

APPLICATION OF THE NEW VOCATIONAL EDUCATION AND TRAINING
SYSTEM (VETS) IN TANZANIA

THE BUILDERS TRAINING PILOT PROGRAMME

MAIN REPORT

ON BEHALF OF THE
VOCATIONAL EDUCATION AND TRAINING AUTHORITY (VETA)
GERMAN AGENCY FOR TECHNICAL COOPERATION (GTZ)

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1. Introduction

The Tanzanian VETA is in the process of improving the effectiveness of training courses in the construction field to respond to labour market and social demand on training. The goal is to have modular training that would meet workplace requirements as well as requirements specific to self-employment.

Modular training, broken down into training units and training elements (exercises), should be focused directly on employable skills. Unit Standards which build upon one another should lead to the development of job profiles for semi-skilled, skilled craftspersons and technicians.

The introduction of Unit Standards which can lead to recognised certificates (Grade III, II and I) creates a modular training structure. It is able to meet the socio-economic needs of almost all target groups in Tanzania and is of key importance for the development of a demand-oriented training structure.

The goal of the mission was to plan, prepare and assist in the implementation and assessment of model training course modules for the skill area of Unfinished (Frame) Building (job profile: Builder). The training sequences (modules, units, TLEs) are to reflect and meet the expectations of different target groups and different public and private training providers.

In addition to the Builders training programme, the consultant assisted in the preparation of training of trainers and collect information on training for road construction of feeder roads (for further details see Annex 1, Terms of Reference of the consultant).

For these purposes during a mission from 25.01. - 15.02.2000, discussions were held with VTC managers/principals, instructors and VETA, GTZ and DANIDA experts and two workshops were prepared, moderated and followed-up (for itinerary, lists of participants and workshop agendas see Annexes 2.1, Itinerary, 2.2, Agenda 1 of Workshop from 31.01. - 08.02.2000, Development of Training and Learning Elements (TLEs) for the Builders training, and Annex 2.3., Agenda 2 from 10. - 11.02.2000, The Builders training pilot project).

On the first Workshop (Development of TLEs), the consultant presented the concept and structure of the Builders training and explained the pedagogical background of the formats of the TLEs (for further information see Annexes 3.1, Presentation of the Builders training concept, 3.2, Modules, units and TLEs of a Builder/Fundi (multi-skilled building entrepreneur), 3.3, Examples of training and upgrading possibilities for different target groups, and Annexes 4, The formats of Training and Learning Elements, and 5, Explanations. On the Workshop

existing Curricular Outline and Unit Standards had to be adapted and finalised and drafts of 42 Training and Learning Elements (TLEs) had to be developed (see Annex 3.2, List of TLEs).

At second workshop (The Builders training pilot project), a concept paper on the financing of training in combination with unit assessment was given to the participants and discussed (see Annex 6, Financing the Builder training) and the remaining preparation problems of the Builders training were analysed and action plans (see Annexes 7, 7.1 and 7.2) was developed.

All parties involved in the pilot programme of the Builder training were aware that the exercise is of great importance for the success of the new Vocational Education and Training System (VETS). Because of that, discussions mirrored engagement and commitment, especially regarding financing the training (for the Builders programme but as well in general) and the assessment of training in combination with a possible rewarding structure for successful training. The consultant wishes to thank the Director of Vocational Education and Training, Ms. B. Ndunguru, the coordinator Mr. Sabuni and VETA/GTZ-Project staff, as well as workshop participants and everyone with whom he had discussions for their co-operation and commitment.

2. Workshop 1: Development of Training and Learning Elements (TLEs)

2.1 Organisation of the workshop

The workshop was a major preparation event for the builders pilot project and took place between 31 January and 8 February 2000 in VETA's Dar es Salaam conference room.

In addition to the final agreement on the Unit Standards and Curricular Outline, the Workshop participants developed 42 required TLEs for the Builder training. For this purpose, experienced VETA and other instructors, all Builder instructors from the pilot centres, VETA curriculum experts and entrepreneurship experts were invited (see Annex 2.1, Itinerary). To ensure good quality and for entrepreneurship training construction specific training materials, two additional construction consultants (architects) were invited as resource persons.

For drawing up of Training and Learning Elements (TLEs), use was made of the training materials that have already been developed (ILO (Modules of Employable Skills), GTZ materials developed in Jamaica, private materials and reference books of workshop participants).

2.2 Curriculum of the Builders training

The draft Curricular Outline submitted was discussed and accepted by the workshop participants. It was slightly adjusted by additional exercises such as "Excavating foundation trenches", "Manufacturing terrazzo" and "Cement screeding". The latter as part of the TLE "Hard core and concrete flooring". The question whether painting is a part of the Builders responsibility was positively answered and two simple painting TLEs were developed on the workshop.

It seems that the Unit Standards for Builders are matching workplace requirements. An additional adjustment of the Standards, Curricular Outline and Training and Learning Elements is planned after piloting the programme for a certain time.

The formats for the TLEs were discussed and accepted by VETA. The formats consist of:

1. Cover page;
2. Exercise/Lesson Preparation Sheet indicating objectives, duration, equipment, tools and materials, teaching aids, reference materials and trainees preparation;

3. Presentation Sheet of Instructional Steps including illustrations/instructional points and use of teaching aids;
4. Information Sheet (hand-out) for the trainee.

For further details see Annex 4, Formats of TLEs and Annex 5, Explanations of TLEs.

The TLEs were developed in English to complement the structure and content of the formal training courses. They are in general of a reasonable quality, but some need trade-specific improvements. Before adaptation of the TLEs to academically weak target groups and translation into Swahili, an additional evaluation of the instructional materials is planned during the workshop on development of unit assessment organisation and exercises end of March 2000.

3. Workshop 2: The preparation of the Builders training pilot project

On an additional workshop from the 10 to 11 February remaining difficulties were taken separately in turn and solutions were worked out. Participants of the workshop, The Builders Training Pilot Project, were the VETA Regional Directors of the pilot areas, national VETA and project representatives of GTZ and DANIDA and Managers/Principals of the following pilot centres:

- RVTSC (Dar es Salaam),
- Montfort Technical Training Centre (Dar es Salaam),
- Hai Vocational Training School (Kilimanjaro Region),
- Don Bosco Youth Training Centre (Iringa), and the
- RVTSC (Mbeya).

For further information see Annex 2.1, Itinerary.

The GOPP method was used to identify the major remaining problems. Altogether seven problems were identified during the GOPP¹ workshop:

1. Training not market oriented;
2. Not enough training materials and tools;
3. Instructors are not qualified enough;
4. No sustainable financing of training;
5. Assessment organisation and certification not adjusted;
6. The new VETS not well known in public;
7. Builders training not sufficiently prepared.

For further information see Annexes 7, 7.1 and 7.2, Action plans, and the following seven chapters (3.1-3.7) describing the results to be achieved and proposed preparation activities, which are to be implemented before the Builders training programme will start.

¹ A GTZ planning method called Goal Oriented Project Planning. It was the wish of a number of workshop participants to attend a seminar organised by the Project on this planning method.

3.1 Training is market oriented (Result 1)

Three activities were already implemented to match market labour requirements for wage and self-employment: (1) A VET System was introduced by VETA which permits short but intensive training activities and sequences, (2) a market oriented curriculum and (3) unit standards for the Builder training were developed by the Project.

In addition to that, the workshop participants recommended an intensive dialogue and improved contact of trainees with entrepreneurs and - wherever feasible - construction projects will be implemented together with construction firms and building demonstration activities will be conducted on different construction sites (marketing). Emphasis will be given as well on the identification of potential training applicants and their expectations and net working and bench marking will be improved through activities of RDs, centre managements, instructors in connection with the regional based VETA Labour Market Officers and the employers associations. VETA reduces unnecessary academic entrance requirements and entry to training will be based on performance standard assessment instead, which should be developed on the base of workplace requirements.

To guarantee an excellent level of Builders training, additional staff should be hired by the pilot centres (entrepreneurs, building technicians, experts on micro-financing etc.). It was recommended by the workshop participants that the Project assists in the initial financing.

3.2 Sufficient training materials and tools available (Result 2)

The materials for the Builders training sequences were identified and financial means for the purchase of required training materials and tools and construction materials were given to VETA by the Project (the latter for VTC Hai only). The Project will follow-up the money transfer to the pilot centres via the RDs responsible for the programme. To ease procedures one should find for the future a quicker way to provide financial means, tools and materials to the pilot centres.

After the reception of training applicants the Project staff would in collaboration with the RDs and centre managers analyse the training materials and tools actually demanded.

3.3 Instructors qualification is improved (Result 3)

The training needs of the instructors for the Builders training was identified by the Project. It was decided that all instructors who participate in pilot activities should take a basic upgrading course, which should have two main themes:

- Vocational pedagogic;
- Entrepreneurship skills.²

The planned upgrading course should last approximately 1,5 - 2 weeks (3 days for pedagogic and 5 days for entrepreneurship) and the implementation should take place between 11.04. and 20.4.2000, i.e. during the holidays for the centres.

Tender documents were drawn up for the identification of an institute that could carry out further training for instructors in pedagogic and entrepreneurship. So far bids were sent to Morogoro Teacher Training Centre and the University of Dar es Salaam. Additional bids should be solicited from the Arusha Technical College, Tanzania Institute for Education and others before a decision can be taken.

In addition, it was recommended that DANIDA experts should analyse possible competence deficiency of VETA instructors on a bigger scale and take action for improvements.

To improve attitude and motivation of instructors, workshop participants recommended to pay incentives to instructors for additional tasks (see as well chapter 3.4, Financing of Builder training).

3.4 Builder training is financed (Result 4)

In addition to the contribution of the VETA/GTZ project to the pilot phase, resources will be needed for the implementation of the Builder course to cover the running costs and future capital costs. Three suggestions may be made to address this.

Training fees

Financing should come mainly from training fees. The level of the fees was discussed with several Regional Directors, managers and instructors of the pilot VTCs. The average fees in Tanzania's training centres range from 100,000 to 110,000 Tshs per year. Given this background, it appears that the fees for the Builder course appear reasonable (see attached calculation of Annex 6, Financing the Builder training), especially since the Builders training is offered in shorter sequences and clearly more extensive than for masonry.

VETA's contribution

² For further information see Moll, D.: Main Report, November 1999.

Since VETA is coordinating all training activities in Tanzania and performs quality-control, it is highly recommended to reward training providers (VETA's centres, private VTCs, training companies, etc.) for successful training. The costs that VETA would incur to pay for successful training and further training measures undertaken by other providers would be clearly under the training costs of the VETA centres.

The reward given to training centres for trainees passing VET unit performance standard assessments could even be split. One smaller portion of the reward could be given to successful trainees to motivate them to excellent performances and another portion to the trainer/instructor as an incentive for successful training implementation. The advantage of such a "reward package" would be in the improvement of training quality and better skill qualification.

With this "instrument," VETA could steer training activities to training needs. Payments have to adjusted according to skill areas in demand, remote areas, disadvantaged target groups, etc. and reduced for skill areas with limited employment opportunities.

After piloting the Builders training and evaluation of such a system and analysing legal implications³ a decision should be made by VETA on the proposal to provide payments for successful training activities.

Income generation

It could be observed from the visits to the various training centres in Tanzania that possibilities for income generation activities were far from exhausted. Setting up small-scale production lines, implementing small-scale construction projects, etc., could lead to an increase in additional income, and help to finance the running costs of the Builders training. Consequently participants of the planning workshop recommended to implement a workshop on Entrepreneurship and Training in Production.

For further information see Annex 6, Financing the Builder training and Annexes 7, 7.1 and 7.2, Action plans.

3.5 Assessment and certification is organised (Result 5)

The Unit Standards are providing evidence requirements and assessment guidance in addition to performance criteria and range statements. The assessment guidance is in

³ Could VETA reward not only the institutes but as well trainees and trainers? Would it be better if the institutes would be forced on a contract basis to share the reward with them?

particular an essential information of assessment methods and assessment contents. To reach special target groups and to take into account the self-employment orientation of the Builder programme, assessment criteria will have to be developed principally on the basis of training results and attainment of performance standards, and less on the technology used and the academic knowledge gained. Thus the development of Unit Standards reflecting these requirements is of great importance.

Given the various target groups for the Builder programme and the flexibility of the Builder training that will mean less implementation of entire training modules. In favour of training and further training that is more in the nature of short courses such as training units, after each unit there should also be a certificate issued.

To permit the participation of external candidates the assessment of each unit should be done only on the basis of final examinations. To ensure objectivity and comparability, the assessment should be implemented with the involvement of external trade assessors. Not to overburden the RD's administration regarding assessment procedures the workshop participants recommended the following:

1. Unit assessment will be done internally by the instructor in charge in collaboration with the centre management;
2. Training centres should bundle assessments as much as possible;
3. They inform the responsible RD two weeks before assessment activities will be implemented to permit random visits of the respective Trade Assessor.

The latter would guarantee the objectivity needed to apply the in chapter 3.4 described rewarding for successful training.

The following issue was raised during the workshop: Should the Regional Directors be given other wide-ranging tasks in connection with decentralisation, consideration could be given to establish an Trade Assessment Group/Department and even making these assessors part of a regional Trade Advisory Group (yet to be discussed and decided upon).

The new training concept requires a Test Assessment Bank for units including the development of instructional materials, Unit Standards Assessment Sheets (practical exercises and - if required - theoretical trade knowledge). It is to be ensured that Teaching and Learning Elements match the performance criteria.

It is recommended to develop these "assessment tools" on a workshop between the 27th-30th of March at VETA Head Quarters (conference room) together with the same participants who attended the TLE workshop.

3.6 Public is better informed about the new VETS (Result 6)

It was stated, that the significant possibilities given by the new VET System and the Builder Curriculum should be made public.

The campaign should stress the possibilities offered by the new VET approach. For example, this would highlight:

- **no need for academic entrance requirements,**
- **multi-skilling opportunities through flexible training offers,**
- **modular, short-term training and further training,**
- **training according to individual needs,**
- **orientation towards self-employment and entrepreneurship,**
- **national recognition after short training courses (Units and Modules),**
- **affordable fees because of short but intensive training sequences,**
- **successful training rewarded, etc.**

Publicity should be aimed principally at the communities and target groups in the area of the 5 pilot centres. Leaflets (5000) and posters (1500) are designed and will be printed until end of February and will be distributed by personnel of the RDs and pilot centres in public venues by the pilot centre staff (in markets, churches, party offices, bus stations, etc.) and articles and spot advertisements will be published in the print media.

Other centre-based events, such as an Open House Day, information stands at the markets, speeches to clubs and community groups, etc., could of course be promoted. The Marketing Promotion Specialist of VETA HQ and the Project staff would assist the managements of the pilot centres.

A broader national campaign on VETS would extend the concept to other skill areas and training providers and should be planned in detail once it is clear that the approach taken for the Builder training has achieved the desired results. Such a campaign should be done on a large scale involving television, radio and the print media.

3.7 Builders training programme is sufficiently prepared (Result 7)

The RDs and the managers of the pilot regions and centres are requesting better communication and back-stopping while preparing the Builders training. It is agreed to solve the communication problem through ongoing telephone contacts and visits by the Project personnel together with their counterparts appointed by VETA. To guarantee the readiness of each training centre a flexible begin of the Builders training is foreseen. Anyhow, it seems that a begin of training in May 2000 would be possible for most of the pilot centres.

For further information see Annexes 7, 7.1 and 7.2, Action plans.

All five pilot centres have, over many years of training experience, shown that they have well-qualified instructors and good management capacity. The management capacity is important, since understandably the instructors cannot always meet the higher programme requirements, and their optimal placement has to be realistically assessed by the management and if necessary arrangements made for additional instructional personnel (in entrepreneurship training, credit and loans etc.). Unsatisfactory training harms the reputation and the sustainability of the Builder programme and - in the long-run - raises questions about the applicability of the pilot programmes to other skill areas and training centres. The Management of the pilot centres of the pilot regions bears a high level of responsibility that should be supported as much as possible by project activities.

4. Further steps on feeder road construction and maintenance

In addition to the TOR of the consultant covering the Builders training, information about ongoing and former training activities for road construction and maintenance had to be collected and analysed to develop a possible VETA training concept for road construction and maintenance of feeder roads.

The Tanzanian Government launched in 1990 a 10 years Integrated Roads Programme (IRP) to be executed by the Ministry of Works (MoW). Basically IRP plans included appropriate measures to strengthen management of roads, enhancing road maintenance capacity and expansion of Labour Based Technology (LBT)⁴. A policy statement on the use of Labour-Based Methods (LBM) and a National Labour-Based Road Sector Programme was introduced in 1996. To maximise the use of local resources the MoW launched consequently a Appropriate Technology Advisory and Training Project (ATATAP) which has the goal to introduce and expand the use of LBM wherever feasible.

Two Appropriate Technology and Training Institutes were established (Mbeya and Tanga regions) to carry out training of supervisors and inspectors of road works in LBM techniques. Also the Appropriate Technology Unit (ATU) was established to advice ATATAP, in addition, training programmes were implemented by the National Construction Council (NCC).

Lack of financial means and lack of a maintenance policy and organisation led to unclean drainage systems, unacceptable axle loads, unlevelled or destroyed road shoulders etc. and the condition of roads became worse over the years and only a limited success could be analysed regarding maintenance by the responsible MoW.

Anyhow, meanwhile financing of road construction and maintenance became perspectives through the introduction of the Tanzania Social Action Fund, which has financial means for labour-intensive road construction, and the establishment of a Road Authority (TANROADS). It is planned that the latter will finance road construction and maintenance activities by a fuel tax (70 Tshs/litre).

Since both initiatives are committed to LBM, one hopes that significant measures will be taken to finance and improve regional and district feeder roads, ideal for labour-based and labour-intensive methods.

⁴ MoW, Rural Roads Division: Appropriate Technology Advisory and Training Project (ATATAP, Seminar organised by Appropriate Technology Unit (ATU).

A technical manual in four volumes (Appropriate Technology Labour Based Road Works Technical Manual HV) by Consulting Engineers of the ILO and ATU through the project ATATAP outlining the tasks of rehabilitation, maintenance, design and contract documentation and a Management Manual on Routine Maintenance developed by the Road Project of the GTZ in Arusha⁵ may serve as a guideline for planning implementation and training matters.

The training demand of implementing contractors such as villagers (village contracts), petty and labour-based contractors according to their possible different tasks (routine/ongoing, recurrent and periodic maintenance, rehabilitation and re-construction) differs significantly. This, and the fact, that certain training institutes like ATTI Mbeya, Tanga but as well the Technical College Arusha (TCA) are already offering training activities, it is recommended to invest more time in the analysis of possible training activities of VETA.

It was agreed that the consultant before designing training profiles and recommending training activities of VETA would during his next assignment contact above mentioned stakeholders involved. Prior he will concentrate on the analysis of the training demand of local contractor and villagers on feeder road construction and maintenance on district level. The analysis has to cover the different training demand on LBM for the above mentioned target groups and, at the same time, should indicate a feasible organisation of training. An emphasis should be put on an appropriate training level for the parties involved (brief, to the point and as the site based and practical as possible).

⁵ GTZ/DIWI/Regional Engineers Office Arusha: Routine Maintenance Manual.