or later question whether it is their role to finance, via the levy, the training of school leavers with no prospect of being recruited by them. Also, private TPs (apart from mission trade schools and NG0s) are business oriented and do seldom play a social role. Their fees are often prohibitive for a large portion of the target population. Some financial support from Government is therefore needed in answer to the social demand which cannot be ignored or left exclusively to churches and NGOs. One way of doing this might be that Government contributes to the recurrent expenditure of the VTCs which are mostly in rural areas meeting the demand of the IS.

5.2 Scenarios for a new trade testing system

As mentioned before, the existing trade testing system is not related closely enough to the world of work with its various occupational hierarchies. In addition, training standards vary, certificates of the different TPs do not correspond to recognised training standards and therefore create doubts among employers when hiring job candidates. Finding employment becomes more difficult and in the end, enterprises may be hindered in their development.

Formal vocational training does not, at present, lead to a nationally recognised craft certificate. Public and private TPs issue certificates that lack national recognition and are not comparable.

For instance, the following certificates are issued by various authorities:

- VETA/Ministry of Labour and Youth Development: Trade Test Certificates grades III to I, after 2- to 4 years of training,
- Ministry of Education and Culture: Technical Secondary School Certificates, Form IV (O-Level Certificate) after 4 years, Form VI ((A-Level Certificate) after 6 years.
- Ministry of Science, Technology and Higher Education: Full Technician Certificate (FTC), after preparation in a Technical College following Form IV,
- Private TPs following the same curricula issue their own certificates and prepare their trainees for trade tests.

In order to meet the human resource needs in sectors critical to the re-vitalisation of the economy and also to respond to the important social demand for skill training, a nationally recognised craft or trade test and certification system should be introduced. A craft certificate, based on mastering a specified level of skills (semi-skilled, skilled, technician etc.) rather than fulfilling a prescribed length of studies in a formal training institution will create new opportunities for the different target groups. It will also lead to a more motivated workforce which can climb the "career ladder" irrespective of whether the skill and technical know-how has been acquired in formal training settings, including the training offered by VETA, the MoEC, NGOs, private schools etc., through enterprise-based on-the-job training, or in traditional

apprenticeship models. The co-operation of employers and enterprises in the definition of the various levels and contents of skills will be required in order to have precise indicators of proficiency which are in line with the standards of industry and conducive to the development of the country.

The advantages of such a craft certification system are:

- it connects non-formal with formal training, especially through the introduction of a crafts certificate and allows for shorter modularised training when and where appropriate and according to workplace requirements,
- it favours career development because no importance is attached to how and where one got trained (formal, non-formal, in-plant, through work experience etc.) and enables persons without school certificate to find a way to the world of work,
- it encourages private institutions and organisations with varying capacities to offer more flexible training on different skill levels. Thus, it is likely that the number of trainees will increase.

VETA's role in testing and certification needs to be redefined, taking into account the limited resources available. It is suggested that VETA concentrates on the coordination of training standards and areas as well as post training quality control through the implementation of recognised craft certificates. In future, VETA's role should be less in-put oriented which is costly and cannot be sustained in the long run, with one exception: instructor training and upgrading for all TPs. The development and revision of curricula to be followed by all TPs, accreditation and evaluation of other TPs etc. are extremely costly and require resources which are, in fact, not available.

An autonomous tripartite (incl. employers', workers' and VETA representatives) trade testing and certification agency, independent from VETA - a training provider - would elaborate the skill tests, administer them and award the certificates. Once more, it will be of no importance whether the person taking the test has had formal training, training in a dual system, non-formal training (evening courses etc.) or on-the-job training in a firm.

Because of regional differences in production techniques and materials trade testing should be decentralised. In order to allow for comparison at national level, overall trade test requirements and standards need to be determined though allowing for regional adaptations. The 8 RVTSCs could function as trade test examination centres. Regional Boards/Offices could nominate other trade test centres, incl. private ones. Trade test instructors and invigilators should be mixed, i.e. include representatives from various training institutions and firms.

As mentioned earlier, similar problems exist in the commercial/business training areas, where candidates sit for the NABE stage 1 to 3, instead of trade test grade III to I. Therefore, when revising the present trade test system, attention should also be paid to adapting the present NABE standards to actual job requirements. Occupational profiles are changing in a changing business environment. ⁶⁰ Job

⁶⁰ See para. 3.4.2 above dealing with the issue of shorthand

analyses should therefore be undertaken together with the private sector in order to establish realistic examination standards.

5.3 Development and implementation of modularised curricula

It is recalled that the primary responsibility for curriculum development and revision lies with the MVTTC, assisted by DANIDA. The Curriculum Development Unit at VETA Headquarters has a co-ordinating role regarding the new and modularised curricula.

The newly developed course structure will consist of 3 modules (basic, intermediate and advanced), which are offered in blocks of decreasing duration. For fitter mechanics, for example, the 1st module covers 30 weeks, the 2nd module 15 weeks and the 3rd one 12 weeks. Two periods of on-the-job training are foreseen between modules 1 and 2. The main target groups are school leavers (Standard 7 and Form IV), but workers with relevant job experience will also be admitted to modules 2 and 3. All applicants will have to take an entrance test. It is foreseen that after the successful completion of each module a certificate is issued and after the third module the trainee receives a craftsman certificate.

Although this approach goes in the right direction, away from the 1 to 2-years' training courses and aims at providing competency-based employable skills, the new modular programmes must be carefully field tested, especially regarding appropriateness and cost. This type of training structure is not necessarily cheaper than the longer term training provided so far.

It may, however, enable some trainees to find employment in the IS or elsewhere after having followed 1 or 2 training modules. They could later on come back to complete the remaining module(s). This requires that each module is self-contained, incl. safety and health, preventive maintenance and similar subjects, and is not just a breakdown of the present curricula into units (subjects), not actually leading to employability (e.g. like in the newly developed printing curriculum, with a "module" *Introduction*).

It is important to take care of various levels of competencies, the special needs for self-employment and the informal sector as far as the contents of training is concerned. Project work should form an integral part of each module.

It is problematic to develop a national curriculum, especially for certain crafts, since, for example, a mason in a rural area will carry out all kinds of tasks, whereas in urban areas he/she will normally be more specialised and may only do bricklaying.

Furthermore, it is believed that the development and on-going revision of curricula for a large number of skill areas is too big a task for VETA alone. Under

the new testing and certification system outlined in para. 5.2 above, the updating of curricula by VETA and other TPs remains an important issue although curricula should no longer be enforced on any TP. The aim of all TPs should be to provide quality training leading to positive results in craft certificate examinations and not, to follow pre-established and imposed curricula.

The development of instructional materials to assist instructors and trainees alike, is of prime importance. The development and production of bilingual training materials might be envisaged in order to achieve greater effectiveness and enable non-English speaking target groups to have access to vocational training. The Training Materials Unit at the MVTTC, assisted by a SIDA Adviser, is presently involved in the elaboration of learning elements, but has no facilities for mass production. Therefore, the Graphic School with its modern printing equipment should be entrusted with the reproduction of materials at national level.

Lastly, it must be questioned whether the present minimum entrance requirements are really necessary for all training programmes. Indeed, they often mean that disadvantaged groups (namely persons with less than Primary School Certificate - Standard 7) are excluded from formal training. It is believed that there are skill areas where this requirement should be lifted. Trainees with less than Standard 7 could still become good masons for example, if they acquire the necessary skills and can do the job up to the standard required.

This is important in the light of the increasing social demand. Curricula, craft examinations and training materials would need to take into account the weaker academic background of these trainees who may even be illiterate.

5.4 Promotion of other training providers

By law, VETA has a responsibility to support the other TPs. These offer more than 90% of the VET supply, including training activities presently under line ministries, mission trade schools, company training centres and other private training institutions.

In the Dar es Salaam Region there are over 100 training institutions run by churches, NGOs and private owners. Their training capacity is about 22,500 training places according to a survey undertaken in 1997⁶¹ in the DSM Region. Their total enrolment figures amount to some 14,500 which corresponds to 64% of their capacity. (See details in the table below). Capacities/enrolments of these TPs clearly exceed those of the RVTSC in Chang'ombe with its 600-700 basic trainees and 2,000-3,000 evening class trainees.

⁶¹ Source No. 32

SKILL AREA	CAPACITY	NUMBER OF TRAINEES	CAPACITY UTILISATI ON (IN %)
Administration	6695	3992	58
Information technology	6620	4503	68
Construction trades	190	74	39
Wood working	67	66	99
Metal work	1350	1012	75
Electrical / electronic trades	2140	1199	56
Hotel/Tourism	440	261	59
Home crafts	2845	1564	55
Health services	2035	1914	94
Agriculture	150	2	1.3
TOTAL	22532	14587	66.2

Of the 14,587 trainees in private and similar training institutions in 1997, only 2,351 or 16% were in technical/crafts training courses against two thirds of all trainees following business, administrative or information technology training. This confirms that private TPs generally opt for training courses necessitating less capital investment. But the 2,351 technical/crafts trainees represent nevertheless four times the corresponding enrolment figures (577) at the RVTSC Chang'ombe.

It is questionable whether the huge capacity in the areas of administration and information technology (13,315) corresponds to a real need. Training in these areas obviously is supply driven.

While enrolment levels in areas like health services, metal work, administration, information technology and electrical/electronic trades are high, those in other skill areas like agriculture, construction, wood working and even hotel & tourism - an expanding sector - are significantly lower. Many private TPs explain the low enrolment with the tough competition between TPs and the high level of training fees as compared to those of the RVTSC.

Private TPs encounter various problems which have been described in detail elsewhere. ⁶² These are recalled here briefly:

- lack of buildings / classrooms,
- lack and age of tools/machines,

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⁶² Sources No. 19 and 32

- lack of training materials (consumables),
- · insufficient accommodation and transport,
- no facilities for practicals,
- · rapid change of technology/styles,
- school fees not paid fully and on time and, in some cases, too low,
- a training levy which up to now has benefited only VETA training centres, but not other TPs.

Although the VET Fund regulations of 1995 stipulate in para. 3e that the VETA Board may authorise

grants for the support of vocational training activities undertaken by bodies other than the Authority",

this has not yet been done for a number of reasons. These are mainly:

- need for setting up VETA structures, regulations etc. first,
- need to undertake a survey of other TPs in the Region,
- lack of funds.

Several meetings with the other TPs, a small provision of some funds in the proposed 1998 VETA budget, the foundation of a TP Association and the establishment, in November 1997, of draft "Guidelines for issuing grants to private vocational training providers" are steps aiming at the promotion, in the long run, of private TPs.

However, taking into account the scarcity of overall funds, it is suggested that thought be given to interesting donors in the promotion of private TPs. The German Bank for Reconstruction (KfW), for instance, is about to engage in such promotional activities in a neighbouring country. ⁶⁴

Before embarking in such promotional activities, it is of utmost importance to establish criteria for the eligibility of TPs to be entitled to financial and/or other support. These should take into account: LM and social demand, employment chances, skill areas offered, training standards, the participation of industry, joboriented training, appropriate entrance requirements and, in particular, the self-sustainability of the TPs. See detailed list in Annex 10, which may need to be adapted to the Tanzanian and DSM regional context.

Other criteria for the promotion of PTPs may be: training for self-employment, in addition to training for entrepreneurial development, follow-up assistance, an initial allocation of tools or the existence of credit facilities/a revolving fund for the promotion of self-employed graduates.

In the long run, quality private TPs operating in a context of skill related craft certification would be recognised as such without any need for accreditation,

⁶³ Sources No. 6 and 31

⁶⁴ Source No. 33

evaluation and inspection activities by VETA. Experience has shown that these do not function properly anywhere. Inspection of the quality of equipment, instructor qualifications and implementation of prescribed curricula etc. as mentioned in the draft Guidelines for issuing grants to private TPs does not guarantee quality training.

Furthermore, it is questionable whether TPs which operate training courses for disadvantaged target groups should be excluded from support, only because they have insufficient infrastructure/equipment. If the same questionable criteria were applied to some of the workshops at the RVTSC (e.g. electrical installation, motor rewinding, laboratory assistants etc.), these workshops would have to be closed down.

To sum up, the VET System as a whole can only be improved if private TPs are not left on their own. As the funds available from the VET levy are limited, VETA should negotiate contributions from other sources. It is suggested to explore possibilities for financial co-operation with the German Bank for Reconstruction (KfW), possibly within the framework of the Government consultations/ negotiations between the United Republic of Tanzania and Germany.

6. Prerequisites

In order to allow the RVTSC Chang'ombe to fully play its new role and thus become an important element in the new VET System, the following prerequisites need to be fulfilled.

6.1 Efficient management structure

The RVTSC will only be able to function efficiently if a new management structure is put into place. There need to be a strong and competent Centre Manager (or Director), a position distinct from the Regional Director's position. This Centre Manager should have overall management, co-ordination and budgeting functions.

An assessment of the implementation of the SAP, presented at the Regional Chairpersons Meeting at Iringa in January 1998, has suggested that the post of Training Manager be changed to Centre Director. This proposal goes in the right direction.

A possible organisational structure for the RVTSC Chang'ombe and the interrelationship with the VETA Regional Office in DSM can be seen in <u>Annex 11</u>. This is an attempt to visualise the management structure of the RVTSC. The Centre Manager would be assisted by several (3 to 5) Training Co-ordinators who would have a double role:

- co-ordination of training in a number of technical trades in a given trade area,
- co-ordination of types of training activities, such as:
 - * co-operative training,
 - * in-service training for the formal sector,
 - * production activities,
 - * IS related training.

The new Chang'ombe will be a rather complex institution and these training coordinators will therefore play an important role. Needless to say, that this will require a new type of manager. As the SAP puts it:

"Training institutions will be made more accountable to users which ...will require a businesslike style of management". 65

This implies that an attractive salary and incentives package is offered to the management as well as to the Centre staff in general.

Position (job) descriptions should be established and the qualifications of the present incumbents be compared with the requirements of the job. Possible discrepancies must be analysed and decided whether these can be overcome through staff development measures or not.

The clear distinction between the two positions (Regional Director and Centre Manager) should furthermore be underlined through a "physical separation". The Regional Office should not, as foreseen now, be housed in the middle of the RVTSC. This was recognised by the Iringa Meeting in January 1998.

6.2 Training needs assessment

Recent labour market surveys do not answer the question: how many to train, for which jobs, in which trades, at what levels. The present report has drawn some general conclusions from the limited information which is available here and there, but for the future development of Chang'ombe and with a view to the important investments expected, a training needs assessment must be carried out as a matter of urgency.

In addition, continuous LM monitoring at regional level is necessary as the economy is in a transition process and is characterised by continuous change. The TACs are expected to collaborate with the VETA Regional Board and RO in this effort.

Notwithstanding the difficulty to collect information on possible increases in staffing levels for the next 5 years, such a training needs assessment should take the following into account:

- composition of present staff by level, type of job, sex etc.,
- annual turnover and replacement rates by level, type of job etc.,
- need for technician training etc.

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⁶⁵ Source No.3, Annex 4

Employers could also be given a list of occupations, traditional and new ones and be asked about their preferences and needs. The information obtained in the recent survey is too general to allow drawing realistic conclusions.

It is obvious that training needs which have been identified must be compared to the supply of trained labour, taking into account all TPs in the Region. For example, the need to train qualified personnel for the hotel and catering industry has been voiced, but one needs to look into the existing capacities before consideration is given to starting new training programmes at Chang'ombe.

It is believed that there is a training need in the informal sector. However, microenterprises might first have to be sensitised to the importance of training.

The needs of the modern sector for qualified, practice oriented technicians have to be looked into keeping in mind the projections made by ILO (para 1.2 above refers).

6.3 Adequate infrastructure

An improvement of the present building facilities which are in poor shape is absolutely necessary. With a few exceptions (building, tailoring and printing sections, toilet facilities etc.), it does not seem that there is a need for new buildings, but a reorganisation of the workshop allocation at the RVTSC and refurbishing is necessary in most of the trade areas. A new site plan should be established and the allocation of existing buildings reviewed in the light of the requirements of present and new activities planned.

Including the equipment required, the total cost may be estimated between 6 and 10 million US\$, depending on whether the machines provided in 1981 by Swiss bilateral aid for the FM, TM and WF sections would be replaced or remain in use.

Since such financing is not available at the moment, it is proposed to proceed step by step, keeping the following priorities in mind:

- production workshops that can assist in the repair and renovation of the RVTSC,
- workshops offering particularly promising possibilities for employment and selfemployment,
- craft areas which require few tools for self-employment.

This implies that workshops for electrical installation, masonry, carpentry, plumbing etc. need to be refurbished as a matter of priority, but it is believed that improving the infrastructure and equipment for these workshops can be done with relatively modest means.

In the medium term, with the aim of improved practical training and incomegenerating activities, these production units should be transformed into trainingcum-production workshops.

6.4 Extensive staff development

The new role of the RVTSC requires a type and level of staff not available now. This became apparent in the present assessment. An audit of the present staff of the Centre must therefore be undertaken and management and instructional staff be assessed against the new job requirements and profiles to be established. Training gaps must be identified and those staff members who fulfil the basic condition of "being perfectible" should receive the necessary technical and pedagogical upgrading including, as far as possible, exposure to the world of work, be it at least via short industry attachments, as in the printing trade.

The staff of the Centre should also receive training in the organisation of production work, unless it is decided to recruit from the outside production workers who are given additional training in their trade area as well as in on-the-job training techniques. The latter solution might yield better results, but may be difficult to implement from a human/social point of view. The staff development measures could be elaborated together with the experts to be assigned to Chang'ombe under the donor support programme required.

6.5 Donor support

The last prerequisite to be mentioned is the one of donor support. At present, donor support accounts for 41% of the total VETA budget. Taking into account the country's financial constraints, it would be unrealistic to imagine that the new VET System and the new RVTSC can be put into place without donor assistance. The rehabilitation of the infrastructure is foreseen with the co-operation of DANIDA, but the new role of Chang'ombe and the important changes to be implemented also require expertise from the outside and hence donor support. Whereas funds seem to have been earmarked for the rehabilitation of the facilities, 66 donor support to cover the technical assistance needs will need to be identified and ensured.

⁶⁶ 12 million DKr are apparently available for the period 1998/99

7. STRATEGY AND SUGGESTED ACTION PLAN

The long term objective is to strengthen the training and service capacity of the RVTSC Chang'ombe and to turn it into a labour market oriented and financially viable institution for the DSM Region. It should serve as a <u>pilot centre</u> for new training approaches and programmes, including the informal sector, for the development of other RVTSCs, but also for other training providers.

In order to reach this aim, the <u>rehabilitation and reorientation</u> of the RVTSC Chang'ombe, a complex and long term task, needs to be undertaken as a matter of urgency. This requires the concurrence of regional and national VETA authorities and some <u>legislative/regulatory action</u> in order to ensure the implementation of the new concept.

<u>Donor assistance</u> will be necessary not only for the rehabilitation of the existing infrastructure, but also for the design and implementation of the new training approaches and programmes which have been described in the above chapters. Staff development and counterpart training, co-operative (dual) training, training-cum-production, training for new trades, for the informal sector etc. are areas where support will be needed.

It is suggested to proceed in stages or <u>phases</u> which can be easily identified. This will allow objective setting and planning on a step by step basis, finally leading to demand driven, financially sound and sustainable vocational education and training in the DSM Region and hopefully in Tanzania.

This long-term objective is rather ambitious given the present status of Chang'ombe and VET in general. Hence a <u>time-frame</u> of 8 to 9 years and the involvement of donor assistance.

(see table on following pages)

SUGGESTED ACTION PLAN

ACTION TO BE TAKEN IN ORDER OF PRIORITY		COMMENT	
1.	Approval of new training concept for RVTSC Chang'ombe	by VETA National and Regional Authorities	
2.	Identification of priority training areas, quantitative and qualitative training needs (standards, job profiles etc.)	by Regional Office DSM Region together with GTZ, taking into account employment/ self-employment/production possibilities and gender sensitivity, duplication with other training providers to be avoided	
3.	Rehabilitation of infrastructure	in co-operation with DANIDA	
3.1	Utilisation plan of land/buildings	'	
3.2	Functional layout of buildings		
3.3	Setting up of production workshops for rehabilitation work (bricklaying, electrical installation, carpentry, plumbing, painting)		
3.4	Implementation of refurbishing/ construction work	in co-operation with DANIDA	
4.	Staff development (in areas mentioned underneath)	Technical assistance (T.A.) required (long term and short term expertise in certain trade areas)	
4.1	Strengthening management (Centre Manager, Training Co-ordinators)		
4.2	Counterpart training		
4.3	Upgrading of VET instructors	for VET System, incl. other TPs	
5.	Development of short upgrading courses (in-service training)	geared to the needs for specia- lisation and updating of workers in the formal/informal sectors	

6.	Development of training-cum- production	T.A. required (procedures, marketing, management etc. in selected areas)
7.	Training of in-plant trainers/ foremen / supervisors with a view to implementing co-operative training programmes	T.A. required
8.	Promotion of co-operative training (apprenticeship)	T.A. required (if possible, linked to introduction of levy-grant system)
9.	Implementation of a new trade testing system	T.A. required (job analysis, modular curricula, quality control etc.)
10.	Implementation of co-operative training activities with micro-enterprises/ informal sector	improvement and expansion of existing (non-formal) apprenticeship
11.	Promotion of co-operative arrangements with private TPs	namely in terms of common use of equipment/tools and possible other areas to be explored
12.	Reproduction of revised curricula and training materials	Printing at Graphic School production unit
13.	On-going training needs assessment	to be undertaken by TACs, VETA national and regional authorities in consultation with enterprises/ATE/CTI
13.1	New trades	e.g. Air conditioning and refrigeration, Hotel & Tourism, TV & radio repair, information technology ???
13.2	Technician training/upgrading	Practice oriented training
14.	On-going evaluation of training	to be undertaken together with users

The aim of the above action plan is to give some guidance to those who are going to implement the new training concept. It is in no way rigid. Also, there is expected to be a certain amount of overlapping in timing between several of the actions which could/should take place concurrently, as for example rehabilitation work and staff development.

The sequence of actions 5 to 9 can be interchanged although the consultants think that, in order to "get the private sector on board", it is first necessary to convince

them of the quality training of the "new Chang'ombe" by organising short courses geared to their needs. This will facilitate action 8 as employers will more easily agree to increasing the number of apprentices for in-company training in a new legislative environment (new apprenticeship law, levy-grant system etc.).

As before, some surveys/studies will be necessary before launching certain of the above mentioned activities, namely the practical training of technician, improved apprenticeship/co-operative training models etc.

Detailed operation plans will need to be established at a later stage.

Annexes

(As separate files, apart from Annex 1.)

- 1. Terms of reference
- 2. Work and journey report
- 3. List of persons contacted
- 4. List of sources used
- 5. Interim report
- 6. Basic socio-economic statistics
- 7. Training areas and number of instructors
- 8. Enrolments at RVTSC Chang'ombe in 1997
 - a) Basic courses
 - b) Evening courses
- 9. Site plan of Chang'ombe
- 10. Possible criteria for the promotion of private training providers
- 11. Possible organisational structure of the RVTSC Chang'ombe and interrelationship with the VETA Regional Office
- 12. Summary information regarding the RVTSC Chang'ombe
- 13. Fact sheets regarding Chang'ombe Training Sections (15)

Promotion of Vocational Education and Training

Tanzanian-German Project, PN 94.2145.4

Terms of Reference

for Consultancy Services to be provided by:

Mr. Dieter Moll and Ms Karin Schramm

The consultants are expected to:

- Assist the VETA Regional Director Dar es Salaam Region in finding ways and means for the improvement of the efficiency and effectiveness of the Vocational Education and Training System in the Dar es Salaam Region with particular reference to the Changombe Regional Vocational Training and Service Centre (RVTSC).
- Assess Changombe RVTSC in terms of:
 - training programmes,
 - training, management and support staff,
 - budget,
 - selection and testing,
 - training materials
- 3. Elaborate proposals and options regarding the future role of the Changombe RVTSC in the Region, in particular in relation to the demand of the employers, the possibilities for self-employment and to the programmes already offered by other public and private training providers:
 - training concept and programmes,
 - financial issues (e.g., VET-Fund, income generating activities),
 - centre-based training supplemented by workplace-based training,
 - teacher qualifications (pre-service and in-service training),
 - national trade testing system,
 - the promotion of private training providers.

The results of the labour market survey and the trainees survey as well as the survey of the training providers in Dar es Salaam are to be taken into consideration. The recommendations of the future role of the centre should also be based on the newly developed VETA training concept.

The consultants are expected to work closely with the VETA Regional Director DSM Region, the GTZ-advisors and the Chief Technical Advisor of DANIDA. They will visit various training institutions in and outside Dar es Salaam and the Morogoro Vocational Teacher Training Centre.

The consultants will present their conclusions and recommendations to the project management prior to their departure and submit a joint report not later than 4 weeks after their return to Europe.