

November 20-21, 2006
Addis Ababa, Ethiopia



Proceedings: International symposium on
**Implementation issues of diversified
financing strategies for TVET**

gtz

ecbp engineering capacity
building program

Published by:

Deutsche Gesellschaft für Technische Zusammenarbeit
(GTZ) GmbH
– German Technical Cooperation –

Deutsche Gesellschaft für Technische Zusammenarbeit
(GTZ) GmbH Postfach 5180
65726 Eschborn
T +49 6196 79-0
F +49 6196 79-1115
E info@gtz.de
I www.gtz.de

Staff responsible for publication:

Andreas König, andreas.koenig@gtz.de

Editors:

Jutta Franz, franzjutta@web.de
Andreas König, andreas.koenig@gtz.de
Julia Schmidt, julia.schmidt@gtz.de

Proceedings compiled by:

Eva Castañer, eva.castaner@t-online.de

Layout and design:

Büro für Typo-Grafik, meenenga@gmx.net

Photos on cover:

R. Maro on behalf of GTZ-ECBP
Stefan Erber (GTZ)
Bildarchiv GTZ

Print:

Druckservice Harry Schmidt, 51105 Köln
www.druckserviceschmidt.de

February 2007

Printed on recycled paper

Table of contents

Foreword	3
1 Introduction	4
2 The Ethiopian approach to financing TVET	5
3 Promoting efficiency, effectiveness and equity in public TVET institutions	7
4 International experience with cost-sharing with trainees	9
5 Financial implications of cooperative TVET	11
6 Generating income and increasing capacity utilisation in public TVET institutions	13
7 Promoting private investment in TVET	17
8 Financial implications of standard-based TVET	20
9 Lessons learned	21
10 Participants' feedback to the symposium	25
List of annexes	29
Annexes	30
Acronyms	103

Foreword

The Government of Ethiopia is currently developing a new financing strategy for technical and vocational education and training (TVET) as part of the ongoing fundamental reform of the Ethiopian TVET system. The aim is to secure a sustainable finance base and develop operational mechanisms to support this ambitious reform.

To enrich this process, the Ethio-German Engineering Capacity Building Program (ECBP) organised an International Symposium on Implementation Issues of Diversified Financing Strategies for TVET on November 20-21, 2006 in Addis Ababa, Ethiopia.

The purpose of the symposium was to add an international perspective to TVET financing options at a time when Ethiopia faces the major challenge of fine-tuning and putting its TVET financing strategy into practice. In this spirit, the symposium was designed as an opportunity to benchmark the planned financing strategies against international best practice, to exchange lessons learnt with practitioners from other countries, and to assist Ethiopian decision-makers, implementers and stakeholders both at federal and regional levels in widening their understanding of the relevant issues, challenges and opportunities when developing and implementing sustainable mechanisms of financing TVET.

The symposium was attended by nearly one hundred experts and practitioners from eleven countries and four continents, who generously shared their experience and knowledge and actively engaged in critical reflections and learning about TVET financing.

The present document presents the proceedings of the symposium. The two-day symposium was organized as a combination of plenary and panel sessions. The plenary sessions introduced the participants to the recently formulated draft Financing Framework for TVET in Ethiopia in the context of the broader Ethiopian TVET reform process and provided an overview of international best practice in financing TVET, presented by internationally renowned TVET financing experts.

The panel sessions were used to present experiences from different countries regarding the implementation of a series of financing instruments. The selection of panel topics was guided by specific challenges arising from the Ethiopian TVET Financing Framework, rather than by mainstream trends in the international discussion on financing TVET. Lessons learned from the panels were reported to a final plenary session, with special emphasis on their relevance for the further development of the Ethiopian TVET Financing Framework. The agenda of the symposium is shown in Annex 1.

The present documentation consists of a narrative part and a series of annexes. The narrative summarises the main issues raised during the different plenary sessions and panels. Its structure roughly follows that of the symposium's agenda, but those sessions which covered related topics have been clustered in order to avoid repetitions and to provide a more comprehensive picture. The chapter Lessons Learned pulls together the lessons and conclusions that emerged throughout the whole symposium. The last chapter summarises the participants' feedback to the symposium.

All original presentations or papers delivered by the different resource persons are provided in the annexes as reference material. Therefore the narrative focuses on the core messages of the presentations and highlights the main issues that were raised during the discussions. Annex 2 briefly introduces the speakers and facilitators.

With this documentation, we would like to make available the wealth of international knowledge and experience shared during the course of the symposium. We believe that this will be relevant for practitioners, experts and policy makers working on TVET system reforms and specifically dealing with issues of TVET financing – in Ethiopia and worldwide.

Jutta Franz, Andreas König, Julia Schmidt (Editors)
Eschborn, February 2007

1 Introduction

The symposium was officially opened by H.E. Minister of Education (Ethiopia) Dr. Sintaheyu W/Michael. His speech and that of Martin Mueller, German Director of the Engineering Capacity Building Program (ECBP), highlighted the important role that the reform of the Technical and Vocational Education and Training (TVET) system plays in achieving Ethiopia's targets to overcome poverty.

Under the overarching goal of poverty eradication, Ethiopia's economic development strategy aims at fostering fast economic growth, fair and equitable distribution of incomes, the development of a competent and open economy, and long-term reduction of the country's dependence on ODA (official development assistance).

While a whole range of policies are necessary in order to achieve these objectives, the examples of other countries such as South Korea, Taiwan, Singapore, Hong Kong, Japan and Germany show that the development of human capital will play a pivotal role in Ethiopia's social and economic development. In the case of Ethiopia, this includes advancing from a largely agrarian to an industry-based economy. This requires the development of middle level workers to satisfy the labour demand of the different sectors of the economy.

Ethiopia has made considerable progress towards universal primary education and continues to work hard to ensure relevance and quality at each educational level. As an increasing number of young people graduate from general education, it is of utmost importance to

provide them with options for further education and training which increase their employability.

In this context it is important to build a demand-driven, flexible, integrated and high quality TVET system. The Government of Ethiopia (GoE) recognises the need to involve all stakeholders in the planning, policy making, training delivery and monitoring and evaluation of the TVET system. The on-going reform seeks to increase the engagement of the private sector – both of private TVET providers and enterprises as future employers of TVET graduates – and to provide students and trainees with knowledge, skills and abilities relevant for the world of work.

One of the biggest challenges ahead is the sustainable financing of the reform process and of the actual operation of the TVET system. The principles for this are laid down in the draft Financing Framework for TVET in Ethiopia. The main underlying principle is the need for efficient and effective use of diverse resources in order to be able to provide more and better training to Ethiopia's youth.

The symposium was an open invitation to all Ethiopian stakeholders to engage in the development of Ethiopia's TVET system and a unique opportunity to share lessons and learn from internationally renowned experts and practitioners from all over the world.

The speech by H.E. Minister of Education (Ethiopia) Dr. Sintaheyu W/Michael is attached as Annex 3.

2 The Ethiopian approach to financing TVET

Presenters:

• *Dessalegn Mulaw, TVET System Reform and Capacity Building Department Head, Ministry of Education, Ethiopia*

• *Arvil Van Adams, Senior Consultant*

Chair:

• *Andreas König, ECBP-TVET Reform Component Coordinator, Ethiopia*

The objective of this session was to introduce the newly drafted Framework for Financing TVET in Ethiopia from a double perspective. Dessalegn Mulaw's presentation (Annex 4) provides the context within Ethiopia's TVET system reform and outlines the main principles and elements of the financing framework. Arvil Van Adams' presentation (Annex 5) draws from his more than twenty years of experience in TVET reforms and provides lessons for Ethiopia.

Main issues of the presentations and discussion:

Ethiopia's TVET system reform

Ethiopia has achieved an increase of 1,200 % in TVET enrolment over the past five years and ranges second country in Africa in terms of number of training institutions. The recent growth in TVET enrolment and provision has been achieved by a considerable expansion of public spending and increased TVET provision by private institutions. Government sources estimate that private TVET providers currently provide approximately 30% of all TVET in Ethiopia. Private TVET providers estimate their share of the market to be closer to 50%. NGOs (non-governmental organisations) also provide a significant share of TVET in Ethiopia.

Despite this significant progress in expanding TVET enrolment and provision, the current system can only supply formal TVET to 3% of the relevant age cohort of primary education graduates. However, those who do not finish primary education also need to acquire skills to find employment. Ethiopia's National TVET Strategy seeks to address these gaps in TVET provision through a number of different measures.

The purpose of the TVET system reform is to develop a coherent and comprehensive TVET system that allows Ethiopia to train the middle level workforce it needs to boost the country's economic growth and competitiveness in global markets. Ethiopia's National TVET Strategy reflects best international practice regarding governance, management, delivery and financing. A TVET reform is a long-term process – a journey in which Ethiopia is joined by other countries worldwide.

Principles of the new TVET Financing Framework

Based on the core principles for financing laid out in the National TVET Strategy, a Financing Framework for TVET in Ethiopia has been drafted. The main principles of the new TVET Financing Framework are diversification of funding sources, increased involvement of the private sector, and increased efficiency.

These principles are not intended to reduce public spending, but to share the burden and readjust the roles that the public sector, the private sector and households play in TVET financing. The public sector must still actively finance TVET because it needs to address issues of equity, market failures, strategic development, etc.

The three P's for TVET Financing

Financing is a powerful tool to shape the social and economic impact of the TVET system: the way a country chooses to finance its TVET system has a significant impact on its quality, efficiency and relevance. This will influence the potential of TVET to foster fair social and economic development and – ultimately – to reduce poverty.

The three P's for financing can assist policy makers and practitioners in making the right decisions: Poverty (assuring attention to the poor), Performance (creating the right incentives for results and quality), Partnership (creative involvement of the private sector in governance, financing and delivery). In using the 3 P's to guide the choice of TVET financing instruments and mechanisms, it is important to strike a balance between the three.

• Poverty

A broad sectoral perspective is needed when devising mechanisms for cost-sharing with trainees/students. Introducing fees (up front or ex-post) only in certain branches of the education sector introduces potential inequities into the system.

Private TVET providers need full cost-recovery. The state needs to creatively use a range of instruments to ensure that the poor have equal access to good quality TVET, whether from public or from private TVET providers.

There is a potential problem to be considered in balancing out performance against equity. If the performance of TVET institutions is only measured in terms of how many of their students pass standard-based assessments, there is a risk that the institutions will select high performers, who tend to be from higher income families. This can be overcome by creating specific rewards/incentives for institutions who take in poor students.

- **Performance**

In the past, the significant increase in TVET enrolment in Ethiopia was managed by a combination of government funding, intensive short-term teacher training and building of TVET centres. The rationale was still that of a supply-driven system. The future stages of the TVET reform require a paradigm shift towards a demand- and outcome-driven system. This holds not only for the training itself, but for the management of the TVET system and its institutions as well. The deciding factor for success is not input or supply, but performance.

- **Partnership**

In countries like Ethiopia, where the consumers do not yet sufficiently value quality, it is difficult to convince private sector employers to invest in training skilled workers to improve the quality of their products. It is the role of the government to sensitise both consumers and producers about the benefits of quality – quality of products and services as well as of education and training.

Public and private TVET providers need to explore ways to build partnerships. The dialogue established during this symposium can serve as a platform to further develop openness and mutual trust.

TVET financing is an important aspect of governance in TVET. Stakeholders expected to contribute financially will do so more willingly if they are involved in governance as well. The private sector in any country tends

to be more prepared to engage in multi-stakeholder forums when it recognises the relevance of doing so. In large countries, it may be easier to get the private sector on board at the level of regional associations, which can later be scaled up to the national level.

Public-private partnerships require new roles and responsibilities by all actors involved. Both sides need to assess what they need to learn in order to become better partners. These learning needs can be addressed through appropriate capacity building measures.

Ethiopia's significant progress towards universal primary education by 2015 has increased the pressure to expand post-primary education, including secondary, TVET and higher education. An increasing number of donors have expressed their interest in supporting TVET. In the long run, the TVET system needs to be able to function sustainably based on diverse funding sources in order to reduce dependency on external inflows of funds.

Managing the reform process

TVET reform is a long-term process. Accelerating the pace of change can jeopardise quality. Any TVET reform requires good M&E (monitoring and evaluation) mechanisms and willingness to learn from experience. South Korea is one of the best examples worldwide for improvement based on continuous learning from experience.

3 Promoting efficiency, effectiveness and equity in public TVET institutions

Presenter:

• *Vladimir Gasskov, Senior Training and Skills Development Specialist, Skills and Employability Department, ILO Geneva*

Chair:

• *Andreas König, ECBP-TVET Reform Component Coordinator, Ethiopia*

In this session Vladimir Gasskov presented an overview of mechanisms for financing TVET – their structure, underpinning factors, and the features that make them efficient, effective and equitable. For the original presentation see Annex 6.

Main issues of the presentation and discussion:

The three E's for TVET Financing

The choice of TVET funding mechanisms has leverage on the achievement of national development objectives (Effectiveness), on outputs per unit costs (Efficiency) and on the degree to which students from different background have access to good quality training (Equity).

Structure of TVET financing mechanisms

When discussing TVET financing mechanisms it is important to differentiate the following different components: sources of funding, decision-making authorities, rules and procedures for budgeting and disbursement, and the financial and performance accountability system. Many different examples exist across the world and the outcome in terms of the three E's for TVET financing depends on how these components are fine-tuned.

Output-based versus input-based disbursement of public funding

Input-based funding mechanisms – based on costs due to human resources, training materials, equipments, logistics, etc. – are popular because they are comparatively less complex than output-based ones. The disadvantage is that input-based disbursement is rather rigid and cannot be used as an instrument to reward the quality and relevance of training.

In output-based funding formulas, the government purchases TVET outputs. This can be measured as the number of student guided hours (SGHs) or equivalent

full time students (EFTSs). Different courses are assigned different funding rates according to their level and practice orientation. The comparative advantage of this formula is that it allows to link disbursement to actual performance.

Underpinning factors for output-based funding

In order for an output-based funding mechanism to work, it requires reliable funding sources, transparent disbursement mechanisms and fair funding rates for different types of courses, a high degree of management autonomy for TVET institutions, standard-based quality assurance, and transparent accountability mechanisms.

Output-based funding requires the different stakeholders to acquire new knowledge and capabilities: funding agents need to be able to use the flexibility to achieve objectives and priorities; TVET providers need to be able to cope with increased complexity in funding, management and accounting; funding agents and providers need to be able to assess and negotiate fair funding rates and accountability mechanisms.

Dealing with complexity

The increased complexity of information, bureaucracy, and management associated with output-based funding requires appropriate instruments and professional TVET managers and accountants. Options exist to simplify certain aspects of the system, such as grouped funding rates and reducing the number of indicators to report against. However, a certain level of complexity remains and requires directors of TVET institutions to assume new roles as managers of an enterprise. This may be difficult for small TVET institutions in remote areas.

Flexibility

Output-based funding based on fair rates of funding, standard-based quality assurance and transparent accountability mechanisms can be used for any kind of training provided by any kind of provider (public, private, NGO). The use of SGHs/EFTSs makes it possible to adapt disbursement to TVET institutions on a quarterly basis, depending on their performance.

Studies in New Zealand show that it is very difficult to establish the precise cost of training. Courses of different funding rates can subsidise each other. This requires considerable management flexibility at the same time as transparent accountability for the funding received.

Poverty – equitable access to TVET

Different mechanisms exist to enable students from different backgrounds to access TVET opportunities equally, such as full government funding, income-dependent training fees, education loans, etc. The choice of mechanisms needs to take into account factors such as the country's level of income, rate of employment, etc.

In developing and emerging countries, training loans bear a considerable risk of loan default. Usually, only employed graduates under 50 years of age are liable for loan repayment. An option may be loans disbursed by commercial banks, assuming that they are more likely to check which kind of training is more likely to lead to employment of the graduates. Any training loan scheme should be analysed very carefully in terms of its real effect on equity.

Performance

There is a certain concern that the burden of complex management might compromise the quality of the training delivered. In order to counter that, funding rates must be based on competency-based quality assurance standards. SGHs must not merely reflect the amount of teaching hours, but must internalise all additional resources invested into increasing training quality, such as equipment, qualified teachers and instructors (including their time spent on class preparation, increasing their own skills and knowledge, company visits, etc.), care takers, and overheads (management and capital costs). In New Zealand for instance, reconciliation committees negotiate funding rates based on quality standards. One important indicator is satisfaction and employability of students.

Partnership

Financing sources may include public funds, enterprise contributions, trainee contributions, and income generated by the TVET institutions. The question is not just which resources are made available, but also how they are channelled into the TVET system to produce the desired impact. Many different options exist for this.

Vice versa, opting for a certain mechanism such as sectoral training funds, for instance, does not automatically imply that this will be only financed by the private sector – in fact employees, employers and the public sector may all contribute into the fund.

The public sector still has the responsibility to set quality standards, define development priorities, contribute to the costs of TVET through fair funding rates which may include overheads, and develop funding options for students from different backgrounds (income, prior education, region, gender, social and economically disadvantaged, disabled etc.).

Managing the reform process

The TVET reform process in Ethiopia is of considerable size and complexity. The amount of time required for institutional changes should not be underestimated. The example of New Zealand shows that it may take more than 10 years to introduce flexible staffing schemes into systems with an initially high percentage of civil servants.

In a country the size of Ethiopia, decentralisation is likely to play an important role. The most innovative of current trends is to have different structures disburse public funds and/or purchase training for different target groups.

4 International experience with cost-sharing with trainees/students

Presenter:

• Adrian Ziderman, Professor in Economics and Business Administration, Bar-Ilan University, Israel

Chair:

• Andreas König, ECBP-TVET Reform Component Coordinator, Ethiopia

Adrian Ziderman introduced the concept of cost-sharing with trainees and the benefits and risks associated with it. Based on international experience with higher education, he presented a financial analysis of student loan schemes and derived lessons learned for TVET in Ethiopia. The presentation is attached as Annex 7.

Main issues of the presentation and discussion:

Rationale of cost-sharing with trainees

Traditionally, TVET fees have tended to be heavily subsidised, making only a very small contribution to covering the costs of TVET institutions. This can be a severe budgetary burden where public resources are scarce. The justification for cost-sharing with trainees is that since TVET graduates benefit from higher incomes – due to increased employability and better payment – they should contribute to bearing the cost of TVET.

Trainees can contribute to sharing the burden of TVET financing by paying higher, more realistic (i.e. covering a higher percentage of the actual training cost) up-front fees, through loan schemes, or by paying and ex-post “graduate tax” as proposed in the TVET Financing Framework for Ethiopia.

The income generated through cost-sharing with trainees can be used to maintain current levels of enrolment and quality, for TVET expansion, or to encourage private TVET provision.

Risks of cost-sharing and risk mitigation

The risks of increasing TVET fees are that total TVET enrolment may decrease (especially if other tracks of education are not subject to fees) and that disadvantaged candidates may be excluded from accessing TVET.

These risks can be mitigated by selective exemptions and selective grants. These tend to create a considerable burden on public budgets when the number of deserving candidates is high. This is where loan schemes come into consideration.

Equitable cost-sharing through loan schemes – theory and practice

Loan schemes suggest the win-win possibility of reducing the public budgetary burden (cost-sharing) over time while increasing access to TVET for disadvantaged groups (equity). The idea is that loan repayments will serve as a revolving fund. However, international experience in student loan schemes for higher education calls for caution in managing expectations towards loan schemes.

With regard to cost-sharing (budgetary objectives), experience shows that the costs associated with the provision of loan capital, administration of the loans scheme, and loan default result in a maximum loan recovery ratio of 67%. The non-repaid element represents an implicit (“hidden”) grant.

In terms of increased access for disadvantaged groups (social objectives) there is no evidence that loan schemes effectively raise access to higher education for disadvantaged groups. Selective grants are more effective, but also more expensive. A certain balance between budgetary and social objectives can be achieved with appropriate criteria for screening of candidates, pro-active targeting of needy students, adequacy of loan size and conditions, and a unified loan and grants policy.

The performance of loan schemes can be improved by using commercial banks to disburse and collect the loans. However, this still requires public funding to subsidise low interest rates and to cover default loans.

Screening versus pro-active targeting

Mechanisms to improve access of disadvantaged groups to TVET need to take into account the multidimensional nature of poverty. This includes not only the level of income and prior education, but also access to information, ability to understand bureaucratic procedures, etc.

When using screening, it is important to design appropriate criteria. An example from Thailand shows that if the income level used for screening is set too high, the most disadvantaged candidates compete with more educated, better informed, less needy candidates.

Appropriate screening criteria need to be backed by outreach (pro-active targeting) to reach the most disadvantaged target groups. A certain percentage of the resources raised through fees should be earmarked for this purpose.

Applicability of loan schemes to TVET

It is difficult to assess the extent to which the international experience presented here can be applied to TVET, since it is mainly based on loan schemes for higher education. No truly comparable examples exist for TVET.

TVET tends to attract trainees from lower socio-economic groups. On the one hand, this might result in higher repayment default, less preparedness to assume the risk of a loan scheme, and problems of repayment follow-up, given that most graduates will be (self-) employed in the informal sector. On the other hand, they are more likely to recognise employment and wage benefits of TVET than of higher education.

Applicability of graduate tax to TVET in Ethiopia

Again, it is difficult to assess whether experience based on higher education can be applied to TVET. Even if it were, caution is necessary given that the success of higher education graduate tax is still largely unknown. The pre-requisites for smooth graduate tax collection are not usually found in developing countries (location of borrowers, information on income earned, effective collection mechanism).

The term 'contribution' might be more appropriate than 'tax'. As a label to generate social acceptance of the scheme, 'contribution' may be more positive. Also, it is questionable whether the proposed graduate tax in Ethiopia has the nature of a tax in the sense of an income-contingent payment not limited in time.

At this stage in Ethiopia, moderate fee payments may be more appropriate for cost-sharing (budgetary objectives), combined with selective exemptions or grants for increased access of disadvantaged groups (social objectives).

Cost-sharing versus cost-recovery

The resources collected through a cost-sharing scheme (loan, tax, contribution) may be used to reduce public spending while maintaining the overall level of spending on TVET (cost-sharing). They may also be used to inject additional funds into the TVET system to expand output and increase quality (cost-recovery).

Managing the reform process

It is of crucial importance to develop a good M&E system and to invest in good information and feedback gathering. Changes likely to have a critical impact on the access to TVET for disadvantaged groups – e.g. higher training fees – should be introduced gradually, and their impact should be carefully monitored.

5 Financial implications of cooperative TVET

Presenters:

- Folkmar Kath (Panel 1), former Head of the Costs and Financing Department of the German Federal Institute for Vocational Training (BIBB)
- Roberto Niez (Panel 5), Administrator of the Jacobo Z. Gonzales Memorial School of Arts and Trades (JZGMSAT) in the Philippines

Chair:

- Julia Schmidt (Panels 1 and 5), Senior Expert, ECBP-TVET Reform Component, Ethiopia

Particular relevance of the topic in the Ethiopian context:

The Ethiopian TVET Financing Framework assumes that a deepened involvement of employers in the delivery of TVET, through cooperative and in-company training has a significant potential to increase cost-effectiveness in the TVET system and specifically to reduce the relative share of expenditure for public TVET provision. The focus is not on reducing the total amount of public spending on TVET but to tap into other financing sources in order to expand the quantity and quality of TVET provision.

The objective of panels 1 and 5 was to explore the financial implications of such cooperation for both training institutions and participating companies using the examples of Germany and the Philippines.

With its dual system, Germany maintains a well-established and structured cooperative training system. The cost implications of this system are well documented.

The Philippines have recently established a formal cooperative training programme, called the Dual Training System. The JZGMSAT (Jacobo Z. Gonzales Memorial School of Arts and Trades) is one of the leading institutions in the implementation of the programme. In the particular case of the Philippines, another topic of interest was the different approaches of training institutions to raise external income and to increase capacity utilization of facilities through income-generating activities and provision of tailor-made non-formal training programmes, in particular to companies.

The presentations *Employers' contributions to TVET in the German dual system* (Panel 1) by Folkmar Kath and *Experience with the dual training system in the Philippines* (Panel 5) by Roberto Niez are attached as Annexes 8 and 9, respectively.

Main issues of the presentation and discussion:

How much do companies spend on TVET, and what is the return in financial terms?

Recent research carried out in Germany shows that when looking at the financial return of cooperative TVET for companies it is important to distinguish gross costs, net costs and benefits.

Gross costs are the costs actually incurred by the company during the training process. They usually include personnel costs of trainees (trainees already receive a wage in Germany), personnel costs of instructors, plant and material as well as other costs. Net costs are calculated by subtracting the returns from the gross costs. The returns are generated by the trainee's productive work during the in-company training.

Gross costs vary considerably depending on the sector, the region where the company operates, and the way the training is organised within the company. The differences are even greater for net costs, since the proportion of return varies substantially. Figures will also differ depending on whether full or direct costing methods are applied. Direct costing only covers the types of costs actually incurred as supplementary costs by the company as a result of training while full costing also considers other kinds of costs. In Germany, it is estimated that average gross costs per trainee and year amount to 16,435 EUR, returns to 7,730 EUR, hence resulting in average net costs of 8,705 when calculated by full costing (10,178 EUR gross and 2,488 EUR net with direct costing).

While gross and net costs are calculated for the actual training period, the estimation of benefits uses a long-term perspective, taking into account parameters that are much more difficult to quantify. These benefits result from hiring persons trained in the company instead of recruiting external skilled workers, from the cumulative critical mass of skilled workers generated by all cooperative training efforts across a certain sector, from innovation effects triggered by the actual in-company training process, and from the improved public image of companies who engage in cooperative training.

How can employers' investment in TVET and their participation in cooperative training be stimulated? What incentives have worked in developing countries?

The German dual system has evolved over centuries and is engrained into the German culture. Even so, only 25% of enterprises in Germany engage in cooperative training. Across the world, stimulating enterprises to engage in cooperative training requires continuous efforts by the government.

In making the case for cooperative training it is important to explain that investment in cooperative training is a mid- and long-term investment in human capital. The difference between short-term net costs and long-term benefits needs to be well communicated. In developing countries, the shortage of skilled labour is quite tangible, and the opportunity of overcoming this shortage may already provide strong motivation for engaging in cooperative TVET.

It is equally important to raise awareness for the economic and social dimensions of cooperative TVET: it provides the economy with skilled labour capable of competing at international standards and it increases the employability of the trainees. This is of crucial importance not only at the level of individual enterprises, but for boosting the country's competitiveness in global markets and fostering economic growth and social development as a whole.

The experience from Germany, the Philippines and other countries shows that the government needs to pro-actively campaign in order to raise the public's awareness of the benefits of cooperative training. Not just the private sector needs convincing, but society as a whole. This advocacy and marketing is not a one-time campaign but remains a continuous effort. In Germany, negotiations among the different social partners regarding cooperative TVET take place on a yearly basis.

Tangible incentives for private sector investment in TVET may include tax deduction for training expenses and training-related donations, subsidies for capital expenses to improve training facilities, collective or individual agreements to insert training clauses into the labour contracts of trainees (whereby trainees who leave the company before a pre-established point in time after completing their training have to refund part of the training costs to the company), etc.

How and to what extent can employer-based TVET contribute to the overall resources available for TVET? Does cooperative training reduce unit cost for TVET in TVET institutions, hence for government?

During in-company training, the employer covers the trainee's and instructor's personnel costs. It also provides training facilities, either as separate training workshops or integrated into the regular productive activities of the company.

In the case of JZGMSAT's dual training programme, the employers cover the trainees' fees for the in-school component of the cooperative TVET and contribute to a revolving fund used for capital and operational expenses of the TVET institutions as well as for scholarships for needy trainees.

All this constitutes a net inflow of resources into the TVET system. Government funding is still required to cover the TVET institution's personnel costs, operational expenses and part of the capital outlay.

Does cooperative training lead to an enrolment increase compared to the traditional way of institution-based TVET?

In the case of JZGMSAT, the introduction of the dual training programme has led to an annual increase of enrolment by approximately 11%.

Approaches of training institutions to raise external income and to increase capacity utilization of facilities

In the example presented from the Philippines, TVET institutions generate income through tailor-made courses for enterprises, evening courses and entrepreneurial activities of students. The in-company training component allows the TVET institutions to accommodate more students and thus increase capacity utilisation of its facilities.

Managing the reform process

TVET systems are not transferable as a whole. It is important to look at elements and decide how they can be adopted and adapted to the local context.

To foster cooperative TVET it is crucial to develop and support cooperation between all stakeholders.

6 Generating income and increasing capacity utilisation in public TVET institutions

Presenters:

- *Bester Mahube (Panel 2), Coordinator of Tswelelelopele Brigades Centre, Botswana*
- *Godfrey Kafere (Panel 3), Principal of Lilongwe Technical College (LTC), Malawi*
- *Roberto Niez (Panel 5), Administrator of the Jacobo Z. Gonzales Memorial School of Arts and Trades (JZGMSAT) in the Philippines*
- *Gaminie Gunasinghe (Panel 8), Senior Consultant to REVO (Rehabilitation and Modernization of TVET Institutions) Project*

Chairs:

- *Jutta Franz (Panels 2 and 8), International Development Consultant on TVET Finance*
- *Dessalegn Mulaw (Panel 3), TVET System Reform and Capacity Building Department Head, Ministry of Education, Ethiopia*
- *Julia Schmidt (Panel 5), Senior Expert, ECBP-TVET Reform Component, Ethiopia*

Particular relevance of the topic in the Ethiopian context:

In its new financing framework for TVET, the Ethiopian government seeks to recover a substantial share of recurrent costs of public institutions through more systematic income-generating activities. Furthermore, unit cost in public TVET institutions is rather high, because institutions are under-utilized and often run under capacity. On the other hand, some – particularly urban – TVET institutions are overcrowded, which compromises the quality of training provided. The new financing framework therefore calls for increased capacity utilization through non-formal training activities, and increased efforts by the management of public training institutions to develop tailor-made TVET offers for industry and businesses and to deepen the relationship with the private sector. The issue of overcrowded TVET institutions is proposed to be addressed through introduction of performance-based budgeting and through improved management capacity of institutions at all levels of the TVET system.

The Botswana Brigades (government-subsidized but community-owned TVET centres) generate external income by involving trainees in productive work and running independent production units in the centres. They are part of a well-established and formally structured TVET system and constitute a locally adapted approach to Training with Production.

In the second half of the 1990s, Malawi embarked on a TVET sector reform process with the aim of making TVET relevant and accessible. Lilongwe Technical College (LTC) is an outstanding example of a college which prior to the reforms faced the common challenges of poor infrastructure, under-funding, running under capacity and providing TVET programmes that were not related to the labour market. Now LTC is one of the leading schools in Malawi providing competency-based TEVET (technical, entrepreneurial and vocational education and training) programmes and a wide range of skills development options, with substantial non-formal training and other income-generating activities.

The Philippines have recently established a formal cooperative training programme, called the Dual Training System. National TVET policy in the Philippines also encourages public TVET institutions to generate income to cover part of the training costs. The JZGMSAT (Jacobo Z. Gonzales Memorial School of Arts and Trades) is one of the leading institutions in the implementation of the cooperative training programme and generating income (see Chapter 5 on Financial implications of cooperative training).

In Sri Lanka, the authorities have embarked on a policy to encourage income-generating activities in public TVET institutions. This policy is primarily aimed at increasing the efficient use of human and physical resources in the institutions.

The papers *Training with Production in the Botswana Brigades* (Panel 2) by Bester Mahube, *Increasing training activities and income: the example of Lilongwe Technical College, Malawi* (Panel 3) by Godfrey Kafere, the presentation *Experience with the dual training system in the Philippines* (Panel 5) by Roberto Niez, and the paper *Improving capacity utilisation and income in TVET institutions in Sri Lanka* (Panel 8) by Gaminie Gunasinghe are attached as Annexes 10, 11, 9 and 12, respectively.

The discussion in panel 2 also presented the opportunity to learn about the current development of income-generating activities in TVET institutions in Rwanda.

Main issues of the presentation and discussion:

Approaches of training institutions to raise external income and to increase capacity utilisation of facilities

Based on the experiences of the countries represented in the different panels, three main types of income-

generating activities (IGAs) can be distinguished: production units at TVET centres undertaking entrepreneurial activities related to the occupational fields taught at the centre, diversified training offers, and other commercial activities (see box below). Additionally, most TVET institutions charge fees as a way of cost-sharing with trainees. Diversified training offers and cooperative training schemes with the private sector also serve to increase capacity utilisation of facilities.

Production units serve the double purpose of raising some income for the TVET institution and improving the relevance of TVET through exposure of the trainees and their instructors to the world of work (Botswana, Malawi, and Rwanda). The whole concept of the Botswana brigades was developed around such units with the added objective of contributing to local development by implementing (government-sponsored) infrastructure development projects. JZGMSAT in the Philippines has also developed entrepreneurial activities which serve the double purpose of generating income and providing the trainees with opportunities for on-the-job learning, although this does not appear to be its main focus for IGAs and improved capacity utilisation. In the case of Sri Lanka, the production units in public TVET institutions are used for cost-recovery – all income generated is remitted to government revenue and the treasury provides funds to cover the costs. Although this does not generate additional income for the institution, it does provide teachers and instructors with additional income.

Examples of IGAs mentioned during the symposium:

Production units: carpentry workshop, weaving workshop, building material production, garage, metal working workshop, slaughterhouse, office and IT support services, materials testing, electronic devices repair workshop.

Diversified training offers: in-school courses or in-company training for enterprises (fees paid by employers), for the unemployed (contracted by employment agency), upgrading courses for civil servants (contracted by different line ministries), training of trainers (contracted by NGOs or development agencies), preparation of students for national and international professional examinations.

Others: consultancies, conducting testing of recruitment candidates for enterprises, organising trade fairs, hiring out facilities.

Offering tailor-made courses for enterprises and evening courses for diverse target groups is the main strategy of JZGMSAT in the Philippines to raise additional resources for the centre. It is also used by brigades in Botswana. This kind of IGA is at the same time a strategy to improve capacity utilisation of TVET institutions.

The fees charged to trainees vary and are usually higher for courses with higher levels of certification. In Botswana, for instance, centres offering National Crafts Certificate (NCC) programmes can charge higher fees than those who offer Trade Test B and C, because NCC are higher qualifications than Trade B and C.

The fact that the dual training system includes in-company training periods allows JZGMSAT to accommodate more students and thus increase capacity utilisation of its facilities. Another source of income for JZGMSAT is the contribution paid by the companies participating in the cooperative training programme, of which 90% are forwarded to the trainees as allowances and the remaining 10% are paid into a revolving fund used to contribute to the institution's capital expenses, operational expenses, scholarships and medical and social assistance schemes for trainees.

How can the government encourage the development of IGAs and improved capacity utilisation by TVET institutions?

Transparent 'rules of the game', capacity building, technical assistance, subsidies and tax incentives are named as incentives for TVET institutions to engage in IGAs and capacity utilisation improvement. One important aspect in providing tangible incentives is to ensure that they are well coordinated by a lean administrative structure invested with a clear mandate.

The rules of the game should include criteria which entitle or oblige TVET institutions to develop IGAs, criteria for application for public subsidies, guidelines regarding financial management and utilisation of generated funds, and accountability mechanisms. Another important aspect to consider is what impact the generation of income by the TVET institutions will have on the amount of public resources they are assigned. If income generated by a certain TVET institution leads to a reduction of the total amount of public subsidies received, this may be a disincentive. Instead, it may be more conducive to IGAs development to establish that a certain percentage of the institution's budget has to be covered by IGAs.

Appropriate capacity building plays a pivotal role in determining the success or failure of the efforts undertaken by TVET institutions to generate additional income and improve their capacity utilisation. Capacity building can be organised as long-term or short-term cour-

ses and can be targeted e.g. at school managers, accountants, teachers and instructors, members of councils making decisions on budgeting and utilisation of resources.

In Botswana the Department for Vocational Education and Training (DVET) provides technical assistance for the creation of new centres, curriculum development, etc. In Rwanda, technical assistance is provided by international development organisations.

Public subsidies to TVET institutions may be provided in money or in kind. In fact, capacity building and technical assistance – if provided by the government – might be considered a subsidy provided in kind. Other subsidies include the provision of training materials, payment of allowances to members of boards of trustees, subsidies to cover operational costs and capital funding for the establishment of new centres. In cases where considerable subsidies are provided by international donors it is important to design a sustainable funding strategy to reduce dependency on ODA.

Different countries apply different fiscal regulations to TVET institutions. In the case of Botswana, Brigades pay tax on surpluses, i.e. on income generated by IGAs and not reverted to the development of the TVET institution. Brigades are not exempted from paying value added tax (VAT) when purchasing goods and services for the institution. In Malawi a multi-stakeholder negotiation process is underway to develop a fiscal regulation for TVET institutions.

How can public TVET institutions be held accountable for their IGAs and capacity utilisation?

In Botswana the brigades are owned by local communities and subsidised by the government. Each brigade is governed by an elected board of trustees which is accountable to the community by means of regular public meetings. The accounts are audited once a year by auditing firms appointed by the authorities. In Malawi, the TVET institution has spending autonomy for the generated income. A series of committees with staff and management representation monitor income and spending of IGAs and the accounts have to be audited by government-approved auditors.

Another important aspect of accountability is the quality of the training provided. In Botswana, the criteria are based on training input provided by the institution, such as the proportion of time spent for in-class or on-the-job training. The training has to follow curricula developed by the ministry. Individual institutions can apply to be certified as meeting standards set by the Botswana Training Authority (BOTA).

Appropriate performance appraisal mechanisms for staff and management were also mentioned as important instruments to increase quality and accountability.

Main problems associated with IGAs and increasing capacity utilisation and how to address them

• Economic viability of IGAs

One of the main problems associated with production units is that if they fail to establish themselves as economically viable activities, the sustainability of the whole centre, including its training delivery, is at risk. Such experiences have been reported from Botswana, Malawi and Rwanda. The most frequent causes for poor economic performance of production units are lack of management capacity, poor marketing strategies and misuse of funds, materials, equipment, facilities and trainees' labour for the personal benefit of individual staff.

To a certain extent this can be overcome by appropriate capacity building measures and technical assistance to develop appropriate institutional arrangements and accountability mechanisms. It is important to motivate staff and management of the TVET institutions and the production units, and to help them understand that they will derive a long-term benefit from contributing to the sustainability of their employing institution.

In remote areas, however, demand for certain products and services may be weak, and thus the prospects of generating significant amounts of income through production units may be limited. This lies beyond the scope of influence of TVET authorities and can only be overcome through concerted efforts with other sector policies to support the economic development of the area. In remote areas with little local private sector development, the main source of income for production units may be to bid for public development projects, as was reported from Botswana.

Securing sufficient start-up capital is a must for setting up a sustainable production unit. Additionally, the following were mentioned as success factors for production units:

- innovative workplaces linked with a range of occupations (e.g. making chairs combining the crafts of carpentry and weaving workshops);
- careful calculation of training and production capacity to ensure profit;
- transparent and effective accountability mechanisms;
- production units operating separately as commercial enterprises with legal status and long-term development plans;
- use of domestic raw material, and
- realistic marketing plans and distribution channels for products and services.

- **Distraction from core business**

Production units can serve the double purpose of raising additional resources for the TVET institution and offering the trainees the possibility to gain work experience. However, there is a concern that in some cases the pressure to raise enough income distracts the TVET institution from its core business of delivering good quality vocational training. This may particularly be the case when the learning and working processes are not integrated in a systematic way. Examples of this are cases where workload is irregular, and unpredicted work peaks disrupt the in-class teaching process, or when the tasks to be performed by the trainees are repetitive and do not really offer the opportunity to acquire relevant competences.

In order to counter this, there is a tendency to separate theoretical training from on-the-job training. This separation does not necessarily mean that the two learning processes cannot take place within the same institution, but rather that they are designed and combined in such a way as to complement rather than compete with each other. Within the production process the tasks assigned to trainees should be selected according to their training value, depending on the trainees' level of competence.

Establishing training quality standards may also be helpful in balancing out IGA and training objectives. The standards can be outcome-based and assessed within the context of a qualifications framework or be input-based and stipulate the proportion of time dedicated to on-the job and in-class training. It is also important to equip the instructors in the production units with appropriate teaching skills.

- **Potential conflicts with local private sector**

If TVET institutions operate below local market prices, conflicts may arise with local enterprises. Fiscal and pricing regulations to enhance fair competition are only one aspect to counter this.

The way the production units interact with local communities and local business will be crucial in shaping their relationship and preventing potential conflict. It is important to take measures to build trust and seek mutual benefit, such as having local business owners represented in managing boards of TVET institutions.

In fact, a production unit of a TVET institution may act as a motor for local development by providing employment and doing business with local enterprises and therefore not be perceived as a threat to local businesses. The use of innovative technology in the production units may prompt local businesses to subcontract certain steps of their production process to the unit and use this to improve the overall quality of their products.

In some cases, the TVET institution does not actually operate its own IGA but leases it out to a local enterprise which runs it according to local market conditions.

What share of the training cost can be recovered through IGAs and improved capacity utilisation?

Given the current quality of data it is not easy to calculate the precise share of costs recovered through IGAs and measures to increase capacity utilisation. Figures provided do not clearly differentiate between gross and net income, nor is it clear how costs for operation and overheads are allocated to the different units and departments of the TVET institution.

In Botswana, the individual centres are required to raise 10-20% of their recurrent budget. Approximately 10 to 15% are raised through IGAs. Each vocational area within a centre has its own unit of training and IGA. Not all units perform equally and some are subsidised by others. An additional 3-5% is raised through training fees. Compared to government-owned technical colleges, the subsidies to the community-owned brigades absorb less public resources. In Malawi, the income generated by LTC was said to amount to 150% of the allocations provided by the government. Staff costs are not considered since teachers are civil servants. In Sri Lanka, the production activities may only be charged on a cost-recovery basis and not generate profit. It is estimated that IGA account for 5 to 6% of the annual budget of public TVET institutions.

When comparing the different options for IGAs by TVET institutions, it appears that more income can be generated by offering diversified training and conducting consultancies and other services rather than through production units. The comparative advantage of production units lies in providing hands-on working experience to trainees and opportunities for trainers to keep their skills up-to-date. This can be of great importance in remote areas where the opportunities to cooperate with the private sector are limited.

Managing the reform process

Too tight government control over financial management of resources appears to be a disincentive for the development of IGAs in TVET institutions. However, clear 'rules of the game' are needed. The role of the government should be to develop transparent guidelines on the overall purpose of IGAs, set training quality standards and quality assurance mechanisms, and establish transparent and manageable accounting mechanisms for the generation and spending of income raised by TVET institutions. The regulatory framework needs to do justice to the different conditions in urban vs. rural, highly industrialised vs. remote areas by providing scope for adaptation to these different conditions.

The managers of TVET institutions need to acquire solid business management competences to ensure that engagement in IGAs does not jeopardise the quality of training provision. Similarly, instructors involved in training with production programmes or other kinds of

production-based training should be able to apply good quality standards in their productive work and convey these standards in their training. Therefore, one core priority during the process of encouraging the development of IGAs and other measures to optimise capacity utilisation of (public) TVET institutions should be capacity building for TVET accountants, managers and instructors.

Setting realistic targets will be crucial for the reform process. When the generation and spending of income by public TVET institutions was liberalised in Ethiopia,

the expectations were that up to 40% of training costs might be covered by IGAs. Although there are no reliable data available, it is estimated that the share of training costs covered by IGAs remains below 15% of the total training costs.

It is also very important to prevent potential conflicts with the local private sector. The two main strategies are to seek opportunities for win-win cooperation and to develop fair fiscal regulations based on a transparent multi-stakeholder dialogue.

7 Promoting private investment in TVET

Presenters:

- Yusuf Bachu (Panel 4), General Manager of the National Secretariat of UGAPRIVI (Uganda Association of Private Vocational Training Institutions)
- Elliot Mulanje (Panel 7), Coordinator of the Blantyre Service Centre of TEVETA (Technical, Entrepreneurial and Vocational Education and Training Authority) in Malawi

Chair:

- Gerhard Quincke, Project Manager of the Partnership Project between the Ethiopian Chamber of Commerce and the German Chamber for Skilled Crafts of the Rhein-Main area

Particular relevance of the topic in the Ethiopian context:

In Ethiopia, a further expansion of TVET provided by private – mainly commercial but also non-profit – training providers is considered a key strategy to expand formal and non-formal training in a sustainable manner. A significant private training market is already developing in urban areas. Further expansion is constrained by a number of investment regulations and uncertainty about the capacity and preparedness of private households to pay commercial training fees. In this context it will be increasingly important to develop effective instruments to reduce the cost of private training delivery, and/or to introduce mechanisms to ensure equity of access, particularly for disadvantaged target groups.

The Ethiopian draft TVET Financing Framework assumes that a deepened involvement of employers in the delivery of TVET, through cooperative and in-company training has a significant potential to increase cost-effectiveness in the TVET system, and specifically to reduce relative expenditure for public TVET institutions. In this context, the development of traditional apprenticeship

training in micro and small businesses is also considered an interesting tool to cost-effectively increase access to TVET for a diverse range of target groups. Furthermore, increased company investment in staff training is seen as a necessary contribution of the business sector to life-long learning in Ethiopia.

In Uganda, the private training sector is comparatively strong and provides substantially more training places than the public sector. With the support of foreign (initially mainly German) support, UGAPRIVI (Uganda Association of Private Vocational Institutions) has developed into a strong interest organization, providing services to its members and advocating for the interests of private training providers within national policy mechanisms. UGAPRIVI is now represented in all relevant national fora, and is the implementing agency to channel substantial donor support to the private training market. Recently, the Government of Uganda decided on a policy to subsidize training in private training institutions in the context of the *Universal Post-Primary Education and Training Policy*.

Before the reforms undertaken in the late 1990s, the TVET system in Malawi faced major challenges – even by African standards – in terms of relevance, quality, access, and funding. The reform process systematically involved employers of the private and public sectors. A series of mechanisms and instruments have been developed to encourage the engagement of employers in the financing and delivery of TEVET, such as a training levy system and the promotion of traditional apprenticeships.

The presentation *Promotion of private training providers in Uganda* (Panel 4) by Yusuf Bachu is attached as Annex 13. Elliot Mulanje's paper *Promotion of employers' involvement in TVET in the formal and informal sector in Malawi* (Panel 7) is attached as Annex 14.

Main issues of the presentation and discussion:

Role and characteristics of private TVET providers

In Ethiopia, private investment in TVET provision is fairly recent (since 2001). Incipient progress has been achieved in that the attitude of leading government officials towards private TVET delivery is increasingly supportive and the number of private TVET providers (PTPs) continues to grow. The opportunity to exchange views during the symposium was rated as a positive impulse to further improve the dialogue between the public and private sector, and to create a level playing field for private and public TVET institutions.

In Uganda, 80% of BTNET (business, technical and vocational education and training) is provided by PTPs. These institutions can be commercial enterprises or non-profit institutions founded by NGOs and religious bodies. Together, they provide a practically nation-wide coverage of formal and non-formal BTNET services in urban, peri-urban and rural areas. Public institutions mostly operate in urban areas and are not present in all districts. Supported by considerable amounts of technical and financial assistance, UGAPRIVI has developed into a strong national network of 300 private training providers (50% of the private BTNET institutions in Uganda). It actively engages in BTNET governance at regional and national level and shapes national policy on BTNET. UGAPRIVI has gained reputation as a trustworthy partner by improving the quality of the services provided by its partners through advisory services and accreditation.

In Malawi, employers participate in TVET delivery through the On the Job Training Programme (OTJTP) and the Apprenticeship Training Programme, by providing attachment places for trainees. Apprenticeships are particularly suited for small and medium enterprises (SMEs) operating in the formal and informal sector, but special apprentice training has also been initiated by the private sector in the modern automobile industry.

How to promote private investment in TVET

The cases of Uganda and Malawi illustrate well the importance of combining the following approaches to promote private investment in TVET financing and delivery: participation, conducive policies, appropriate financial incentives, transparent quality assurance mechanisms, capacity building, and organisational development of private sector representative bodies. This applies both to PTPs and to employers.

Participation refers to the active and systematic involvement of representatives of PTPs, employers and other stakeholders in governance, management, needs assessment, delivery, curriculum development, competence assessment, and financing of the TVET system. It is based on this kind of comprehensive cooperation that a shared understanding can grow on how the different stakeholders – public, private, civil society, NGOs – can best complement each other.

Conducive policies include the liberalisation of the TVET market, the simplification of bureaucratic procedures for new investments, the legalisation of standard-based quality assurance and licensing mechanisms, and the governance and financial management by an independent body representing all relevant stakeholders. Its members should not be nominated but proposed by their respective constituency.

Financial incentives for private TVET investment (financing and delivery) may include tax exemptions for TVET-related expenses and donations undertaken by employers, tax exemptions for TVET institutions, capital grants to selected private TVET providers, secondment of trained instructors from public to private institutions, provision of funds (e.g. via vouchers) to increase access of disadvantaged groups and SMEs to TVET. In Malawi, 33% of incurred training costs are reimbursed to employers as an incentive to invest in TVET. The reimbursements are financed out of a training fund created with payroll contributions by public and private employers.

The current international trends for establishing transparent quality assurance mechanisms point towards the development of national competence-based TVET qualifications frameworks and associated mechanisms for assessment of trainees and licensing or accreditation of public and private training providers.

Capacity building is needed for all TVET stakeholders, since their roles will change significantly as part of the reform process. Similarly, organisational development for representative bodies of PTPs and employers will be crucial for their successful engagement in the reform and implementation of the TVET system.

The particular case of Malawi shows that while the delivery of TVET for the informal sector may require specific approaches, its financing needs to be integrated within the overall TVET financing framework. Recognising that the informal sector plays a major role in most African countries has helped to increase the willingness to use part of the TVET levy for informal sector training.

The following recommendations were formulated for the particular case of Ethiopia:

Private TVET providers could

- make their network wider and more professional,
- provide services to members (e.g. training/upgrading of teachers and instructors),
- utilise the potentials of cooperating with (German and other) development organizations,
- utilise the market opportunities created by the present government policy (e.g. actively conquer those areas where the government is considering to pull out).

The Government of Ethiopia could

- implement the very appropriate TVET strategy quickly and sustainably, and make sure that the strategy and the related regulations and standards are well communicated to all levels of the hierarchy,
- create a level playing field between public and private TVET institution (same conditions for all, e.g. regarding accreditation),
- remove bottlenecks for more investment in TVET (more liberal (pre-)accreditation rules, ensure fair implementation of rules, provide easier access to land).

Development partners in Ethiopia could increase their efforts to support the private sector in its endeavour to provide TVET.

Problems in promoting private investment in TVET and how to address them

Both in Uganda and in Ethiopia there is a perception that standards and bureaucratic procedures are not always equally applied to public and private training providers, causing comparative disadvantages for PTPs. This calls for transparent and simplified procedures and institutional arrangements that ensure their fair application.

The participation of the private sector – PTPs and employers – in TVET policy making and governance is often hampered by distrust. This is not only the case between the public and private sector, but also among the different members of the private sector who tend to view each other as competitors. Weak coordination among members of the private sector (e.g. employers' associations, trade unions, PTP associations) makes it difficult for the government to find reliable interlocutors who truly represent their peers. The examples of Uganda and Malawi show that efforts to systematically involve the private sector in the reform and governance of TVET need to be matched by awareness raising about the benefits of getting involved, capacity building in communication and networking, as well as technical assistance for organisational development of their associations.

In developing countries private TVET institutions are often perceived as rent seekers not necessarily offering good value for money when compared to public institutions. Standards-based quality assurance, transparent licensing mechanisms and social marketing campaigns can help change this perception and foster the expansion of the private TVET market.

Similarly to public TVET institutions, many private TVET providers in Ethiopia, Uganda and Malawi are still below international standards in terms of management and teaching quality. Strong private TVET providers' associations like UGAPRIVI can play a pivotal role in increasing the capacity of their members to deliver good quality services. This underlines the importance of providing financial and technical assistance to develop and professionalize such associations.

Impact of private TVET provision on access

Non-public TVET providers operating on a commercial basis need full cost-recovery. This requires charging fees for their services which poor households may not be able to afford. A series of instruments exist to ensure access to non-public TVET for disadvantaged groups. These include arrangements at the level of the individual TVET institution which allow poor students to pay tuition fees in-kind or work for fees and – more importantly – the sponsoring of poor students with resources from a levy fund, state budget, NGOs, etc. Modularised courses can also contribute to making TVET more affordable for poor households.

Managing the reform process

Considerable marketing efforts will be necessary to motivate enterprises of all kinds (private and public, large and small, formal and informal) to buy into the TVET reform process. This will require that all stakeholders are prepared to participate, cooperate, share lessons and actively learn from experience.

All efforts to promote private investment in TVET financing and delivery should be underpinned by reliable training needs assessments.

The readiness to accept a general TVET levy seems low in Ethiopia, but voluntary sectoral levies might be a viable option, e.g. for the construction sector. Again, this is an aspect that will require considerable advocacy efforts to convince the different stakeholders to participate. Granting increased ownership and shared governance will be crucial in this process.

The integration of agricultural sector activities will require special consideration.

8 Financial implications of standard-based TVET

Presenter:

• *Gerhard Kohn, Senior Partner in INBAS: Institute for Vocational Training, Labour Market and Social Policy, a German consultancy company*

Chair:

• *Dessalegn Mulaw (Panel 3), TVET System Reform and Capacity Building Department Head, Ministry of Education, Ethiopia*

Particular relevance of the topic in the Ethiopian context:

As part of the TVET reform process, the Ethiopian MoE is currently establishing an outcome-based TVET system, including occupational standards-based assessment and certification. Learning from international best practice, it is currently in the process of developing the most appropriate mechanisms, procedures and instruments for standard setting, assessment and certification. During the recent study to develop a Financing Framework for TVET in Ethiopia, it became apparent that there is still little knowledge about the actual resource implications of setting up, implementing and continuous updating of an occupational standards-based TVET system.

Several African countries are already in the process of establishing a standards-based TVET system in line with international best practice. Using some of them as examples, G. Kohn's presentation illustrates cost implications of setting up, running and updating an outcome-based TVET system. The presentation *Costs of standard setting and competence-based assessment* (Panel 6) by Gerhard Kohn is attached as Annex 15.

Main issues of the presentation and discussion:

CBET – a worldwide ‘mega-trend’

Across all continents a clear trend can be observed towards the establishment of Competence-Based Education and Training (CBET). CBET is an approach to TVET that emphasizes its outcomes – in terms of acquiring competences (often defined as encompassing knowledge, skills and abilities) required in the world of work – rather than the training inputs necessary to acquire these. In essence, a TVET Qualifications Framework (TQF) provides mechanisms for standards setting, assessment, certification, regulation of access to and movement within the CBET system.

Financial implications of setting up and maintaining a standards-based system

The different cost factors of building a TQF are linked

to the development and establishment of the TQF itself, to the development of corresponding relevant occupational standards as well as appropriate curricular and training materials, to the regular updating of the whole system, and the capacity building of a whole range of actors and institutions involved in the process.

Actual products (standards, instruments, materials) vary considerably in the degree of detail they provide, and this has a significant impact on costs. Examples show an order of magnitude per occupation of approximately 35,000 EUR in one case versus 12,500 EUR in another.

In an outcome- or standards-based TVET system, assessment of learners is based upon standards. While formative assessment is integrated into an ongoing training process, summative assessment is an ex-post assessment independent of the learning process. Summative assessment is necessary wherever a TVET system seeks to provide open access and enable the recognition of prior learning, independently of where and how this learning has taken place. Different individuals can opt for one type of assessment or the other depending on their learning path and for what purpose they are seeking the credits. Pilot experiences in Africa show that the costs of summative assessment can amount to 150 – 200 EUR per candidate for a full occupation at level 2 (this can be described as approximately between semi-skilled and skilled worker level). The actual cost will depend on the type of assessment, the number of assessors involved in the testing panels, the number of candidates being assessed in each batch, and the duration of the test.

Keeping costs low without detriment to quality and participation of relevant stakeholders

The period of time for developing the necessary standards and curricula to implement a TQF is roughly estimated at a minimum of 5 years. However, this will vary depending on a series of factors, such as the type of sectors and level of technology involved, etc. These factors and the pace of technological change also affect the frequency of the revision of standards and curricula.

Not re-inventing the wheel can help keep costs low. This applies both to the procurement and adaptation of standards and instruments from other countries while setting up the TQF for the first time, and to the use of databases – for instance assessment instrument and test item databases – once the system is up and running. However, the applicability of existing standards and instruments needs to be carefully analysed. The job profile approach is considered the most realistic in this case, as opposed to the ‘unit-standard’ type of standards.

The cost of development, establishment and running of an outcome-based TVET system are often underestimated and need to be carefully calculated and controlled. The range of existing options to help keep costs as low as possible include: piloting before going to scale, avoiding over-detailed standards, use or adaptation of already existing products and databases, integration of curricula and training materials development into teacher and instructor training, as well as a lean implementation structure.

Managing the reform process

A common challenge encountered when developing and implementing a TQF in a country is that, in the early stages, demand for assessment tends to be low. Individuals and enterprises, both in the formal and informal sector, need to become aware of the benefits of occupational assessment. This requires properly target-

ted efforts to motivate and encourage these different groups and help them understand the benefits.

The ongoing discussion in Europe about a European Qualifications Framework (EQF) shows that the different parameters used – for instance to define standards – by the different countries make it difficult to find common solutions for credit transfer and accreditation, i.e. for the comparison of qualifications between countries and systems.

One important aspect when looking at costs of training, assessment and certification is who covers these costs. This also differs from country to country. In most systems, the ‘users’ are asked to pay a fee for assessment and certification. This may be the learners themselves or a sponsoring enterprise. However, no system has yet been successfully established which manages to recover its costs through user fees alone.

9 Lessons learned

At the end of the symposium the chairs and resource persons from the different panels reported back the corresponding conclusions and lessons learned to the plenary. Jon Lauglo (University of Oslo) and Teshome Zawde (Ethiopian Employers Federation) acted as rapporteurs from an international and an Ethiopian perspective. Jon Lauglo’s presentation is attached as Annex 16, and Annex 17 contains the speech by Teshome Zawde.

Using the three P’s (poverty, performance, and partnership) and three E’s (equity, efficiency, effectiveness) introduced by Arvil Van Adams and Vladimir Gasskov at the beginning of the symposium as a frame of reference, this section pulls together the conclusions from the previous chapters and the main issues that were addressed during the concluding plenary discussion.

The three main conclusions that can be derived are:

- the Ethiopian approach to TVET reform and TVET financing are very much in line with international best practice in terms of performance;
- all stakeholders seem to agree that partnerships (among the public sector, the private sector and civil society) will be key in making any TVET reform process succeed;
- ensuring that the rural and poor majority is not left behind in this process remains one of the major challenges ahead for any country.

Output-based funding mechanisms

Poverty (equitable access)

- If the performance of TVET institutions is only measured in terms of how many of their students pass standard-based assessments, there is a risk that the institutions will select high performers, who tend to be from higher income families. This can be overcome by creating specific rewards/incentives for institutions who take in poor students.

Performance – Effectiveness (relevance, quality)

- The effect that output-based financing mechanisms have on training quality is a contested issue. Competency-based quality assurance standards partly address these concerns but miss other means of appealing to teaching staff to delivery quality (“inner springs of professionalism”).

Performance – Efficiency (output per unit costs)

- Several mechanisms exist to stimulate efficiency in (public) TVET institutions by making resource allocations depending on actual training outputs. Output can be estimated based on SGHs, EFTSs and funding rates. Increasing efficiency in the TVET system as a whole may be achieved through performance- rather than input-based public budgeting.

Partnership (fair sharing of rights and responsibilities)

- Many different examples exist across the world on how partnerships can be used to support an output-based funding mechanism to work in terms of funding sources, disbursement mechanisms, funding

rates, management autonomy for TVET institutions, quality assurance mechanisms, and accountability mechanisms. The use of competence-based standards and assessment is a means to ensure the relevance and quality of TVET and allows to measure outcomes, rather than just outputs.

Cost-sharing with trainees

Poverty (equitable access)

- Access is limited by multiple dimensions of poverty (information, prior educational level, geographic access, cultural preparedness to assume risk of debts, etc.).
- Expectations that student loans contribute to more equitable access to TVET may be overrated.
- Combination with exemptions and proactive targeting can improve equity impact of loans and/or higher fees.

Performance – Effectiveness (relevance, quality)

- Additional (albeit limited) resources in the TVET system raised through cost-sharing can be used to increase quality and relevance of training.

Performance – Efficiency (output per unit costs)

- Setting up and implementing student loan or graduate tax schemes is costly (initial capital, administration, default loans, subsidised interest rates) while rate of repayment remains low. They do not generally reduce overall cost of TVET.

Partnership (fair sharing of rights and responsibilities)

- Student loan or graduate tax schemes require robust administration capacity. Getting private banks on board for disbursement and collection might increase returns.
- Expectations that student loans contribute to a sharing of TVET costs and/or the increase of the total amount of resources available for TVET financing should be cautious. The main burden of financing is still shouldered by the government.
- Establishing (moderate) fees may be more effective than loans in terms of cost-sharing or cost-recovery.

Cooperative TVET

Poverty (equitable access)

- Cooperative training reduces the share of training costs borne by trainees and can increase access for poor students.
- Access is limited by multidimensional poverty (information, prior educational level, geographic access, etc.).
- Combination with additional education and training input and proactive targeting can improve equity impact of cooperative TVET.

Performance – Effectiveness (relevance, quality)

- Cooperative training can make TVET more relevant by providing world-of-work experience to trainees.
- Instructors need appropriate pedagogical and technical expertise to make cooperative training effective.

Performance – Efficiency (output per unit costs)

- The opportunity to combine learning in the school and productive work at the enterprises reduces net costs of TVET per trainee.
- Managers and instructors both at the school and in the enterprise require new management skills in order to increase efficiency of cooperative TVET.

Partnership (fair sharing of rights and responsibilities)

- Cooperative training (apprenticeships, internships, in-company training) increases the share of costs borne by employers and trainees.
- Cooperative training does not necessarily mean 'German dual system'. It is important to look at elements that can be adapted (apprenticeship, traineeship, internship, industrial attachment, etc.)

IGAs and increased capacity utilization

Poverty (equitable access)

- Income generated and cost recovered by TVET institutions can be used to reduce the share of training costs borne by trainees and can thus increase access for poor students.
- A combination with exemptions, work-for-fees and proactive targeting can improve equity impact of IGAs.
- In rural areas, IGAs can be a vehicle to channel and implement local development projects.

Performance – Effectiveness (relevance, quality)

- Production units can be useful to provide world-of-work experience to teachers and trainees in areas with limited opportunities of attachment to commercial enterprises.
- If not well managed, IGAs may jeopardise the quality of training (low training value, competing for resources).
- Diversified training offers and consultancy services appear to be more suited to raise income and increase capacity utilisation of TVET institutions. They are less likely to distract the TVET institutions from their core objective (provision of formal and non-formal TVET).

Performance – Efficiency (output per unit costs)

- Expectations of cost-recovery rates should be cautious (estimations are below 15% of total training costs).
- Setting up and implementation of production units seem to require considerable investment and assistance over a long time, to become sustainable.

- Whether production and training should be integrated or separated remains a contested issue and needs to be carefully assessed for each particular situation.

Partnership (fair sharing of rights and responsibilities)

- IGAs are one way of relatively reducing the state's share of the TVET financing burden.
- Granting TVET institutions autonomy in their financial management is an incentive for IGAs and increased capacity utilisation. This requires appropriate accountability mechanisms as well as management capacity.
- Production units tend to raise concerns among local commercial enterprises regarding unfair competition. Appropriate policies, trust and cooperation can lead to win-win solutions.

Private investment in TVET provision and financing

Poverty (equitable access)

- Private TVET delivery can contribute to increasing access to TVET in terms of total enrolment and regional coverage.
- Special instruments are necessary in order to ensure access to TVET for disadvantaged groups: sponsoring by government, employers, NGOs, work-for-fees or payment in-kind. Proactive targeting can improve the equity impact of any of these measures.

Performance – Effectiveness (relevance, quality) & Efficiency (output per unit costs)

- PTPs are not per se more effective or efficient. Although there is a great variation, they often face similar challenges as public TVET institutions in terms of training relevance, quality and management.
- Strong professional associations of PTPs can be powerful vehicles to increase quality of their members' services.
- On the overall TVET system level, the government pulling out of training provision in specific sectors sufficiently covered by PTPs can increase effectiveness and efficiency. Corresponding measures have to be developed, however, in order to ensure equitable access.

Partnership (fair sharing of rights and responsibilities)

- Good incentives for private TVET provision are necessary and effective. Malawi and Uganda are powerful examples of that.
- Acceptance for levy schemes seems to be higher when they are sector-specific and their use is earmarked for specific purposes.

- Both PTPs and employers need their own strong, professional and representative associations to be identifiable as interlocutors for the government and other stakeholders.

Standards-based or outcome-based TVET

Poverty (equitable access)

- Standards-based training is a good basis for the development of modularised courses. These are often more affordable for poor trainees than longer courses.
- Outcome-based TVET provides mechanisms for the recognition of prior learning. This offers opportunities for poor people who often acquire relevant knowledge, skills and abilities in the informal sector.
- Assessment can be rather costly. Depending on who has to bear the fees, this might exclude poorer candidates.

Performance – Effectiveness (relevance, quality)

- CBET is internationally recognised as best practice in terms of assuring a level of quality agreed by all relevant stakeholders. This is not least due to the fact that competence standards are defined in cooperation among stakeholders.

Efficiency (output per unit costs)

- Focus on outcomes rather than inputs allows different pace in acquiring relevant skills and recognition of prior learning. This can avoid redundancies in training delivery and reduce costs.
- Setting up, implementing and regularly updating standards-based TVET systems are costly and time consuming. It is important to strike a balance between cost and degree of detail and 'perfection'.

Partnership (fair sharing of rights and responsibilities)

- The whole process of development, governance and implementation of a standards-based TVET system requires systematic and professional engagement and mutual trust by all stakeholders.

Managing the reform process

Poverty (equitable access)

- Rural areas, the informal sector and SMEs need specific approaches but should be integrated into an overall TVET strategy and its financing framework.
- The current focus of public TVET on formal post-secondary training is likely to exclude the poor majority. Exemptions from fees and payment of allowances will not suffice (multidimensional poverty).
- Non-formal and informal approaches are more likely to adapt to the prior educational level and life circumstances of disadvantaged target groups.

- It is important to pilot and closely monitor the impact on equitable access of any financing instrument chosen.
- Means testing requires the development of indicators and reliable information and accountability at a very local level – it may be difficult to scale up.

Performance – Effectiveness (relevance, quality) & Efficiency (output per unit costs)

- All major decisions on TVET financing should be underpinned by training needs assessments which reliably reflect the true demand of the labour market (employers and trainees).
- The current focus of public TVET in Ethiopia on formal post-secondary training fits the need to fill the skills gap at middle level.

Partnership (fair sharing of rights and responsibilities)

- TVET can play a crucial role in the achievement of national development goals and poverty reduction targets. This is often underestimated and it is important that all TVET stakeholders and the wider public realise this.
- A fundamental and comprehensive TVET reform process – such as currently undertaken in Ethiopia – needs the acceptance and support from all stakeholders: different government bodies at all levels, private sector (PTPs and employers), civil society (NGOs, religious bodies, communities), households (trainees and their families), and the wider public.
- Creating awareness and advocating for this reform is the responsibility of the government.
- The preparedness of the different stakeholders to participate in financing and delivery of TVET will depend on the degree in which the government is prepared to share governance and management of TVET with them.
- TVET financing is a powerful tool to find the right balance between the three P's of poverty, performance and partnership. It is important that all stakeholders understand and buy into this balancing act.
- Partnerships should not only be viewed as a means to increase the total inflow of funds into the TVET system, but also as an opportunity to foster innovation and improve the quality and flexibility of formal, non-formal and informal TVET provision. The meaning and practical implications of partnership will evolve along the way.
- For a fruitful partnership all stakeholders need to contribute: commitment to 'the cause' of TVET reform, active participation (time, expertise and resources), open communication, transparency, mutual trust, professionalism and representativity (mandate to represent the interests of a certain constituency of stakeholders). This may be easier to develop by starting off at a local level and gradually scaling up.
- Adapting the diversity of international best practice to the Ethiopian context will require a lot of dialogue on technical and political issues. This symposium has been one of several opportunities for this. Joint study tours and systematic opportunities to exchange views can enhance the learning process and build trust.
- The reform of any TVET system and its financing should be regarded as a journey. It needs both time and continuous learning.
- In order to be able to learn from experience (positive and negative), it is important to set up reliable M&E systems and to develop a learning culture.
- Ambitious targets need to be regarded as long-term goals (5 to 10 years) to be achieved by a series of clearly defined milestones. Unrealistic expectations may erode commitment to the reform process by putting unnecessary pressure on emerging partnerships.

10 Participants' feedback to the symposium

At the end of the symposium participants were asked to fill in a questionnaire as a structured means of giving their feedback on the content as well as the organisation of the symposium.

The vast majority of the participants judged that their expectations had been largely met and that after attending the symposium they were better prepared to deal with issues related to the implementation of diversified financing strategies for TVET.

Overall, the symposium was rated as a very interesting and useful opportunity to share experience and learn on an international level. The combination of plenary presentations by international experts and panels illustrating specific examples from other countries was considered particularly valuable. It helped participants to gain a comprehensive understanding of TVET financing issues as well as to learn about specific practical aspects of the implementation of different TVET financing mechanisms. The fact that most panels presented experiences from other developing countries was highlighted as positive.

The symposium was also valued as an opportunity to foster the dialogue between representatives of the Government of Ethiopia and other Ethiopian stakeholders, such as TVET providers (public and private) as well as the private sector. Several participants expressed their hope that similar events might be organised again in the future.

The following section presents the feedback of the symposium in more detail. Annex 18 contains the feedback questionnaire used.

Questionnaire return rate: Out of a total of 93 registered participants of the symposium, 50 returned a filled-in feedback form, representing 54% of the total registered participants. The actual return rate of questionnaires (people who actually did receive a questionnaire and filled it in) is probably higher, since not all participants were able to stay throughout the two-day event and the questionnaires were handed out and collected at the end of the last session.

Stakeholder representation: Nearly half of the respondents indicated that they worked for the Government of Ethiopia (46%). The other half was comprised of individuals working for academic institutions (22%), international development agencies (12%), private sector associations (8%), and other employers (12%) such as Regional Government of Ethiopia, a consulting company, ECBP, Government of Sri Lanka, TEVETA Malawi and Ministry of Education of Rwanda. None of the respondents identified themselves as representing a private

sector company (0%) or civil society/NGO (0%). Among the registered participants, however, there were representatives of private sector companies.

International representation: The vast majority (78%) of participants named Ethiopia as their country of work. Five of the remaining respondents work in Sri Lanka, two indicated that they work in various countries, and the following countries were represented by one respondent each: Norway, Uganda, Malawi, and Rwanda.

Expectations vis-à-vis the symposium: The two most frequently cited expectations regarding the symposium were to have the opportunity to share experience with experts and practitioners from other countries (24%) and the wish to identify TVET financing mechanisms suitable for Ethiopia (24%). Gaining a comprehensive understanding of TVET financing issues was mentioned by 12% of the respondents, while 8% expressed their wish to receive practical input on how to implement different financing mechanisms for TVET. Some respondents mentioned specific topics they wanted to learn about during the symposium, such as: cooperative TVET, financing of TVET institutions, income-generation by TVET institutions, financial management of TVET institutions, cost-sharing, financing non-formal TVET, cost determination, ROI (rate of return on investment). The symposium was also seen as an opportunity to improve the basis for a public-private-partnership.

Meeting expectations: 72% of the respondents regarded their expectations as met completely or to a large extent, while 26% considered they had only partly been met.

Better prepared: 90% of the participants felt that after attending the symposium they were better or to some extent better prepared to deal with issues related to the implementation of diverse financing strategies for TVET. About 8% felt they were only partly and one person felt hardly better prepared than before attending the symposium.

Best experience in the course of the symposium/particularly interesting session: The wording of these two questions appears to have been somewhat misleading and therefore the answers tend to overlap. Most respondents mentioned more than one session, topic, country, or speaker. Wherever that was the case, each of them was treated as an individual answer. Since both questions were formulated as open

questions, the answers were subject to interpretation and therefore the figures given here should be understood as estimates rather than accurate quantitative data.

The panels are repeatedly mentioned as particularly useful in understanding practical aspects of TVET financing. More than 50 entries give credit to the high quality and usefulness of all panel presentations in general or to the usefulness of specific presentations. The two most frequently mentioned topics are income-generating activities (IGAs) and cooperative/dual training, followed by capacity utilisation in TVET institutions, and private sector involvement in TVET.

The more academic plenary sessions were also rated very positively, with close to 30 mentions highlighting their importance and the professionalism of the speakers. The interest of the participants appears to be quite evenly spread across all topics treated in the plenary session. A number of Ethiopian participants valued the opportunity to learn about the new Framework for financing TVET in Ethiopia.

The opportunity to learn from, exchange ideas and network with the international participants is repeatedly mentioned as very positive.

At least four respondents considered the incipient dialogue between the public and private sector as positive, welcoming the public endorsement of private public partnerships for TVET by the GoE.

The reporting back of lessons learned from the different panels into the plenary was also mentioned as useful.

Not so good experiences: Nearly half of the respondents left this field blank – this may suggest that they had no negative experiences but may also have other reasons. Of those respondents who did answer this question, 16 (32%) state that all was fine and they have no negative experiences to report; 4 mention different aspects related to the quality of the presentations. The tension among public and private stakeholders is also mentioned as a problem. One participant points out that there was hardly time for discussions or to develop new insights in workshops and another that the summary session did not offer as much as it could have.

Topics found missing: This field was also left blank by nearly half of the respondents – again, this may suggest that they didn't find any topics missing, but may also have other reasons. A total of 12 respondents (24%) indicate that there are no topics or issues that had not been dealt with as they expected. The following issues were listed by single respondents as topics they found missing: detailed material on TVET financing and its management, financing for self-employment of TVET graduates, partnerships with the industry for skills standard setting, specific difficulties encountered by developing and developed countries during the actual process of introducing IGAs and cost-sharing mechanisms, how to build professionalism by means of an appropriate financing method, tax policy on training expenditures, ROI. One respondent felt that there had not been enough opportunities to share the Ethiopian experience with the international guests and another felt still unable to identify which income-generating scheme actually fit Ethiopia in general and his/her institution in particular. Some people appear to have understood the question as meaning which sessions they had not been able to attend.

Further comments and suggestions: The participants' feedback to this question can be clustered around the following four issues. Regarding follow-up to the symposium and stakeholder involvement, the feedback received (19 entries) clearly calls for transparency and involvement of TVET stakeholders other than central government, such as regional governments, private sector, and operators of TVET institutions. The organisation of the symposium (13 entries) is praised as highly professional, although some participants judge that the time was too short to allow in-depth discussions and that one participant feels that more time should have been invested in wrapping up specific conclusions of the symposium with regard to the draft TVET Financing Framework for Ethiopia. There are several calls (7 entries) for ECBP to host similar events in the future, in order to continue the international exchange of information, and to look into specific topics. In this context, participants highlight the importance of maintaining a flow of information down to the grass root level. The importance of documenting the symposium's results is highlighted by 6 mentions.

List of Annexes

- 30 Annex 1**
Symposium agenda
- 32 Annex 2**
Profiles of presenters, facilitators and resource persons
- 34 Annex 3**
Welcome address
by H.E. Minister of Education (Ethiopia)
Dr. Sintaheyu W/Michael
- 35 Annex 4**
Presentation: The new Framework for Financing TVET in Ethiopia
by Dessalegn Mulaw (Technical and Vocational Education and Training (TVET) System Reform and Capacity Building Department of Ethiopia's Ministry of Education)
- 38 Annex 5**
Presentation: The Ethiopian Financing TVET Framework in an international perspective
by Dr. Arvil Van Adams (Senior Consultant, ECBP)
- 40 Annex 6**
Presentation: Mechanisms of financing TVET
by Dr. Vladimir Gasskov (International Labour Office)
- 43 Annex 7**
Presentation: Cost-sharing with trainees/students: International experience
by Prof. Dr. Adrian Ziderman (Bar-Ilan University, Israel)
- 51 Annex 8**
Paper and selected diagrams: Costs and benefits of vocational education and training in the dual system of Germany (Panel 1)
by Folkmar Kath (former Head of the Costs and Financing Department of the German Federal Institute for Vocational Training, BIBB)
- 60 Annex 9**
Presentation and speaker's notes: Experience with the dual training system in the Philippines (Panel 5)
by Roberto Niez (Vocational School Administrator of the Jacobo Z. Gonzales Memorial School of Arts and Trades, Philippines)
- 67 Annex 10**
Paper: Training with production in the Botswana Brigades (Panel 2)
by Bester Mahube (Coordinator of Tswelelopele Brigades Centre in Ramotswa, Botswana)
- 72 Annex 11**
Paper: Increasing training activities and income: the example of Lilongwe Technical College, Malawi (Panel 3)
by Godfrey Kafere (Principal of Lilongwe Technical College (LTC), Malawi)
- 75 Annex 12**
Paper: Improving capacity utilisation in public TVET institutions in Sri Lanka (Panel 8)
by Gaminie Gunasinghe (Consultant to REVO (Rehabilitation and Modernization of TVET Institutions) Project, Sri Lanka)
- 81 Annex 13**
Presentation: Promotion of private training providers in Uganda (Panel 4)
by Yusuf Bachu (General Manager of the National Secretariat of UGAPRIVI, Uganda Association of Private Vocational Training Institutions)
- 85 Annex 14**
Paper: Promotion of employers' involvement in TVET in the formal and informal sector in Malawi (Panel 7)
by Elliot Mulanje (Coordinator of the Blantyre Service Centre of TEVETA (Technical, Entrepreneurial and Vocational Education and Training Authority) in Malawi)
- 93 Annex 15**
Presentation: Costs of standard setting and competence-based assessment (Panel 6)
by Gerhard Kohn (Senior Partner in INBAS: Institute for Vocational Training, Labour Market and Social Policy, Germany)
- 95 Annex 16**
Presentation: Lessons and questions learned
by Prof. Dr. Jon Lauglo (University of Oslo)
- 97 Annex 17**
Concluding Remarks
by Teshome Zawde (Ethiopian Employers Federation)
- 99 Annex 18**
Questionnaire used to collect participants' feedback
- 100 Annex 19**
List of participants

Symposium Agenda

Implementation Issues of Diversified Financing Strategies for TVET

Addis Ababa, Hilton Hotel, November 20–21, 2006

Symposium Day 1: Monday, 20 November 2006

8.30 – 9.00 Registration of participants

9.00 – 9.20 Welcome addresses

H.E. Minister of Education Dr. Sintaheyu W/Michael

Martin Müller, Director ECBP

9.20 – 9.30 Introductions into the symposium programm

Dr. Andreas König, ECBP/TVET

9.30 – 12.00 The Ethiopian approach to financing TVET

Presentations: The new Framework for Financing TVET in Ethiopia

Dessalegn Mulaw, Ministry of Education

The Ethiopian Financing TVET Framework in an international perspective

Dr. Arvil Van Adams

Chair: Dr. Andreas König

Tea break during the session

12.00 – 13.30 Lunch

13.30 – 15.00 Promoting efficiency and effectiveness in public TVET Institutions

Presentation: Mechanisms of Financing TVET

Dr. Vladimir Gasskov, ILO Geneva

Chair: Dr. Andreas König

15.00 – 15.30 Tea break

15.30 – 17.00 Panels

Panel 1: Financial implications of cooperative TVET (I)

Presentation: Employers' Contributions to TVET in the German Dual System

Folkmar Kath (formerly BIBB), Germany

Chair: Julia Schmidt

Resource Person: Dr. Vladimir Gasskov

Panel 2: Promoting income-generating activities in TVET institutions (I)

Presentation: Training with Production in the Botswana Brigades

Bester Mahube, Tswelelopele Brigade, Ramotswa, Botswana

Chair: Dr. Jutta Franz

Resource Person: Prof. Dr. Jon Lauglo

Panel 3: Increasing efficiency and capacity utilisation in public TVET institutions (I)

Presentation: Increasing training activities and income: The example of Lilongwe Technical College, Malawi

Godfrey Kafere, Lilongwe Technical College, Malawi

Chair: Dessalegn Mulaw

Resource Person: Prof. Dr. Adrian Ziderman

Panel 4: Promoting private investment in TVET (I)

Presentation: Promotion of Private Training Providers in Uganda

Yusuf Bachu, Uganda Association of Private Training Providers

Chair: Gerhard Quincke

Resource Person: Dr. Arvil van Adams

18:30 Joint Reception with national skills competition, Addis Ababa Hilton

Symposium Day 2: Tuesday, 21 November 2006

- 8.30 – 9.00** Welcome and Introduction to second day
W/ro Genet Meseret, ECBP/TVET
- 9.00 – 10.30** International experience with cost-sharing with trainees/students
Prof. Dr. Adrian Ziderman
Chair: Genet Meseret
- 10.30 – 11.00** Tea break
- 11.00 – 12.30 Panels**
- Panel 5: Financial implications of cooperative TVET (II)**
Presentation: Cost implications of dual training in the Philippines
Roberto Niez, Jacobo Z. Gonzales Memorial School of Arts and Trades, Philippines
Chair: Julia Schmidt
Resource Person: Dr. Vladimir Gasskov
- Panel 6: Financial Implications of standard-based TVET**
Presentation: Costs of standard setting and competence-based assessment
Gerhard Kohn, Consultant, INBAS, Germany
Chair: Dessalegn Mulaw
Resource Person: Prof. Dr. Jon Lauglo
- Panel 7: Promoting private investment in TVET (II)**
Presentation: Promotion of Employers' Involvement in TVET in the Formal and Informal Sector in Malawi
Elliot Mulanje, Blantyre Service Centre, TEVETA, Malawi
Chair: Gerhard Quincke
Resource Person: Dr. Arvil Van Adams
- Panel 8: Promoting income-generating activities in TVET institutions (II)**
Presentation: Improving capacity utilization in public TVET institutions in Sri Lanka
Gaminie Gunasinghe, Consultant (formerly DTET), Sri Lanka
Chair: Dr. Jutta Franz
Resource Person: Prof. Dr. Adrian Ziderman
- 12.30 – 14.00** Lunch
- 14.00 – 16.30 Consolidation of findings and lessons learnt**
Summaries from panel sessions
Panel Chairs
Summary evaluation of the findings and their relevance for the further development of the TVET financing framework in Ethiopia
Prof. Dr. Jon Lauglo, University of Oslo
Chair: Dr. Andreas König
Tea break during the session
- 16.30 – 17.00 Closing remarks**
Concluding Remarks
Teshome Zawde, Ethiopian Employers Federation
Closing of the Workshop
H.E. Ato Wondwossen Kiflu, State Minister of Education for TVET
Chair: Genet Meseret
- 18.00** Dinner

Profiles of presenters, facilitators and resource persons

Dr. Arvil Van Adams used to work as Senior Advisor and Sector Manager for Human Development in the Africa Region of the World Bank (retired). He is co-author of *Skills Development in Sub-Saharan Africa* (World Bank 2004). Formerly, he was Professor of Economics at the George Washington University, University of Utah and the Ohio State University. He now works as senior consultant.



Yusuf Bachu is the General Manager of the National Secretariat of UGAPRIVI (Uganda Association of Private Vocational Training Institutions (UGAPRIVI)). He is an Industrial Engineer (majored in Plant Maintenance) by profession with 27 years of industrial experience in various industries and serving in different capacities all over East Africa. On retiring from industrial service, he established a private vocational training centre in his home area, Iganga.



Dr. Jutta Franz has worked for many years as a consultant in TVET development, in particular policy and system development including financing. She has supported the Ethiopian government in the formulation of the National TVET Strategy, and is the author of the study underlying the TVET Financing Framework for Ethiopia, which was discussed during the symposium.



Dr. Vladimir Gasskov works as Senior Training and Skills Development Specialist for the Skills and Employability Department of the ILO (International Labour Office of the International Labour Organization) in Geneva. He holds an Advanced Degree in Industrial Sociology and a PhD in Management Sociology. His major field of specialisation is TVET policies, systems, and funding. He has recently edited the book *Vocational Education and Training Institutions: a Management Handbook*.



Gaminie Gunasinghe works as a consultant to the Rehabilitation and Modernization of TVET Institutions Project. He is the former Director for Research and Development of the Department of Technical Education and Training (DTET) in Sri Lanka. He is a Chartered Mechanical Engineer by profession



with 19 years of experience in process industry including 4 years in power generation in the Kingdom of Saudi Arabia and further 17 years serving in the TVET sector in Sri Lanka. He holds a Postgraduate Degree in Hydraulic Engineering and MSc in Combustion and Energy from Leeds University (UK).

Godfrey Kafere is the principal of Lilongwe Technical College (LTC), one of the leading public TVET institutions in Malawi. He is an Electrical Engineer by profession and has worked in various capacities for the Ministry of Labour and Vocational Training and LTC, such as board member of TEVETA



(Technical, Entrepreneurial and Vocational Education and Training Authority) and also as local consultant for DANIDA and the British Council.

Folkmar Kath recently retired from his post as Head of the Costs and Financing Department of the German Federal Institute for Vocational Training (BIBB). He is also a specialist on the sector levy system in the German construction industry.



Dr. Andreas König holds a PhD in Education from the University of Cologne and a Master's in Special Education from the University of Frankfurt/Main. From 1988 to 1996 he worked for the Vocational Rehabilitation Branch, Training Department at the International Labour Office (ILO), Geneva.



For the following 10 years, he worked as a freelance consultant for GTZ, ILO, UNHCR, UNESCO, Misereor and others in the fields of skills development, employment generation and entrepreneurship promotion in more than 50 countries in Africa, Asia as well as Central and Eastern Europe. He joined the ECBP in Addis Ababa as Coordinator of the TVET Reform Component for German Development Cooperation.

Gerhard Kohn is a Senior Partner in INBAS: Institute for Vocational Training, Labour Market and Social Policy, a German consultancy company. He has worked in the development and implementation of standard-based TVET systems in many countries, and is now also engaged in supporting Ethiopia in the setting up of a competence-based assessment system.



Prof. Dr. Jon Lauglo is a Professor of Sociology of Education at the Faculty of Education of the University of Oslo. He also works as Senior Researcher of two independent research institutes in Oslo. One of his most recent publications is *Vocationalisation of Secondary Education Revisited*. He has worked for six years as Senior Education Specialist for the World Bank. His work focus lies on education policy and private education development.



Bester Mahube has worked as a teacher and administrator in vocational education and training schools in Botswana since 1980. He is currently working as the Coordinator of Tswelolepele Brigades Centre in Ramotswa. He is the Chairman of Coordinators Forum comprising 41 Centres across Botswana. He is the author of two novels: *The Pick Pocket* and *The White Collar Criminal*.



Genet Meseret currently works as Coordinator TVET Reform for ECBP. She holds an MSc in Development Management and a BA in Educational Planning and Management. Her professional experience includes work as Deputy Head, Addis Ababa Education Bureau, TVET sector; Deputy Head, Social and Civil Affairs Bureau; Head, Social and NGOs Affairs Office; and Dean, Addis Ababa Tegbarew TVET College.



Elliot Mulanje is Co-ordinator of the Blantyre Service Centre of TEVETA (Technical, Entrepreneurial and Vocational Education and Training Authority) in Malawi. The service centre is a kind of implementing arm of TEVETA in the economically most active Southern part of Malawi, charged with implementing quality assurance (including testing), support to the TEVETA system and implementation of TEVETA policies.



Dessalegn Mulaw is the Head of the Technical and Vocational Education and Training (TVET) System Reform and Capacity Building Department of Ethiopia's Ministry of Education. He holds a Master's degree in Comparative and International Education from the Institute of Educational Research at the University of Oslo, Norway. He has extensively studied the features of TVET programmes as well as the implementation and challenges in his country. In his current position he is leading the policy and system reform of TVET in the country.



Roberto Niez is the Administrator of the Jacobo Z. Gonzales Memorial School of Arts and Trades (JZGMSAT), a public TVET school in the Philippines. He holds a Master's degree in Technician Education at the Marikina Institute of Science and Technology (MIST), Philippines and studied Project Development Management at the Asian Institute of Management (AIM) in Manila. He is one of the advocates of the Dual Training System for public institutions and has successfully implemented Dual Training in Laguna, Philippines.



Julia Schmidt is currently working for the ECBP TVET Reform Component as Senior Advisor to the Ministry of Education. She is responsible for TVET policy and system development including TVET Financing, TVET Qualifications Framework, TVET law as well as support to the implementation of the TVET reform. She has worked for the International Atomic Energy Agency (IAEA)'s Technical Cooperation Department in Vienna. She has Master's degrees in TVET and in Civil Engineering from the Technical University Berlin and Stanford University, respectively.



Gerhard Quincke is Project Manager of the Partnership Project between the Ethiopian Chamber of Commerce and the German Chamber for Skilled Crafts of the Rhein-Main area which is designed to make Ethiopian Chambers capable to provide business development services. He is a mechanic and holds a Master's degree in Political Science. He has worked in several countries mainly in Africa but also in Central America and South East Asia in the areas of (especially non-formal) TVET, promotion of crafts and of small and medium enterprises, organization development (not only for business membership organizations), planning, monitoring and evaluation.



Prof. Dr. Adrian Zideman is Sir Isaac Wolfson



Professor in Economics and Business Administration at the Bar-Ilan University, Israel. His main fields of specialty are: labour markets and labour force participation; the economics, evaluation and finance of vocational education and training; and

university funding, including student loans and cost-sharing. His many publications include his work as editor for the International Journal of Manpower and the book *Financing TVET in Sub-Saharan Africa* (World Bank 2003).

Welcome address

by H.E. Minister of Education (Ethiopia) Dr. Sintaheyu W/Michael

**Distinguished International Guests,
German Partners in Development Cooperation,
TVET Experts and Stakeholders from Ethiopia,
Representatives from the Private Sector,
Representatives from the Media,
Ladies and Gentlemen!**

It is a great honour for me to welcome you all today and to open this very important international symposium on “Implementation Issues of Diversified Financing Strategies for Vocational and Technical Education and Training”.

We have lately embarked on a major reform of the TVET system. We are very grateful to the German government who is assisting this process with substantial technical and assistance. And we are proud that we have recently developed a comprehensive and modern National TVET Strategy that is – as international experts have confirmed – very appropriate and fully in line with international best practice in this field. This strategy aims at developing a demand-driven, flexible, integrated and high quality technical and vocational education and training system relevant to all sectors of the economy, including all kinds, levels and types of TVET and accessible to all Ethiopian in need of training. The core of the reform strategy is to develop an outcome-based TVET system based on an Ethiopian TVET qualifications framework, to involve stakeholders in all aspects of planning, policy making, training delivery and monitoring of the system, to invest in capacity building, to strengthen the involvement of companies and the world of work, to encourage public-private partnership and to increase efficiency in the system wherever possible. The strategy is well accepted by all stakeholders, and with the support of German development cooperation, we are currently well in the process of implementation.

There is no doubt, however, that one of the biggest challenges of the TVET reform is its solid and sustainable financial base. The implementation of the reform is very expensive and the Ethiopian government is dedicated to invest more resources than ever into the further development and expansion of TVET. However, government engagement alone will not be sufficient, and the

invested resources will have to be spent wisely, efficiently and effectively. We have therefore worked during the last months on a Financing Framework for TVET. A study has been prepared and its recommendations are currently discussed among decision-makers. This framework is based on the principles of efficient and effective use of resources and a diversification of funding sources. We are planning to support the private training sector to invest in new TVET centres and programmes even more than it has done already. We will invite companies to cooperate with training centres and share the responsibility in training delivery. We have already and will further encourage TVET centres to increase their own income potential and to use public allocations efficiently. And we also expect trainees, who benefit from good training, to share the cost, however in a way that will not exclude poor students from participating. We hope that these mechanisms will broaden the financial base of our TVET system and will enable us to eventually provide more and better training to the youth of Ethiopia and all other Ethiopians who require training to improve their productivity and secure their livelihoods.

I hope that this Symposium will assist the Ethiopian decision-makers and stakeholders in clarifying and fine-tuning our financial framework. We are extremely eager to discuss our ideas with international experts, to learn more about how other countries have approached their financial challenges and to benefit from lessons learnt in these countries. And I hope that everybody, we Ethiopians and our international guests, will benefit from this important opportunity of international exchange. Let me therefore express again my sincere gratitude to the ECBP to have organised such an important event with such an impressive list of participants and topics.

I wish all participants fruitful and interesting discussions during the next two days, and I hope that our international guest will fully enjoy the warm hospitality of our capital city Addis Ababa. I herewith declare this symposium officially opened.

Thank you very much.

Draft Financing Framework for the TVET Reform in Ethiopia

by Dessalegn Mulaw

3

4

Background

- Financing strategy needed to appropriately source National TVET Strategy
- National TVET Strategy outlines core principles of funding system
- Discussion on financing strategy started with studies in 2000

The Study

- Study commissioned in 2006 for development of financing framework
 - Analysis of current situation
 - Estimates of resource requirements for expanding TVET system under current situation
 - Discussion of different financing instruments within the Ethiopian context
 - Model calculations of potential effects of different funding instruments
 - Recommendation of framework of diversified financing instruments
- Study currently under discussion among stakeholders and decision-makers

Current situation of financing TVET – some features

- Increase in public funding: enrolment increase by 1,200% within five years
- Inefficiencies in public TVET system:
 - Budget allocation system not linked to output/performance
 - Low capacity utilization
 - Inflexible management structures
 - Insufficient curricular flexibility

Current situation of financing TVET – some more features

- Cost-sharing and income generating activities in TVET centres encouraged during recent years – proceeds still low
- Problems in rural TVET centres: low capacity utilization, high unit cost, low income earning potential

Current situation of financing TVET – some more features

- Expansion of TVET (agriculture, health, etc) for public employment with different financing terms
- Enrolment in private TVET Centres has increased significantly: officially 30%, in reality much higher
- Involvement of private employers in TVET assumed to be low by international standards
- Assumed untapped training potential in the informal sector (traditional apprenticeship)
- Low investment in non- and informal TVET

The Challenge

	2008 (EC)
Enrolment targets for TVET (without health, agriculture and teachers training)	648,730
Total recurrent cost for government under current conditions	738,740,000 million ETB
Total capital cost for government under current conditions	862,820,000 million ETB

New Financing Framework: Principles

- ↳ **Diversification of funding sources** (beneficiaries should contribute; income generating activities)
- ↳ **Increased involvement of private sector** (public/private partnership; private training market)
- ↳ **Increased efficiency** (in TVET delivery and management)

Recommended Elements of New Financing Framework

Public spending on TVET

- Needs to continue at high levels
- Focus on regulation, quality assurance, support services and monitoring
- Financing of TVET delivery focus on strategic areas (rural TVET, poor target groups, strategic occupations)

Strengthen Efficiency in Public TVET Centres

- Management capacity building
- Activity/performance-based budget allocation system
- Increase capacity utilization
- Encouragement of income generating activities

Increase Enrolment in Private Training Market

- Improvement of investment climate
- Conducive accreditation system
- Withdrawal of government from strong private sector training fields (Business studies in urban areas)
- Financial support to needy students in private training market (matching grant or loan scheme)

Involvement of employers in TVET delivery

- Short-term: Expansion of internship period in formal TVET (co-operative training)
- Encouragement of company-based investment in TVET (tax incentives, etc)
- No TVET levy scheme intended in the short run, but industry encouraged to develop sector levy schemes

Cost-sharing With Trainees

- Graduate Tax recommended:
 - (Up front) Fees at significant cost-recovery rate cannot be raised by TVET target group
 - Graduate tax implies cost-sharing after start of employment
 - Graduate tax links cost-sharing to quality and relevance of TVET programmes
 - Graduate tax income to be pooled in sheltered fund and (re)-channelled to TVET centres, matching grant/loan fund, non-formal TVET

Non-/informal TVET

- Increased public allocation to non-formal TVET
- Stimulation of innovative non- and informal TVET initiatives through establishment of earmarked challenge fund
- Support programmes for traditional apprenticeships

Capital costs

- Capital cost to be relatively reduced by
 - Better capacity utilization
 - Higher share of private training market

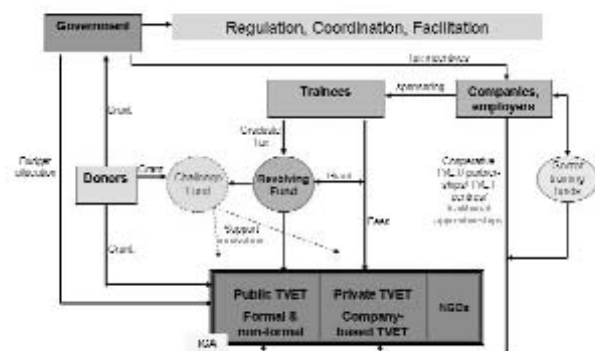
Potential Impact

- New financing instruments can add resources, but not replace public spending
- Public spending, both recurrent and capital, has to increase to meet MoE enrolment targets

Major Risks

- Quality and relevance of TVET will not improve as expected
- Insufficient public spending on TVET
- Lack of implementation capacities
- Lack of preparedness of private households to invest in TVET
- Lack of economic and private sector growth

Possible Diversified Financing Framework for TVET



The Ethiopian Financing TVET Framework in an international perspective

by Dr. Arvil Van Adams

1. Introduction

- a. Recognition of dignitaries and guests
- b. My assignment today: talking about TVET financing from an int'l perspective and lessons for Ethiopia
- c. Topics covered:
 - i. Why the emphasis on skills?
 - ii. Challenges to be met and lessons for financing from int'l experience
 - iii. The three P's for financing in Ethiopia: poverty, performance, and partnership

2. Ethiopia has been engaged in a major TVET reform program as part of the Government's Engineering Capacity Building Program launched November 2005 with German technical cooperation

- a. A TVET strategy is now under consideration by the Council of Ministers
- b. Strategy reflects best international practice in its content
 - i. Shared governance
 - ii. Decentralization of management
 - iii. Diversified financing
 - iv. Strengthening of private delivery
 - v. Expansion of cooperative training
 - vi. Focus on quality assurance
- c. Ethiopia is joined by other countries in pursuing TVET reforms

3. Why the emphasis on skills?

- a. Success in Education For All and in meeting Millennium Development Goals calls for providing choices in further education
- b. Not all youth will enter higher education, only half in advanced countries and less in low-income countries
- c. The missing middle in skills for Ethiopia
- d. Providing youth with a skill opens the way to employment and income for reducing poverty
- e. The critical foundation of education for skills
- f. Skills will enable Ethiopia to attract added investment and expand the economy
- g. Ethiopia is competing in a global economy

4. Challenges faced in financing and lessons from other countries

- a. TVET has to compete with other sectors for public expenditure
- b. Low income is a constraint to household financing, limits on fee income
- c. Rural communities face more serious constraints than urban areas for household financing and income generation
- d. Readiness of the private sector as a partner in Ethiopia presents a challenge, importance of building its capacity
- e. Borrowing against future income requires well functioning capital markets
- f. Diversifying financing does not mean withdrawal of government financing
- g. How financing is done may improve quality, efficiency, and relevance

5. The three P's for financing

- a. Poverty: assuring attention to the poor
 - i. Looking at the equity of financing policies across education sector
 - ii. Awareness of the impact of cost-recovery on access of the poor to private training
 - iii. Role of the State in promoting access for the poor
 - iv. How to go about protecting the poor
 1. Community-based targeting and selective waivers
 2. Geographic targeting and cost-recovery waivers
 3. Institution budgets weighted for the share of the poor
- b. Performance: creating the right incentives with financing for getting results
 - i. Supply-driven systems have no accountability for failure to meet market needs
 - ii. Shifting the financing focus from inputs to outcomes: standards-based training systems as an outcome
 - iii. Performance-based budgeting with accountability
 - iv. Vouchers: U.K., Chile, Kenya
 - v. Competitive procurement of training: SENSE and Training Funds
- c. Partnership: creative involvement of the private sector as a partner in financing
 - i. Conditions under which enterprises will finance training
 - ii. The challenge in Ethiopia where quality is not valued by consumers
 - iii. Strategies for encouraging SME's to train: Malaysia, Singapore
 1. training voucher for less than 50 workers – SDF
 2. use of excess training capacity in large firms with training grants – HRDF
 3. grants for training needs analysis – SDF and HRDF
 4. pre-approved public courses –SDF and HRDF
 5. support for education equivalency programs
 - iv. Other ways for partners to contribute than tax-based and contract financing
 1. Board of governors for training institutes
 2. Consultations on curricula and certification instrument
 3. Cooperative training
 4. Instructor internships in industry
 5. Industry craftsmen as instructors
 6. In-kind support with equipment

6. Looking at TVET reforms as a journey

- a. Establishing early milestones
- b. Building a learning culture for adapting lessons
- c. Awareness of the importance of the roles of the State and partners
- d. Using financing to address the three P's

Mechanisms of financing TVET

by Dr. Vladimir Gasskov

MECHANISMS OF FINANCING TVET

By Vladimir Gasskov, ILO
Addis-Abeba, 2006

Structure of 'TVET' funding mechanisms

- Sources of funding (availability of public and private funds, structure of available funds, multi-level funding, reliability, conditionality, etc.)
- Authorities charged with powers to decide on budgeting and funding processes and allocate TVET funds to providers (central/decentralized resource allocation)
- Funding formula, rules and procedures for disbursement of funds to TVET institutions
- Financial and performance accountability

Vladimir Gasskov, ILO Addis-Abeba, 2006

27

Efficient, effective and equitable funding mechanisms

- TVET funding mechanism is effective if it directs providers to deliver programmes towards national objectives and priorities
- Funding is efficient if it directs providers to maximize their outputs and control training unit cost
- Funding is equitable if it enables students from different backgrounds to access education and training opportunities equally

Vladimir Gasskov, ILO Addis-Abeba, 2006

28

Sources of funding national 'TVET'

- Government budgets (central, state and local)
- Enterprise contributions
- Income of TVET institutions from *education and training services* for individuals and organizations (fees for service);
- Income of TVET institutions from *non-training products and services* (catering, printed books, production of parts, maintenance and repair, etc.)
- Donations

Vladimir Gasskov, ILO Addis-Abeba, 2006

29

Features of government financing

- Central, state, or local government budgets
- Government TVET budgets may originate from different taxes – local school district property tax in the US, regional automobile tax in France, etc. Fundraising powers determine resource allocation policies
- Funds can be made available to regions through transfers earmarked for TVET or as bulk regional transfers
- TVET institution funding may be zero-growth or growth funding;
- Funding rates may involve capital and recurrent funding; or capital funding is allocated through grants for building infrastructure/ competitive grants for product development, etc. (Australia)
- funding may be decentralized or be multi level with different funding capacity at each level (US); may result in significant discrepancies between regions (France)
- government funds may be combined with industry resources and student fees according to determined formula (NZ)

Vladimir Gasskov, ILO Addis-Abeba, 2006

30

Authorities charged with powers to decide on budgeting and funding processes and allocate 'TVET' funding

- TVET funds come from national general revenue; schools receive budgets directly from the state education budget (The Philippines)
- Government education and training funds are distributed through formula-based transfers to lower-level governments; they eventually allocate budgets to TVET institutions and control their performance
- Governments at each level can tax and raise funds; institutions receive portions of funds from federal, state and local budgets (multi-level funding/US)
- Government funds or portions thereof can be administered by: education departments, national TVET agencies (NZ/UK), industry training organizations (Denmark), social partners organizations (Regional Employment Councils, the Netherlands); TVET providers bid for funds from various organizations according to determined tasks and conditions
- Combinations of public funds and industry training funds can be administered centrally and locally

Vladimir Gasskov, ILO Addis-Abeba, 2006

31

Enterprise payroll-based contributions to TVET

- Enterprises' legal contributions – payroll based national training levies (Latin American and African countries, France, Denmark, Singapore, etc.); sectoral – construction industry in UK
- Enterprises' and sometimes employees' contributions to national labour market funds and employment insurance funds through labour market taxes and *employment insurance taxes* (Barbados, Sweden, Japan, South Korea)
- Levies on expatriates' payrolls are collected and used for skills training and retraining (Bahrain, Hong Kong)
- Companies' and sometimes employees' *voluntary contributions* regulated by *industry agreements* and collected by sectoral funds (15 Funds in Denmark, 49 in Belgium, 70 training and social funds in the Netherlands)
- Enterprise legal contributions to regulated apprenticeship systems through apprenticeship taxes (France, Denmark) or statutory financial commitments (Germany, Switzerland).

Markus Gorkun, ETV 686-01000, 2004

Training taxes on value of work contracts, and exports

- Mexico, Training Institute of Sugar Industry (ICIA) is financed by company contributions equivalent of \$0.0125 per kilo of standard base sugar produced
- Hong Kong: training levy of 0.25% collected on value of construction projects; 0.3% on value of clothing exports
- UK, Sea fish Training Organization collects levies which vary by species and weight of fish landed
- Mexico, Construction Industry Training Institute (ICIC): public and private sector construction enterprises pay a levy of 0.2% of value of business contracts
- Kenya, the Construction and Civil Engineering companies have to pay a percentage of their total quarterly turnover into the sector Training Fund
- Queensland, Australia: purchasers of construction services pay training levies calculated as a percentage of the cost of building

Markus Gorkun, ETV 686-01000, 2004

Regulated apprenticeship schemes in Pakistan (and India)

- Employers are legally required to finance training of apprentices in scheduled apprenticeable trades
- Enterprises with 50 or more employees are to recruit and train apprentices in numbers equals to 20 % of total number of workers employed in apprenticeable trades.
- Employers are obliged to ensure that an apprentice receives 20 % of theoretical and 80% of practical training
- Employers bear the entire financial responsibility for training of apprentices; allowances, instructors, materials linked to training, and fees to public training centres for theoretical instruction
- The employer annual unit cost of apprenticeship was Rs.42,000 (800\$) with approximately 68 % spent on a stipend; 15% spent on production losses; fees paid by employers for theoretical training to public VET institutions total 3.5%

Markus Gorkun, ETV 686-01000, 2004

Regulated apprenticeship schemes in Sri Lanka

- National Apprentice and Industrial Training Authority (NAITA) receives a government grant for delivering the scheme
- NAITA bears the major cost of apprentices (allowance –the major cost driver)
- Employers' participation is voluntary and is based on their interest to engage apprentices
- Employers' cost involve voluntary welfare benefits, and the cost of on-the-job training

Markus Gorkun, ETV 686-01000, 2004

Funding flows in informal apprenticeships

- On-the-job informal instruction delivered by masters in small enterprises is widespread
- Informal apprenticeships may involve apparent financing arrangements - trainees pay masters in cash/kind, or contribute by their work, or both. Trainees may need to borrow in order to pay masters.
- Arrangements vary from country to country and from industry to industry
- Whether governments need to be involved and what can be done to improve informal apprenticeships including funding arrangements?

Markus Gorkun, ETV 686-01000, 2004

Disbursement of public funding: 'The input-based formula

- It is essentially the cost-based funding (institution is funded for what it costs rather than for what it delivers)
- Funding process does not distinguish between well and poorly performing TVET providers: Budget is allocated from year to year no matter the providers' performance and outputs
- Formula does not distinguish between different unit costs for different TVET courses
- Funding formula assumes low accountability of TVET institutions/administrators

Markus Gorkun, ETV 686-01000, 2004

'The output-based (performance-based) funding formula

- A government *purchases* the outputs (and outcomes) of a TVET institution – skills and education acquired by / delivered to graduates
- A TVET institution is funded for what it *delivers* rather than for what it costs
- A number of delivered student- guided hours (SGHs) / or equivalent full-time students (FTEs) is considered as a proxy of an output: TVET providers that attract and retain more students receive more funds
- Funding rates are calculated for different groups of courses by subject (different trades) and for different levels of study (certificates, diplomas and their levels)
- Funding rates take account of methods of the course delivery
- Funding rates take account of operating TVET institutions in different cost-of living areas
- Amount of funding may take account of success of TVET institutions in achieving delivery targets

Malcolm Gribben, EIU Global Monitor, 2004

58

Relative funding categories in Malaysia, 2003

(calculated by G. Pridemore, New Zealand, 2003)

Relative funding category	Group of courses	FTEs	RM/FTEs	Ratios	RM x millions	% FTEs
A	Arts/business	75496	7480	1.00	599	20.5
B	Computer science/ economics/ education/ law	41592	9200	1.24	383	14.0
C	Science/social science/ architecture	47298	11600	1.57	549	20.1
D	Engineering	49809	17700	2.39	882	32.3
E	Dentistry/pharmacy	2634	35700	4.82	90	3.3
F	Medicine	5228	51500	6.95	768	9.8
	total	221917			2730	

Malcolm Gribben, EIU Global Monitor, 2004

59

Underpinning factors for output-based funding

- Funding agent has the flexibility and knowledge to apply the output-based funding mechanism
- Correct funding rates for TVET programmes (subjects/levels of study) are applied
- Rates are examined and agreed upon between a funding agent and TVET institutions
- Budgets provided as a bulk amount enabling institutions to exercise financial management (cross-subsidizing of programmes)
- TVET institutions have the right to hire and fire staff/carry forward funds from year to year, invest in assets, generate and retain income, reward staff, etc

Malcolm Gribben, EIU Global Monitor, 2004

56

Some equitable funding mechanisms

- Option 1: All the 16-19 year old students are fully funded by the government (*high-income countries*)
- Option 2: All students, in principle, have to pay training fees (% of training cost); students from low-income families pay less; seriously disadvantaged pay nothing and may receive training allowances (income tested funding)
- Option 3 : All students have to pay training fees (% of training cost); all students have equal access to education loans repayable until the age of (50) if former graduate is in employment and receive more than a certain minimum wage

Malcolm Gribben, EIU Global Monitor, 2004

55

Features of effective, efficient and equitable funding

- involve reliable funding sources (public and private)
- link funding to objectives and priorities
- be output-based (funding against training outputs)
- involve funding rates which differ for different courses
- maintain funding options for students from different income backgrounds
- reward better performance (better performing institutions are entitled to growth funding)
- be based on flexible budgeting (minimum number of budget lines or global allocation for a TVET institution/ less teaching staff and more equipment)
- encourage generation of revenue from education and training services
- encourage efficient use of resources – teaching and non-teaching staff, salaries, training space, land, training equipment, other resources
- involve transparent accountability for the funding received

Malcolm Gribben, EIU Global Monitor, 2004

57

Cost-sharing with trainees/students: International Experience

by Prof. Dr. Adrian Ziderman



**Cost-sharing with
Trainees/Students:
International
Experience**

Adrian Ziderman
Bar-Ilan University, Israel
zidcra@mail.biu.ac.il

Six main topics for discussion today

Cost-sharing: definition and rationale
Tuition fee increases: benefits and risks
Loans schemes: financial analysis
Loans schemes: alternative objectives
Lessons from international experience
A graduate tax for TVET in Ethiopia?

1. Cost-sharing: definition and rationale

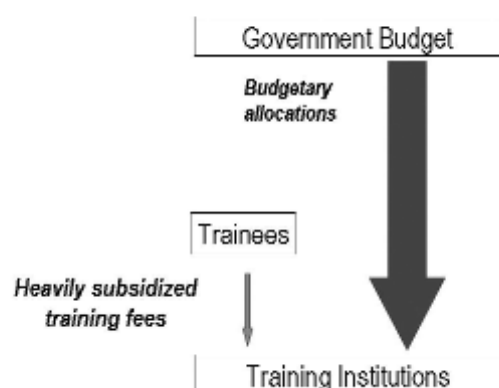
Public sector TVET provision is highly subsidized
Are these subsidies justified? High private returns
Beneficiaries of TVET should pay
Shift burden from taxpayers to employers and trainees
Employers: training levies
Trainees: higher, realistic fees

2. Tuition fee increases: benefits & risks

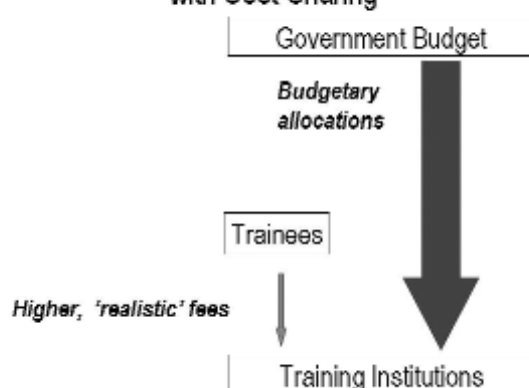
Benefits:
Additional revenues for TVET institutions
Easing government budgetary constraints

Risks:
Risk of trainee drop-out
Disincentive to access
Effects most marked amongst the poor

Budget Allocations to Public TVET Institutions



Budget Allocations to Public TVET Institutions, with Cost-Sharing

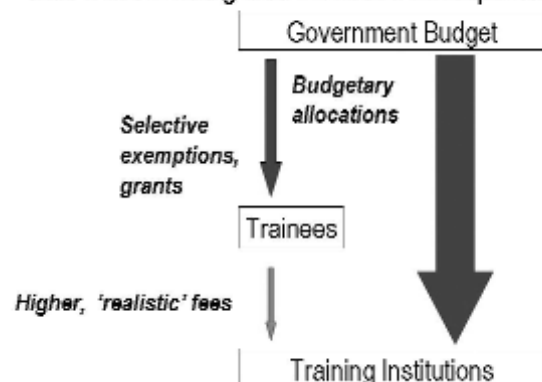


How to mitigate these risks?

Selected tuition fee exemptions

Selected grants

Budget Allocations to Public TVET Institutions, with Cost-Sharing and Selective Exemptions



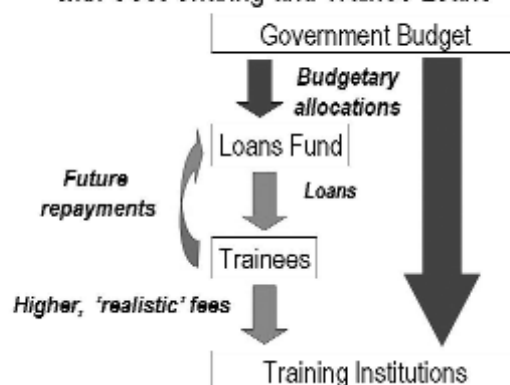
How to mitigate these risks?

Selected tuition fee exemptions –
leads to reduced tuition revenue

Selected grants -
costly

Budgetary implications particularly strong when
Many trainees and potential trainees are regarded
as deserving

Budget Allocations to Public TVET Institutions, with Cost-Sharing and Trainee Loans



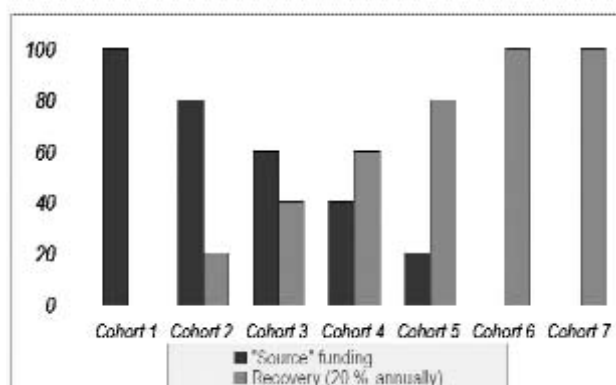
Loans schemes are a form of cost sharing: deferred
cost recovery.

They may also be initially costly to the government

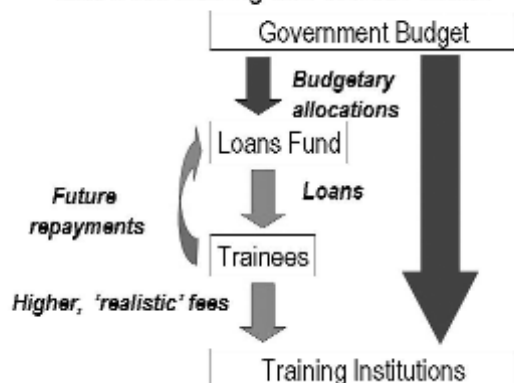
But the budgetary burden is reduced over time, as
repayments income builds up

At best, this will constitute a 'revolving fund'

Revolving fund (1-year TVET course)



Budget Allocations to Public TVET Institutions, with Cost-Sharing and Trainee Loans



Provision of loan capital

Loans funding: usually from government
Increased financing burden, which is reduced overtime with loan repayments

Other funding sources:

- Banks
- Financial institutions (existing funds)
- Borrowing (securitization)

Caution!

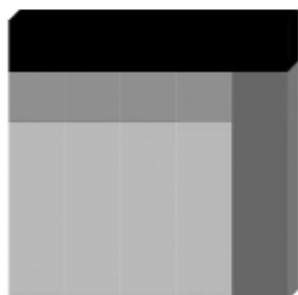
Unfortunately, in practice, things work out less happily

The financial integrity of loans schemes are frequently undermined

To understand why this is so, we turn to a discussion of the financial underpinnings of loans schemes

3. Loans schemes: financial analysis

The Loans Scheme



Loans recovery with default & administration costs

Loans Recovery:

How much of loans scheme outlay (loan disbursements plus administration costs) is recovered?

Recovery Ratio:

Present Value of receipts from repayments / Present Value of total outlays

Loan Recovery Ratio, Selected Countries (1992 estimates)

Country	With default and administrative costs	Country	With default and administrative costs
Kenya	-3	Australia	43
Venezuela	-8	United States (OSL)	47
Chile	18	Ireland	48
Honduras	27	Guatemala	50
Indonesia	29	Norway	52
Brazil	29	Colombia	53
Ecuador	30	Hong Kong	53
Jamaica	30	Dominican Republic	57
Bolivia	30	Canada (Quebec)	61
Denmark	36	Uruguay	67
Mexico	39	Sweden	67
Japan	40		
Peru	40		

Source: Ziderman and Albrecht (1996)

Selected Loan Recovery Ratios, SE Asia

Country (loans scheme)	Recovery ratio (%)
China	53
Korea (Ministry of Education)	64
Korea (Government Employees)	40
Philippines (SNPL)	0
Thailand (First degrees)	(8)

Reasons for Low Recovery Ratio

Built-in features of the loan scheme:

Low (subsidized) rates of interest

No interest payment during study and grace periods

Repayment in nominal terms

Administration of the loans scheme

Non-Repayment ("default")

Administration Costs

Exemptions, "Forgiveness"

Loans versus Grants

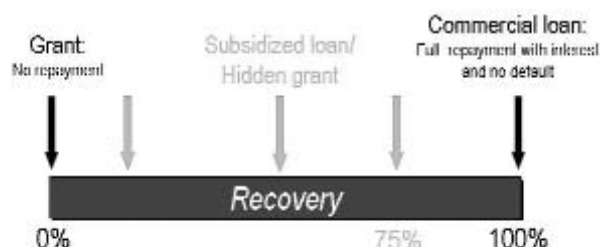
Where trainees repay less than the full value of the loan, the non-repaid element of the loan is a "hidden grant" (Johnstone)

Two issues:

Are large hidden grants justified?

Should loans with large hidden grants, be replaced by explicit (non-repayable) grants?

Loans versus Grants



4. Loans scheme: alternative objectives

Budgetary

Social

Budgetary objectives – cost sharing

Generate income to maintain enrolments and output/quality
 in response to rising TVET unit costs
 in response to government budgetary constraints

Generate additional revenues to (partially) finance expansion of the public TVET sector

Loans to trainees in private institutions to encourage private sector expansion

Cost-Sharing: country examples

Australia (HECS)

England & Wales / Scotland

New Zealand

Netherlands

7

Social objectives (increasing access)

Loans targeted on lower socio-economic groups – needy students, disadvantaged groups, etc

Reaching out to these groups to increase access

Social Targeting: country examples

China

The Philippines

Hong Kong

Thailand

Summary

Loan Scheme Objective	Measure of success	Substantial subsidy justified ?	Coverage
Budgetary (cost recovery)	Enhanced resources for the TVET system	No	All trainees*
Social, equity	Increased access for the needy	Perhaps	Only targeted trainees

* If loan budgets are limited, loans must be rationed

Cost-sharing objectives: How can loans be rationed?

First-come, first served

Academic merit

Manpower shortages

Needy students

Pros and cons of each approach

Where student loans schemes have clear social objectives, they have *not* proved be effective in raising the access to tertiary education, of lower socio-economic groups

Barriers to access are not only, or mainly, financial

Financial poverty vs. informational poverty (Barr)

Prior action to better inform and raise aspirations

Assisting the poor: five key conditions for increasing access of lower S-E groups

Effective eligibility and screening criteria

Pro-active targeting

Adequacy of loan size

Favourable loans conditions

Unifying grants and loans policy

Direct subsidies are present in most schemes, but these may need to be sizeable to encourage access of lower S-E groups

Grants are more effective than loans in increasing access of lower S-E groups: but they are more expensive

When the hidden grant is very large, it may be preferable to provide outright grants

5. Some conclusions based on international experience

Student loan schemes have played an important role in cost sharing policies, aimed at increasing the overall level of university funding

Student loans schemes have not proved to be an effective device for enhancing access of lower socio-economic groups

Large government subsidies, sizeable in virtually all national student loans schemes, are usually not justified

Cost-sharing:
How have loans affected access of the poor?

Lessons from Australia (HECS)

Proportion of lower socio-economic groups has not fallen

But no proactive steps to enhance access of poor

As in most countries, the socio-economic profile of the student population has not improved over time

Loans recovery may be far lower in practice than expected

Targeted grants may be a preferable option where loans recovery is very low

Explicit subsidies (grants) are more effective than "hidden grants" in protecting the poor

Student loans should be combined with focused grants and scholarships, to assure access for the disadvantaged

6. TVET loans for Ethiopia?

Is cost sharing through a loans scheme appropriate for TVET? Is implementation more difficult for TVET than for general/higher education?

Ethiopian Higher Education Graduate Tax

Is the Higher Education Graduate Tax an appropriate model for TVET delayed cost recovery?

Is cost sharing through a loans scheme appropriate for TVET?

There are some country examples of loans for formal TVET (e.g. Thailand), but no known loans schemes for training (T)

An exception is Career Development Loans in UK, but these serve a rather different purpose

Trainees are drawn from lower socio-economic groups: here repayment default is higher than for more typically middle-class university students

Similarly, they may be more risk averse and less ready to commit to a loans scheme

However, employment and wages benefits of TVET may be more apparent to low socio-economic groups, than they are for higher education

A large proportion of trainees are likely to be self-employed or enter informal sector employment; problems of follow up for repayment

Higher Education Graduate Tax

Graduate tax is modelled on the successful Australian Higher Education Contribution Scheme (HECS); adopted in a small number of industrialized countries

Essential feature is income contingent repayment (collected by the tax authorities). Most loan schemes are Mortgage-type repayment schemes.

Three pre-requisites for income-contingent repayments:

- Location of borrowers
- Information on income earned
- Effective collection mechanism

These conditions are not usually found in developing countries.

Another major feature, enhancing the acceptability of the scheme, is the exemption from repayment for graduates with low earnings; this may not be temporary

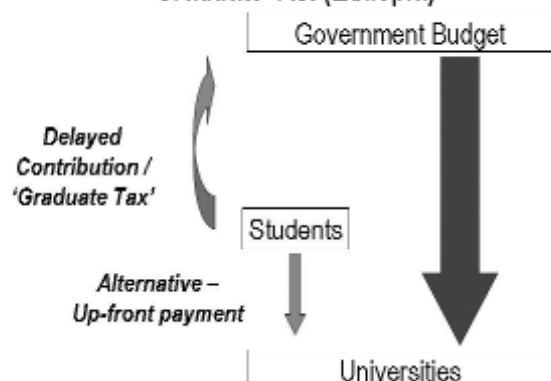
Adoption of the term "tax" is unfortunate.

The Australians emphasized that delayed payment is not a tax nor a loan repayment,

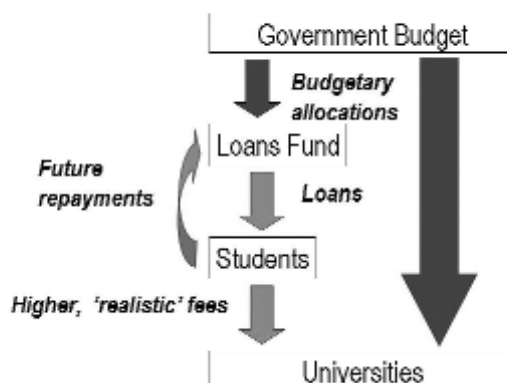
Rather, it is a justified contribution to higher education costs, made out of (enhanced) graduate earnings.

Is it a graduate tax?

Higher Education Contribution Scheme (HECS) / Graduate Tax (Ethiopia)



Typical loans scheme in higher education



Is the Higher Education Graduate Tax an appropriate model for TVET?

Caution necessary. Success of the HE graduate tax mechanism is still largely unknown.

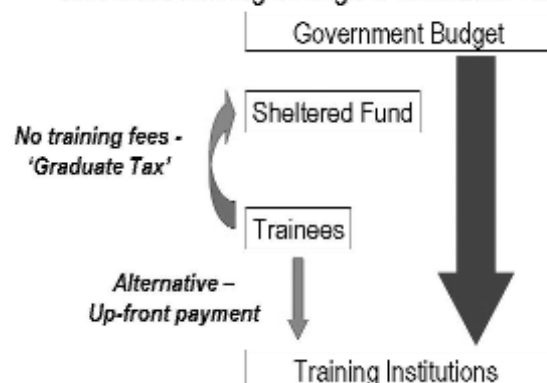
Size of subsidy? Amount of effective cost recovery?
Effect on poor?

Efficacy of income contingency repayments unknown

Loss of parental contributions (5% up-front discount)

Suggested graduate tax model for TVET in Financing Framework

Budget Allocations to Public TVET Institutions, with Cost Sharing through a 'Graduate Tax'



Is the Higher Education Graduate Tax an appropriate model for TVET?

Probably not at this stage!

Need moderate fee payments for all, with deductions or exemptions for "deserving" families.

If delayed cost recovery is to be adopted (in the future), then there is a preference for mortgage type loans, with fee exemption or grants for targeted students

Number of Youth (15-19) Eligible for loans, Thailand

Household Income (Baht)	Number of Eligible Youth (Household income up to 150,00 Baht)	
	At school	Total
Up to 50,000 (poverty line)	314,000	512,000
50,001 - 100,000	647,000	922,000
100,001 - 150,000	429,000	569,000
Total	1,390,000	2,002,000

Total number of loan recipients: 453,000



**End of
presentation**

Costs and benefits of vocational education and training in the dual system of Germany

by Folkmar Kath

The meaning of cost and benefit in company-based VET-systems

Cost-benefit analyses investigate the value of vocational training as perceived by the state, employers and individuals in terms of the life income of working people, the labour productivity of each company providing training, and state infrastructure spending, tax revenues and the level of social transfer payments and social stability. Because of the predominant role of employers in the German vocational training system with its dual structure and individual-employer-based financing arrangements, the economic dimension of three parameters cost, benefit and funding is much more important than in the case of a school-based, publicly financed vocational training system. In the latter type of system, cost problems are felt only indirectly, but in the former these have an immediate and palpable impact on the company's financial accounts. If costs which are relatively easy to quantify are not reflected by corresponding benefits generated by training in the medium term, there is a latent danger that corporate investment in training will no longer adequately meet the demand for training within the younger generation.

The fact that in Germany companies themselves for the most part decide whether and to what extent young people receive vocational training accounts for a dependence on market conditions, growth and employment dissimilar to state-organised and financed vocational training. Firms finance training costs, which they affect as an investment in human capital with the goal of optimising their operating resultants through personal qualifications. With an annual expenditure of more than 27 thousand million Euro projected by the Federal Institute for Vocational Training (BIBB) in 2000 on the basis of a representative survey, one should actually assume that companies orient their vocational training decisions on a cost-benefit analysis. This is not the case, however, because the parameters must be converted into money in order to be able to compare expenditure and return. Attempts to register completely the benefit or income side of vocational training fail because of methodological problems of benefit measurement. On the other hand, the statistical description of the cost or funding side does not present any insoluble methodological problems.

Methodological approach to determining training costs

Most enterprises in Germany do not have separate entries for training costs in their costing. To the extent that internal company training costing does take place, which is generally the case only in larger enterprises, the procedures differ widely and the results in the different enterprises are hardly comparable. In a representative study of company training costs it is therefore necessary to record the individual cost components – quantity and value – in each enterprise and then to convert them into cost variables using a uniform system.

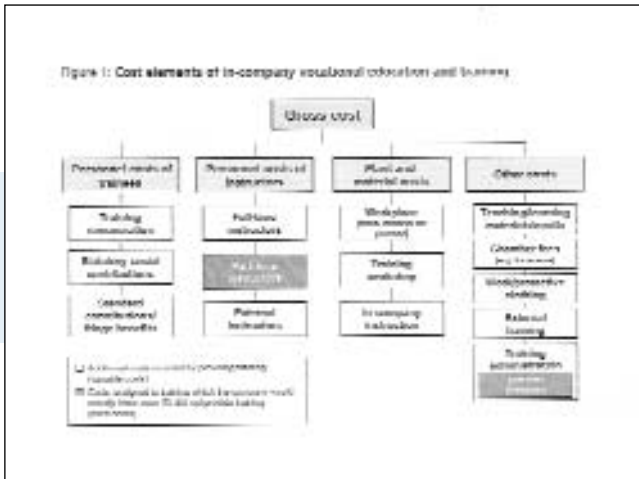
The cost model derives from the value-basis cost concept that is usual in business administration, according to which cost is taken to mean the assessed consumption of goods and services to generate the goods and services produced by the company. It follows the concept of full or absorption costing whereby all the costs entailed in producing the company's goods and services, both the variable and the proportionate fixed costs, are attributed to the cost units, that is, the individual products. Applied to in-company training, this means that the entire process of vocational qualification of a trainee in the enterprise is to be seen as a performance to be costed and the overall deployment of persons and resources that this requires has to be determined and evaluated. Not only all the costs additionally occasioned by the training are included (variable costs) but also a proportionate share of the personnel and material costs that would arise for the enterprise even if it did not provide training (fixed costs).

In in-company vocational education and training, the following major cost pools have to be distinguished:

- The personnel cost of trainees consist of the training remuneration cost elements, that is, the “pay” for the trainees, as well as the statutory and standard social contributions and fringe benefits.
- The personnel costs of instructors are wage and salary costs including employee benefit costs of all persons involved in training in the enterprise. The proportion of personal costs corresponding to the time spent on training was determined, with the distinction being made between full-time and part-time instructors. Whereas the central task of the full-time instructors was to do the training, the part-time instructors only

do training work temporarily in addition to their actual tasks in the framework of the production of company goods and services.

- Plant and material costs are incurred at the different in-company learning venues. For training at the company workplace, the costs of tools and equipment specifically at the disposal of the trainee were recorded.



Methodological approach to determining direct costing

The full cost principle takes into consideration to a high degree- especially with the incorporation of the cost of part-time training personnel- costs that the company would incur even if it did not provide training. The training costs arrived at thus does not reflect the actual supplementary cost burden that is relevant for the company when deciding whether or not to provide training. Therefore over and above the full costing, direct costing was also carried out, covering only the types of costs actually incurred as supplementary costs by the company as a result of training.

For direct costing it is first of all necessary to divide the costs up into costs incurred by the company independently of training, that is, the fixed costs, and those that are occasioned additionally by the training provided, i.e. variable costs. There is no general answer to the question of whether and to what extent the costs of the part-time instructors are to be seen as fixed or variable, however. The part-time instructors in particular often devote a considerable part of their working time to training. If the company stopped providing training and thus relieved those employees of their training responsibilities, however, that might lead to a reduction of the company personal requirements and thus to cost-saving in some companies and not in others. In most of the companies by far, termination of training would result in no savings in personnel resources worth mentioning, since the volume of original work done by part-time instructors differs little or not at all from that of

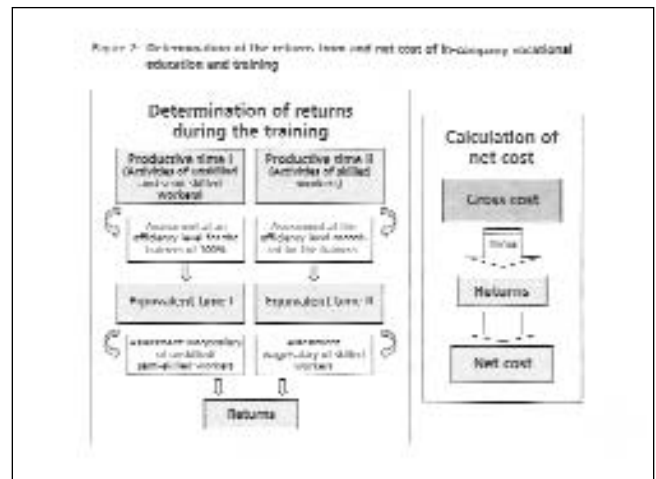
employees not providing instruction. Therefore the costs of personnel engaged part-time in training can be completely ignored in direct costing. It is therefore a simplified calculation in which the tendency is to slightly underestimate the cost burden of the companies.

Procedure of determining the returns during training

In in-company vocational education and training, learning and working are closely interconnected. As a rule the trainees perform productive work, that is, work that the company can put to economic use, during the in-company training period. The productive work reduces the cost burden of the companies and is therefore subtracted from total costs as returns from training. However the returns cannot be recorded directly but can only be deduced indirectly from substitution requirements. The assumption is that if the company did not have anyone to train it would have to hire normal employees to do the work. Thus the value of the productive work of the trainees for the company is equal to the amount it would alternatively have to pay to those employees in wages and salaries for the same work performance.

Returns are determined as follows: First the amount of time is determined during which the trainees were doing productive work in the company during the individual training years.

And how that productive time was distributed among



activities that are normally performed by unskilled semi-skilled workers, and activities otherwise performed by skilled workers. Productive times are assessed at the level of efficiency that the trainees attain in comparison to the employees otherwise used for the same work. Whereas the lower level of efficiency of the trainees for skilled worker activities is differentiated by years of training, the level of efficiency in the case of unskilled and semi-skilled work is generally taken to be 100 %. The so-called equivalent times calculated on that basis corres-

pond to the time skilled or semi-skilled and unskilled workers would have taken to do the same work. By assessing the equivalent times with the wages and salaries, including employee benefit costs, of skilled or semi-skilled and unskilled workers the costs that the company would have incurred if it had employed normal workers are determined. The alternative costs that the company saves through the productive utilisation of trainees are regarded as returns from training. The returns are subtracted from the total training cost to the company, that is, the gross cost determined by full costing, or direct costing. The remaining net cost express the actual cost burden connected with training.

Problems of estimation

One difficulty with the determination of training costs is the part of the required individual data in the companies is not available in the form of systematically recorded data but can only be estimated. This applies in particular to the time expended by the part-time instructors. The companies do not generally register precisely how many hours the individual employees spend on catering for trainees. The data are therefore subjective estimates of the respondents and can be influenced by their ideal conceptions of good training. It should therefore be assumed that the tendency would be to overestimate the time spent on training by part-time instructors.

Another estimation problem arises above all when determining the productive performance of the trainees, which is likewise not as a rule precisely recorded by the companies. The volume of productive time and the level of efficiency of the trainees when performing skilled worker activities must therefore also be estimated by the survey persons. All data on the productive performance of trainees are therefore subjective judgments to a certain extent, although here underestimation is more to be expected.

Results of full costing

As elucidated above the total deployment of persons and material was registered and assessed in order to determined in-company training costs by full costing. Not only the costs additionally occasioned by training (variable costs) but also the proportionate personnel and material costs that the company would have incurred even without training (fixed costs) were taken into consideration. The following results of full costing show what resource consumption is connected with training in the companies.

For the year 2000 the gross costs of in-company vocational education and training in Germany calculated by full costing averaged EUR 16,435 per trainee and year. The largest cost pool consists of the personnel costs of

trainees at EUR 8,269, corresponding to 50 % of gross costs. Training pay, averaging EUR 6,042 per trainee and year, makes up the largest part of this sum by far; it alone accounts for 37 % of the gross costs. Unlike other cost elements of in-company vocational education and training, the company has little or no influence over the amount of training pay. In most branches of industry, collective agreements determine training pay.

Companies with collective agreements are obliged to pay trainees at least the sum set forth in those agreements. The statutory social employer's contribution calculated on the basis of the training pay was about 21 %.

The second largest cost pool consists of the training personnel costs. Averaging EUR 5,893 per trainee and year, they account for 36 % of gross costs. The main item here is the cost of part-time trainers, that is, the company personnel who spend some time on training tasks in addition to their actual work, averaging EUR 5,419. The cost of full-time instructors, on the other hand, is relatively low, averaging EUR 453. The reason for this is that full-time instructors are generally only employed in larger enterprises. Only 11 % of the trainees receive instruction from full-time instructors, so that in most cases these cost are not incurred. If only the companies where full-time instructors are actually employed are considered, the average cost is EUR 4,098 per trainee and year.

The plant and material costs of training play only a subordinate role, averaging EUR 545 or 3 % of gross costs. The remaining 11 % of gross costs go for other training costs, consisting of a number of different cost elements and amounting to a total of EUR 1,728 per trainee and year.

As elucidated above the returns from training are determined by recording the productive time of trainee and then calculating the wage of salary that would be paid to the workers who would otherwise be performing the same tasks. For work that would normally be done by skilled workers, the level of efficiency of the trainees is also taken in consideration. For the year 2000 the trainees' time spent in the enterprises averaged 133 days, or 55 % of total training days per year. So during more than half the in-company training time (53 %) the trainees do productive work; they do the work of semi-skilled or unskilled workers (54 %) somewhat more frequently than that of skilled workers (46 %). The level of efficiency of trainees performing skilled worker activities averages 50 %. The total returns from training calculated on that basis amount to EUR 7,730 per trainee and year. Thus 47 % of the gross costs are met by the return. Once the return has been subtracted from gross costs we are left with net costs averaging EUR 8,705.

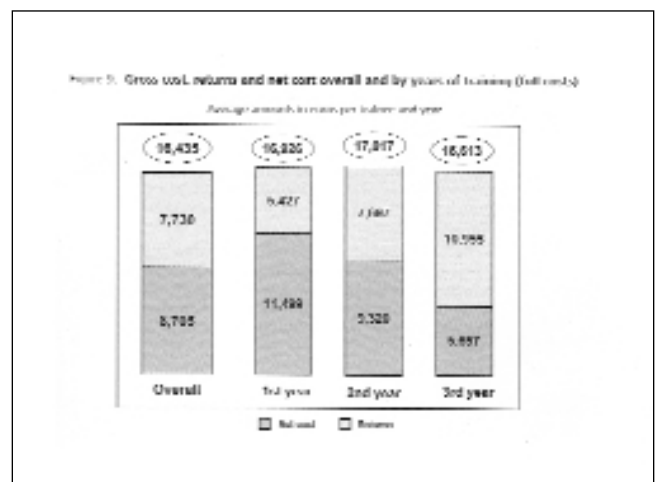
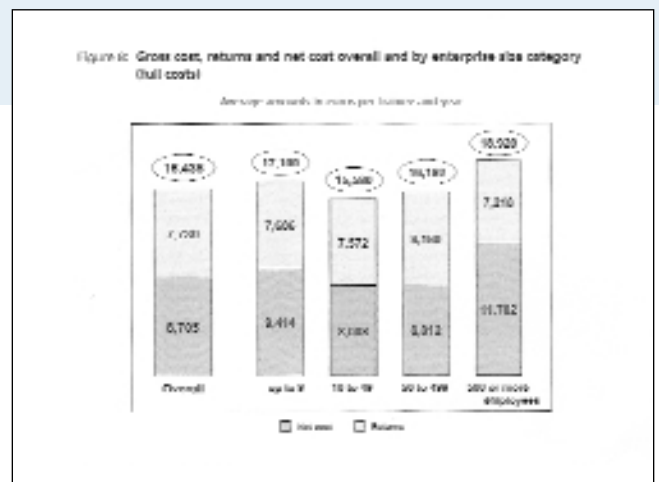
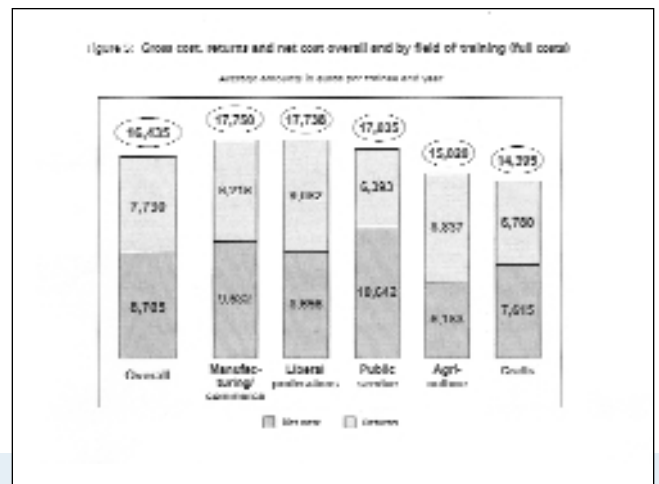
Overall distribution of trainees by cost level

The cost results presented up to now have in each case been average values that tell us nothing about the overall existing cost differences. The deviation can be shown by means of distribution structures, where we look at the number of trainees for whom costs reach a given amount. For this purpose the costs are grouped in intervals in order to show in greater detail the distribution of gross costs and returns as well as the net costs as the most important value expressing the actual cost burden borne by the enterprises.

The total gross costs are of the order of EUR 10,000 to EUR 20,000 per year for 59 % of the trainees. For 15 % of the trainees the gross costs are rather low, less than EUR 10,000. For 22 % of the trainees, on the other hand, the gross costs are comparatively high, between EUR 20,000 and EUR 30,000. The highest figure for gross costs is about EUR 103,500, the lowest EUR 1,535. The considerable deviations in gross costs can be traced to a large number of factors: Firstly because of the German pay scale system there are large differences in training pay from one economic sphere, branch and region to the next. The same applies to the wages and salaries of the personal involved in training. Secondly the training in enterprises can be organized in very different ways. For instance, training that takes place in large part in a company training workshop generally involves considerably higher costs than production related training at the company workplace. The groups of employees deployed for training and their respective training times can vary widely as well, having a substantial influence on the amount of costs. Added to this are the differences from one training year to the next that have entered into the total distribution.

The returns from training, that is the productive performance of the trainees, also vary widely on the whole. 38 % of the trainees bring returns amounting to between EUR 5,000 and EUR 10,000. For 30 % of the trainees the returns are comparatively low, less than EUR 5,000. On the other hand, the returns were relatively high, between EUR 10,000 and EUR 20,000 in the case of 25 % of the trainees. The highest rate of returns was just under EUR 40,000.

The differences are considerably greater for net cost than for gross cost since the proportion of return fluctuates substantially. The total net cost for half the trainee's lies between EUR 5,000 and EUR 15,000. Very high net costs of over EUR 20,000 are incurred for 8 % of the trainees. Net costs are relatively low, less than EUR 5,000, for just one-fifth of the trainees. Finally no net costing is incurred for 11 % of the trainee, who instead generate net earnings. All in all, the net cost varies between EUR 91,400 as the highest value and – EUR 19,295 as the lowest value.



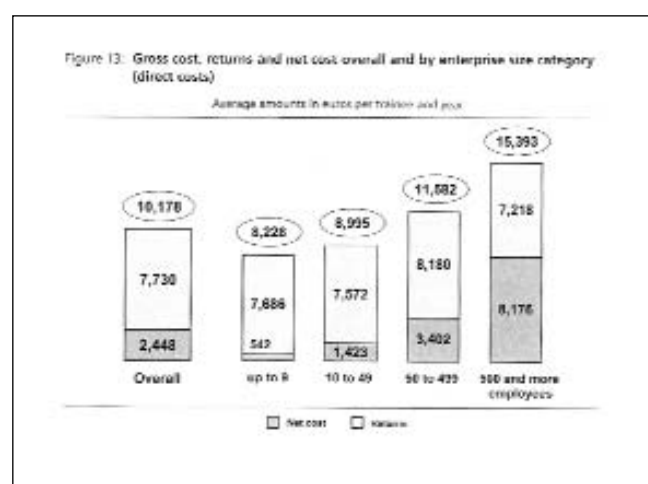
Extrapolation of costs of the economy as a whole

On the basis of the average gross and net costs per trainee and year the total cost of in-company vocational education and training to the German economy, that is private business and the public service, in the year 2000 can be calculated. At the beginning of 2000 there were a total of 1.7 million trainees in Germany. The gross cost incurred by the companies for these trainees amounted

to EUR 27.7 billion. The net cost totalled EUR 14,7 billion. This was equivalent to 1.4 % of the gross national product (GNP) with reference to gross cost and 0.7 % with reference to net cost.

Resultants of direct costing

As elucidated earlier, when the company training are determined by direct costing only the additional costs are considered. The fixed costs of training, which the company would incur even if it did not provide training, are not taken into account. This is the case for the costs of personnel engaged part time in training. The results of direct costing thus show the extent of the additional cost burden borne by the companies owing to training, i.e. to what extent costs are incurred that the company would save by not providing training. The amount of direct costs is presumable the cost factor that is decisive for the company's decision whether or not to provide training.



The gross costs determined by direct costing for the year 2000 averaged EUR 10,178 per trainee and year. After subtraction of returns from training totalling EUR 7,730 we are left with net direct costs averaging EUR 2,488. This in the case of direct costs more than three quarters of the gross costs is covered by the productive performance of the trainees.

Distribution of trainees by cost level

The gross and net cost spread is very great for direct costs as well. There is a high concentration in the cost range between EUR 5,000 and EUR 10,000; for 57 % of the trainees the gross costs per year are of this order of magnitude. High gross direct costs of over EUR 20,000 and very low costs of less than EUR 5,000 are exceptions, with a proportion of trainees of 3 % in each case. Compared with the full costs, the direct costs are considerably more strongly concentrated in a few cost inter-

vals. The reason therefore is that strongly fluctuating costs of part-time instructors are not taken in consideration in direct costing.

Because of the very pronouncedly varying share of the returns, substantially greater difference occurs in net costs than in gross costs. One third of the trainees generate net returns according to direct costing, mostly of the order of up to EUR 5,000. Returns of more than EUR 5,000 are generated by 10 % of the trainees. These results make it clear that the enterprises often incur only a relatively slight additional burden of costs as a result of training and that to some extent the training even already yields dividends during the training period by generating net earnings. On the other hand, however, a relatively large proportion of the enterprise incur additional costs owing to training that can only yield returns through utilisation of the skills imparted after completion of training when the trainee is taken on in an employment relationship.

Training benefits

In principle the following three components of the benefit of training can be distinguished:

A) Benefit from those being trained

During training a benefit for the enterprises is produced by those being trained in that returns are generated through productive work. These returns are assessed on the basis of a concept already used and proven in earlier surveys. The returns from the productive performance of the trainees are a part of the concept for determining training costs. If the returns are subtracted from the gross cost determined the result is the net cost. Some important returns from training have already been presented in the discussion of the of in-company vocational education and training.

B) Benefit from those trained

When the company hires persons trained in the company, the company benefits because the qualifications imparted during training can be used to good purpose in the work process. Such benefit can only arise if the person trained by the company is indeed hired by the company. These directly need-oriented elements of benefit are that what we call utilisation benefit. Benefit after training is most easily determined indirectly, by comparing it with the alternative possibility of recruiting personnel. Training benefit arises for the company only to the extent that it is cheaper for the company to do its own training than to recruit skilled workers from the external labour market. Quantity and quality of the external labour supply are thus an important determinant of the benefit the company can draw from doing its own training. Since the external supply of manpower

is determined by the training behaviour of all enterprises and the government, the benefit for the individual enterprise depends on the final analysis on the training commitment of business in general. The less training is done by other enterprises, the greater the possible benefit for the individual enterprise if it does its own training. If there is not enough qualified manpower on the external labour market as an alternative recruitment potential, considerable costs may ensue due to loss of production to a company that does not provide training. These costs can take on substantial proportions and must be considered when counting the possible benefits of in-company education and training.

Part of the benefit of training ensues from a comparison between doing one's own training and the cost of alternative recruitment and qualification. If manpower is drawn from the external labour market, personnel search and especially personnel break-in and qualification costs are incurred. The costs saved in this regard by doing one's own training are an indirect benefit of training.

In the proficiency level of the externally recruited skilled workers after in-company qualification is similar to that of those trained by the company itself, there is no further benefit of training. This is probably more the exception than the rule, however. In general the qualification courses are likely to impart only those skills that are absolutely essential for performing the tasks required for a specific job. In that respect long-term performance differences are to be expected between manpower trained in the company and manpower recruited externally, documented in different knowledge, skills, capabilities and patterns of behaviour. These performance differences are relevant for the company to the extent that they influence the success or the development of the enterprise. A distinction should be made in this context between manifest and latent performance differences. Manifest differences are already discernible in the context of the concrete and ongoing work processes and therefore of immediate importance for the enterprise. The performance differences can also be latent, however, and only have an effect when the enterprise has to adapt new market constellations and the corresponding adaptation services have to be performed. Since it is becoming less and less possible for enterprises to expect stable environmental conditions, they cannot afford to underestimate the significance of latent performance differences.

Existing performance differences between company-trained and externally recruited skilled workers can be reflected in a multitude of effects that are of considerable economic significance for the company. In addition to the higher productivity of the company-trained skilled workers we might mention less fluctuation, a higher quality of work and faster adaptation in the event of

conversion of production and changes in market constellations. In-company training is also likely to lead to greater identification with the aims of an enterprise and favour adaptation to the specific corporate culture.

When comparing the alternatives "external recruitment" and "training by the company itself" one has to consider possible wage differences in calculating returns. A clear-cut cannot be given for those wage differences. Both a higher wage rate -owing to better performance- and lower wage rate -greater adhesion to the company- for the company-trained skilled workers are conceivable.

C) Benefit from the training

A benefit of training also comes about owing to the very fact that the enterprise decides to carry out or offer training. These are elements of benefit that result from merely dealing with training questions. We describe this benefit as "supply benefit". First of all we can speak of a strengthening of the company's position on the external labour markets. Thus a renowned training-providing enterprise can be expected on principle to find it easier to obtain productive manpower for itself in other fields of qualification as well. A high degree of commitment to training also has a positive influence on the image of the enterprise among the public at large and among potential customers or business partners. In addition to this dimensions geared to outward presentation of the enterprise, training can also have a positive effect on the quality of work within the enterprise. First of all, it can be assumed that the special competence built up in the context of initial training activity can be used to good effect in structuring in-company continuing education and training as well. In this regard, dealing with questions of initial vocational education and training can lead to increase professional in continuing education and training. Finally, in-company initial vocational education and training can be seen as an institutionalised rejuvenation of an enterprise. In view of the increasingly rapid changes in the markets and the great differences in consumer behaviour between individual age groups, a guaranteed influx of younger skilled workers is useful for the long-term existence of an enterprise. In addition to that, preoccupation with matters of training obliges one to modernise the knowledge at hand.

Basic orientation of in-company education and training

The net benefit of training to an enterprise results from the balancing of all relevant cost and benefit dimensions. In principle there are two possibilities of a positive benefit balance that need to be distinguished. On the one hand such a net benefit can already be attained

ned during training. The precondition for this that the returns from productive activity by the trainees exceed total training costs. If such a net benefit is not attained during training, the training is a paying proposition for the enterprise even if the trainee is taken on as employee and a further benefit from the training can be internalised by the enterprise owing to recruitment and performance advantages of company trainees over external skilled workers or a generally inadequate supply of skilled workers. The terms “production model” and “investment model” of initial education and training have been coined for these two possibilities of profitably engaging in training. In the former case the training costs can be compensated for by efficient use of trainees; the training strategy of the enterprise is geared to the most profitable possible deployment of the trainees in current production. In the other case, in contrast, training is regarded as a long-term investment that will be only be profitable for the enterprise later, when the trainee is taken on as an employee.

Training as an alternative to recruiting skilled workers via the external labour market

One way of determining the benefit of in-company education and training is by comparing it with the alternative, the recruitment of skilled workers. For that purpose, analogously to determining the costs of in-company training, the recruitment costs for hiring an external specialist are determined or estimated. By doing one's own training and taking the trained person on as an employee one can save those costs. They can therefore be counted among the benefits of in-company training. In addition to this monetary assessment of a part of the benefit of training, geared to a fundamental comparison between doing one's own training and external recruitment and taking dimensions into account that go further than just considering the recruitment costs saved. Here we are concerned, for example, with the fundamental question of what the effect on the enterprise would be if personal recruitment in the skilled worker segment were exclusively external. First, however, it must be dealt with the results with the regard to the amount of the recruitment costs saved.

Benefits of training through saved costs of recruiting skilled workers

The data for the average costs of hiring an external skilled worker were asked by the enterprises distinguished in the following specific cost components:

- **Advertising costs**

Data provided by the enterprises on newly to-be hired skilled workers.

- **Job interviews**

The time expended in the enterprise on preparation, holding, post-processing and administrative processing of job interviews.

- **Working in**

The average working-in time and the average output deficit for the skilled workers during the working-in period.

- **Continuing education and training**

The extent to which external skilled workers still take part in special continuing education and training courses for working-in purposes.

- **Wages and salary differences**

In calculating recruitment costs one must take into account whether company-trained and external-skilled workers are paid different wages and salaries. The recruitment costs are higher or lower depending on whether external skilled workers are paid more or less wages.

The average total estimated value of recruitment costs saved through training was found to be about EUR 5,800 per skilled worker to be hired. Regarding the average values for the individual cost components we see that on average the main item in an alternative calculation is the high break-in costs of almost EUR 4,000 incurred when an external skilled worker is hired.

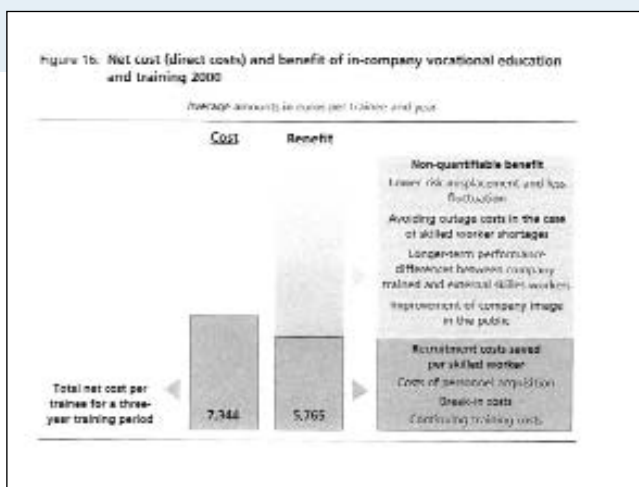
Accounting of costs and benefits of training

The total benefit of training consists of the following types of benefit:

- returns from productive performance of the trainees
- (saved) costs of recruiting external skilled workers
- (saved) outage costs when skilled workers are in short supply
- performance differences between company-trained and external skilled workers
- Supply benefit (e.g. image improvement).

As reported above the returns from the productive performance of trainees comprise the difference between gross and net cost. A balancing of training costs and the other mentioned types of benefit of training thus follow implicitly from a consideration of the net cost. The direct costs are best suited for the intended balancing since they provide the best information about the extent of which the enterprises are really burdened by the training activities. Projected into a three – years training period, we arrive at an average of EUR 7,344 for the net direct costs. In terms of figures, this is the

amount of costs that the enterprise would be left with at the end of the training period if only the returns of the productive performance of the trainees were considered as a training benefit. Proceeding from the presented study findings, this net cost figure can be compared on average with a monetarily quantifiable sum of EUR 5,765 in saved recruiting costs for each company-trained specialist actually hired. Of course the other benefit dimensions also have to be taken into account for the balancing, but they cannot reliably be assessed and evaluated monetarily. One can therefore conclude that as a rule the benefits of training in its totality would probably appreciably exceed the training costs. A precise figure for the amount of the total benefit, however, cannot be given.



Conclusions

The results presented show that a comparison of the benefit and the cost of training for the enterprises can usually be expected to be positive. When doing such a calculation, however, the broad spectrum of benefit dimensions connected with training has to be taken into account and too narrow a view of the benefit of training has to be avoided. In particular one should consider that a substantial part of the benefit of training is hard to quantify in monetary terms, and yet is of considerable importance for the enterprise.

Proceeding from the distinction in education economics between production-oriented and investment-oriented training models, the results show that a clear majority of the enterprises have a longer-term investment interest in doing their own training. Not only the industrial training in large enterprises but also the training in many craft enterprises is usually investment-oriented. There is a clear connection between the amount of training costs and the basic orientation of training. The training costs in enterprises with production-oriented training tend to be lower than in those with investment-oriented training. This connection,

however, is far from being an equation such as “production-oriented training = low training costs” and “investment-oriented training = high training costs”.

It should be noted that the training benefit is probably not independent of business fluctuations. The returns from the productive performance will tend to fall off in a period of business downturn owing to declining orders and the concomitant limitations on the productive deployment of trainees. The gross cost of training remains constant, but the net costs, as the difference between gross cost and returns will increase. For enterprises that are primarily interested in the work done by the trainees it would be a rational business move in such a situation to reduce the number of trainees and adapt to be shrunken opportunities for productive deployment until the returns hence the net costs as well return to the old level.

A worsening business situation also has the effect that the benefit after training ends and the trainee is taken on, as an employee tends to decline. Thus in a period of economic downturn the number of well-qualified skilled workers seeking work on the external labour market increases and the productivity difference between the company-trained skilled workers requirements decline. That means that a deterioration in the economic situation has a direct negative effect on the ratio of the cost and benefit of doing one's own training and reduces the incentives for the company's own training activities. The reduction in the supply of company apprenticeships observed in the last years is undoubtedly due in part to such changes in the cost-benefit ratios. In addition, the unfavourable economic situation directly affects the basis for company training.

Cutbacks in in-company for business cycle reasons lead to a future shortage of skilled workers on external labour markets and thus in the medium term to improvements in the ratio of cost and benefit for companies doing their own training. If sooner or later a business upswing occurs, there may be an intensified shortage of skilled workers, which cannot be remedied in the short term through the expansion of in-company training activities. Training markets like labour markets, are subjects to the effects of business cycles, and it has not been possible up to now to lastingly stabilise company training behaviour. Indications of an immanent skilled worker shortage in the future are obviously not enough to prevent adaptive reactions to changing short-term requirements. It should be noted that enterprises could always change their training strategy and increase the number of trainees again in the longer term.

The present economic situation in Germany is not just leading to a training crisis but is primarily an employment crisis. The overall demand of the enterprises not only for current existing manpower but also for future manpower is falling off. The decline in company

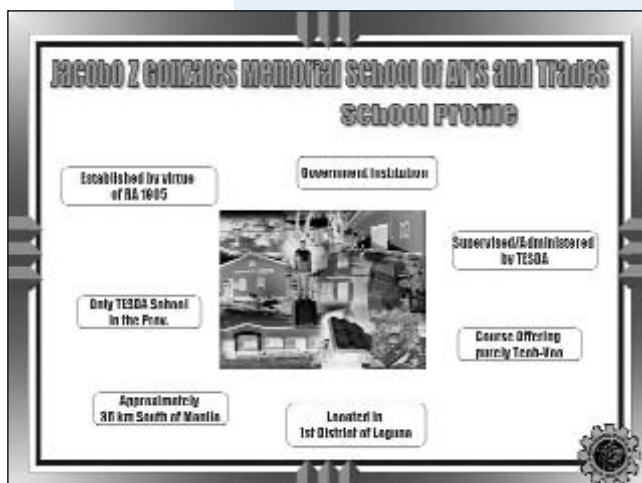
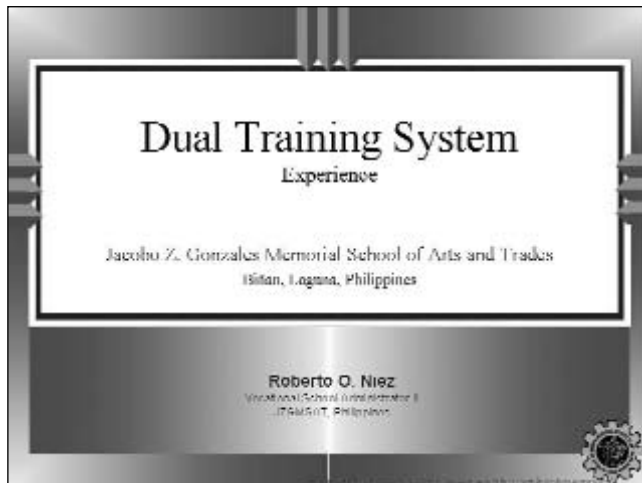
demand applies to manpower of various skills levels and not just to skilled workers with dual training.

I think that over a prolonged period the ratios between cost and benefit of doing their own training will be favourable for most enterprises and after the recovers the supply of company apprenticeships will probably increase again. In the meantime, however, the state in particular is obliged to compensate for the company apprenticeship deficit by means of suitable incentive schemes. These include measures outside the companies and in schools, which of course can appreciably shift the emphases in the German vocational education and training system. We cannot rule out the danger of some enterprises becoming habituated to this situation, which could lead to a permanent change in training and recruiting policies. In that regard the longer-term effects of the present economic situation cannot be assessed with any degree of precision. In this respect any measures to stabilise the supply of company apprenticeship are important.

There are good microeconomic reasons for the enterprises to do their own training. But the German dual system of vocational education and training serves not just company interests but also the interests of the economy and the society as a whole and produces significant results. These overriding interests are taken into account by many enterprises. In that respect the dual system of vocational education and training cannot be assessed exclusively in terms of microeconomic categories. Fundamental to the system is rather the institutionalised cooperation between government and business and the integration of the trade unions. This cooperation requires a strong economic basis.

Experience with the dual training system in the Philippines

by Roberto Niez



2 The Jacobo Z. Gonzales Memorial School of Arts and Trades (JZGMSAT) is a government school mandated to provide trade technical curriculum for high school graduates, post secondary trade curriculum and trade opportunity for the province of Laguna. It was established by virtue of Republic Act 1905 in 1960.

The school was formerly known as Biñan National School of Arts and Trades situated in San Antonio, Biñan a municipality within the first district of Laguna, Philippines. Was re-named JZGMSAT (by virtue of Provincial Council Resolution No. 97-A) in honor of the late Congressman Jacobo Z. Gonzales.

After the tri-focalization of the educational system in Philippines, and the passage of Republic Act 7786 (otherwise known as TESDA Act of 1994) the school was then transferred its supervision/administration to Technical Education and Skills Development Authority (TESDA).

The school had focused its programs to the technical-vocational education and training providing a good opportunity of its graduate for labor employment in the locality.

The school is approximately 35 km South of Metro Manila and the only technical-vocational school in the province of Laguna.



3 JZGMSAT is a TESDA administered school strategically located in the first district of Laguna and is nestle in the area where industrial development is located.

The 1st District of Laguna is the gateway of industrial development in CALABARZON.

The school primarily served the town of Binan, San Pedro and Sta Rosa as well as in the neighboring towns of the 2nd District of Laguna and part of the Cavite Area.

It accommodate the graduates of 18 high schools within the vicinity and particularly supply the needed trained workforce of the 184 companies in the surroundings. Likewise, the school also help the community by providing relevant livelihood training programs.



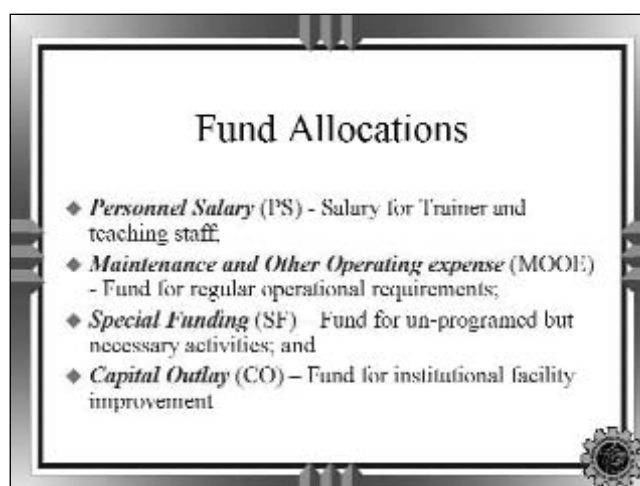
4 JZGMSAT is an educational institution which mandated to performed four major core business functions namely, a) provision of instruction, b) conduct of research and extension, c) provision of outreach programs, and d) implementation of income generation activities.

The schools' major business is the provision of instruction, where all resources are poured in. The aim is to provide relevant training program that would give opportunity to the beneficiaries for their employability as well as for the upliftment of their living conditions. In the area of instruction several programs were line-up to produce employable graduates such as: DIT, COT, Short Tech-Voc programs and competency assessment.

The conduct/provision of research and extension programs is an activity which is installed for purposes of technology updates as well as information available outside the school. This activity is conducted to provide guidance of the school what program to offer and what are relevant technology and their employment requirement. This program is conducted purely for information updates, research activity are purely for institutional consumption only.

The outreach program is offered by the institution for livelihood activities. The training program conducted are brought out to the community to insure wide participation and for economy purposes.

While, Income Generating Program is one of the business installed by the institution for financial augmentation purposes. The operation utilizes the students manpower to engage in entrepreneurship activities or purposes of training the students as well as providing them opportunity to earn while learning.



5 The operational function of the school is dependent on the national subsidies appropriated annually. The school budgetary requirement is fixed and are determine by the national office at the beginning of the calendar year. A National Action Program is being designed by the National Headquarter (TESDA) and being deployed in the provinces and the institutions. In return we (in the institution) planned training program that would respond to the national action agenda as prescribed by the national office for implementation.

The financial support is appropriated in four different allocation such as: a) personnel salary, b) MOOE, c) Special Fund (financial augmentation), and d) capital outlay

These budgetary allocations is funded annually dependent of the needs or requirements.

The personnel salary is fixed and are appropriated annually depending on the number of available permanent plantilla positions.

MOOE is variable and is utilized to fund the schools operations that covers: a) electrical consumptions, b) personnel official travel, c) training supplies and materials, d) facility maintenance, and e) others.

The special fund is rarely provided, but this is handle by the national office for special allocations and program purposes. The institution can tap this fund if the school is mandated or ordered to perform additional programs other than the programs identified in the annual action plan.

The capital outlay is a lump sum fund provided to the institution for the establishment or expansion of training facilities such as: a) additional building, b) acquisition of additional equipment, and c) other procurement that requires bigger budgetary requirement.

Institution's Budgetary Allocations

PARTICULARS	ALLOTMENT CY 2002	ALLOTMENT CY 2003	ALLOTMENT CY 2004	ALLOTMENT CY 2005
PS (Personnel Expenses)	17,363,756.00	13,860,000.00	14,086,000.00	14,086,000.00
MOOE (Maintenance & Other Operating Expenses)	5,000,000.00	5,354,000.00	5,354,000.00	4,754,000.00
CU (Capital Outlay)	0.00	0.00	0.00	0.00
Maintenance Scholarship/Train Fund	457,670.00	570,995.00	654,000.00	8,132,000.00
TOTAL	20,824,426.00	19,784,995.00	19,994,000.00	26,932,000.00

6 Shown in the slide is the historical budgetary appropriation provided to the school from CY 2002 to CY 2005.

Historically the institutions' PS budget on CY 2002 is quite bigger compared to other year, this was because the school at that time (CY 2002) were mixed with personnel assigned to man secondary program. The following year it reduces since the secondary program were carved out including those personnel manning the program and were transferred to the Department of Basic Education (DepEd).

While budget allotment for MOOE slightly increases in CY 2003 to CY 2004 to enhanced the training program and the quality of the technical-vocational program. However, MOOE remain stagnant on the following year. This is because the national office encourages the institution to engage in income-generating activities as well as encourage student participation in paying the financing of training expenses.

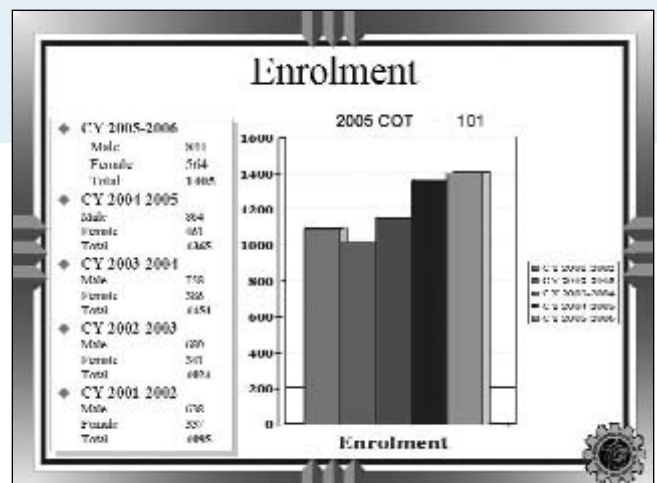
Having recognize the need the school had engaged in different fund sourcing methods. As shown in the slide the revenue (income) of the school increase practically on CY 2005. It had increased its revenue collection to more than 10 times than the previous year. The increase of revenue was attributed to some income generation activities as well as in the dual training system.

Sources of Revenue

- ◆ Students contribution:
 - Training facilities fees;
 - Co-share supplies & materials
 - Miscellaneous fees;
- ◆ Industry tie-up training;
- ◆ Income generating activities
- ◆ Dual training fund

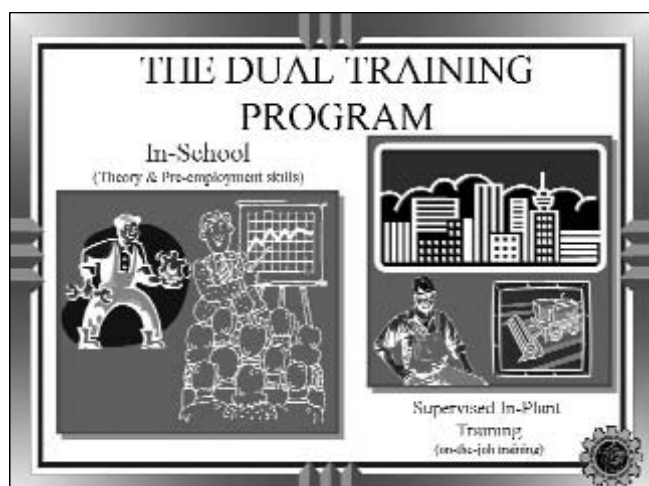
7 Realizing the need to be financially viable the school had instituted several cost sharing schemes (fees). The students are required to pay certain amount for the cost of maintenance of facilities such as electrical consumption and maintenance of facilities. Since the bigger part of training investment is on the budget required for the consumable materials in the conduct of skills training the students were required to supply their needs particularly for laboratory project constructions.

To insure that marginalized students who can not afford the expense of the training the school had instituted training tie-up (sponsored) and scholarship program. To help some students with financial incapability the school also set up an income generating activities which provide opportunity to the students to earn while learning, as well as engaged in the dual training system.



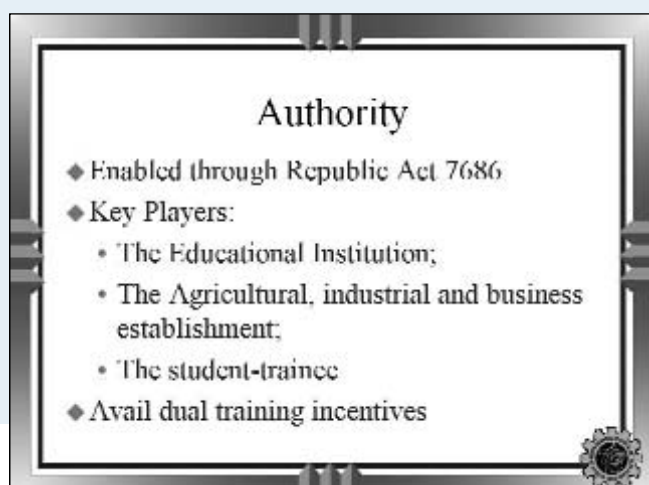
8 The enrolment of the school has gone up due to the existing training arrangement. As noted enrolment goes up at an average of 11% beginning CY 2002-2003. The increase as noted was attributed to a promised of assuring student-trainees for industry training deployment.

Likewise, the school program incorporate certificate of technology program and was able to graduate 101 students. This is a new course offering to provide student a wide variety of options to take.

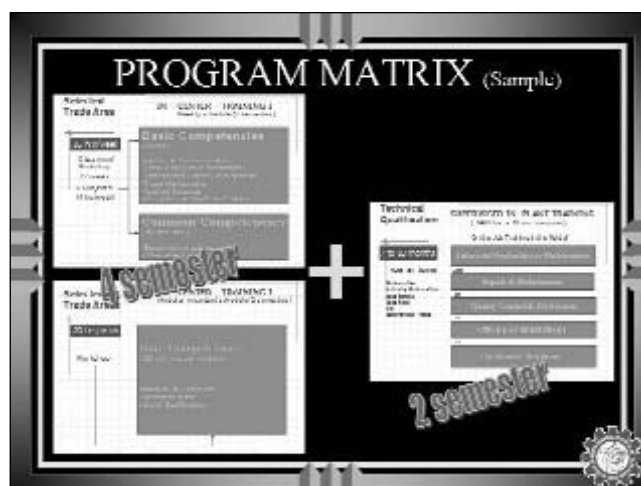


9 The Dual Training Program (DTS) is a special type of training delivery system for Technical-Vocational Education and Training (TVET) that combines two places training; the in-school training and in-plant training based on a training plan collaboratively designed and implemented by an accredited dual training institution and dual training business establishment.

The System established a shared responsibility of providing trainees with the best possible job qualifications.



10 This program/system is enabled by virtue of Republic Act 7686 that authorizes the training institutions and the industry partners to engaged in a dual training system. The act prescribe the roles and functions of the key players (the educational institution, industrial establishment and the student trainees) in relation to the implementation of the dual training system. This also authorizes some training incentives of the key players in the course of implementation of the program.



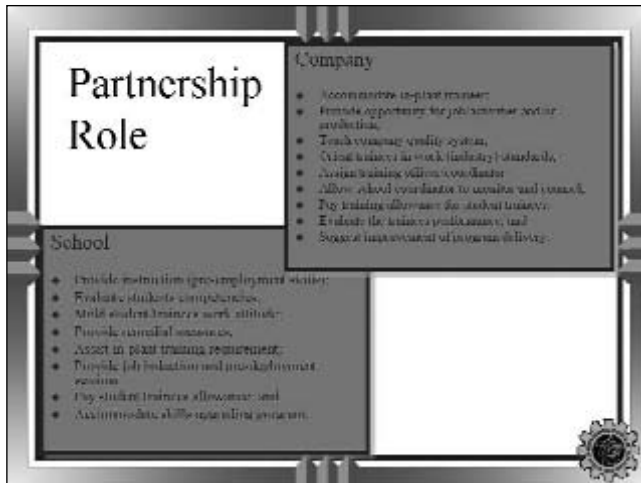
11 Under the Dual Training System, JZGMSAT were able to successfully market the program. The school started to engage in a dual training mode and was able to successfully define a training plan that works both the institution and company partner. This program is aggressively pursued and had gained reputation with several industry partners.

The school organizes training particularly on basic, common and core competencies for a duration of four (4) semester in-school program. While the partner company accommodate trainees for a 7 to 10 months program that deals on honing the trainees skills and orientation to company operational standards.

12 Prior to the start of the program the institution and the company shall discuss and agree the specific program and discuss among themselves the delineated roles and function. This agreement should be documented in a form of Memorandum of Undertaking or Understanding and shall spell out specific agreements as shown in the examples:

For institution

- Provide trade-related theory and practical hands-on exercises for common and core competency (pre-employment skills);
- Evaluate the trainees performance and insures that the competencies are fully achieved;
- Assist the trainees requirements such as parents consent, waiver and other in-plant training requirement;
- Mold the trainees work attitude consistent with the company/industry expectations;
- Monitor the trainees progress and provide remedial measures to further develop the trainees working attitude;
- Provide job induction and pre-deployment in-plant program;
- Pay the student trainees allowance; and Accommodate industry trainer/workers for skills upgrading program.



Company Partner

- Accommodate in-plant trainees for a minimum of 1460 hours to a maximum of 10 months actual industry experience;
- Provide the in-plant trainees opportunity to contribute in actual job/activities and/or production;
- Provide the in-plant trainees opportunity to learn the company quality system;
- Orient trainees in work (industry) standards;
- Assign training officer/coordinator to supervise the trainees activities while in the company;
- Permit training center in-plant coordinator access to trainees work station for monitoring and counseling purposes;
- Pay the school for the training allowance for student trainees.
- Evaluate the trainees performance; and
- Provide input and suggestions to improve the training program.

These roles are only examples and can be modified depending on the agreement as discussed during the initial negotiation stage.



13 There were several advantages that the school were able to harness out of the DTS implementation. Foremost is the relevancy of the program offering as well as savings on the part of the institution. The cost of training are partly shouldered by the company specially during the in-plant training portion. There is also a direct exchange between school and industry partner for other information and activity needed to improve the program/curriculum. While graduates are readily employable.



14 In our experience as affirmed by our cooperating partners the systems had yield several advantages to them.

It is less investment for the company in hiring prospective workers because right there in their shop floor are potential and trained workforce. Student-trainees can be groomed for as potential workforce already tested and trained in accordance with the company standards and culture. A communication between training institution and company is already established, thus any improvement necessary can be relayed immediately.

Benefits	
For the institution	For the companies:
- Reduced investment cost of training; - Focused on pre employment and value enhancement; - Income additional fund generated; - Trainers upgrading;	- Gained additional complementary workers (trainees) for specific job process in the company; - Responds to community relations program - Minimize Investment Cost of Training - Training investment could qualify for tax exemptions (Phil. Context) e.g. 50% DTS expenses paid to partner institution 100% book value of donated equipment; and 10% of Depreciation

Costs of Training Program						
UNIT OF COMPETENCIES	FIRST YEAR		SECOND YEAR		3RD YEAR	TOTAL
	1st Semester	2nd Semester	1st Semester	2nd Semester		
Diploma of Technology						
Industrial Automation and Mechanics	153,496.00	147,880.00	162,672.00	148,908.00	30,240.00	643,196.00
Consumer Electronics	85,776.00	121,400.00	157,672.00	143,908.00	30,240.00	538,996.00
Electrical Technology	129,840.00	70,176.00	63,788.00	74,528.00	30,240.00	438,592.00
IT User	73,128.00	88,216.00	74,756.00	87,244.00	30,240.00	333,584.00
Automotive Technology	163,596.00	147,032.00	138,040.00	134,756.00	30,240.00	604,674.00
Machinist Technology	182,082.00	229,448.00	77,884.00	330,740.00	30,240.00	850,494.00
Hotel and Restaurant Service Provider	92,680.00	89,962.00	87,912.00	72,344.00	30,240.00	373,048.00
Fashion Design and Apparel Technology	68,082.00	79,834.00	81,184.00	75,828.00	30,240.00	355,968.00
Certificate of Technology						
Refrigeration and Air-conditioning	206,188.00	127,394.00	156,056.00	152,034.00		
Automotive Technology	72,276.00	98,788.00	66,188.00	80,502.00		
Welding and Fabrication	129,070.00	143,116.00	146,188.00			

15 The system is very advantageous both the institution and the industry partners. As experienced we noted that the cost of training reduced additional budget requirement for the schools while the costs of training for new workers in the company likewise is minimized, these generate SAVINGS. While in the part of the company it also further reduce cost since they were able to access and benefit the tax exemptions provided for in the DTS Law.

16 With the Dual Training System the school able to reduce the cost of training. As noted the average cost per semester runs to about PHP 120,00.00 for one particular program at a class size of 20-25 participants. The supervised in-plant training of the DTS program has enabled the school to save at least 1/3 of the intended budget to complete the whole course.

Detailed cost estimate

YR	SEM	Unit Code	Unit of Competency/Subject Title	Nominal Duration	PERSONNEL SERVICES		ELECTRICITY		GAS/WATER	MAINTENANCE	S & M	TOTAL	PER CAPITA @20 PAX
					TEACHING	NON-TEACHING	LIGHTING	EQUIPMENT					
FIRST YEAR	1ST SEMESTER	TOL 01 -01	Communication (Receive/Respond)	54	3,780.00	1,134.00	270.00	4,050.00	270.00	1,820.00	500.00	11,624.00	7,672.80
		TOL 01 -02	Work with Others	18	1,260.00	378.00	90.00	1,350.00	90.00	540.00	300.00	4,008.00	
		COM 02 -03	Measurement and Calculation	54	3,780.00	1,134.00	270.00	4,050.00	270.00	1,820.00	500.00	11,624.00	
		COM 02 -04	Technical Drawing	54	3,780.00	1,134.00	270.00	4,050.00	270.00	1,820.00	500.00	11,624.00	
		COM 02 -08	Science Principles/Concepts	54	3,780.00	1,134.00	270.00	4,050.00	270.00	1,820.00	500.00	11,624.00	
		TOL 02 -06	Civic Welfare Training Service (CWTS 1)	54	3,780.00	1,134.00	270.00	4,050.00	270.00	1,820.00	500.00	11,624.00	
		TOL 02 -08	Physical Fitness (P.E. 1)	36	2,520.00	756.00	180.00	2,700.00	180.00	1,080.00	400.00	7,816.00	
		COM 02 -01	Use of Hand Tools	36	2,520.00	756.00	180.00	2,700.00	180.00	1,080.00	400.00	7,816.00	
	2ND SEMESTER	COM 02 -02	Occupational Health/Safety Practices/5's	18	1,260.00	378.00	90.00	1,350.00	90.00	540.00	300.00	4,008.00	
		COM 02 -05	Quality Standards	18	1,260.00	378.00	90.00	1,350.00	90.00	540.00	300.00	4,008.00	
		COM 02 -07	Electrical Wiring/Electronic Circuits	280	19,600.00	5,880.00	1,400.00	21,000.00	1,400.00	8,400.00	10,000.00	67,680.00	
		TOL 02 -01	Participate in Communication Workplace	54	3,780.00	1,134.00	270.00	4,050.00	270.00	1,820.00	500.00	11,624.00	
		TOL 02 -02	Work in a Team Environment	18	1,260.00	378.00	90.00	1,350.00	90.00	540.00	300.00	4,008.00	
		TOL 02 -03	Ecosystem	18	1,260.00	378.00	90.00	1,350.00	90.00	540.00	300.00	4,008.00	
		TOL 02 -04	Gender and Development	18	1,260.00	378.00	90.00	1,350.00	90.00	540.00	300.00	4,008.00	
		TOL 02 -05	Family Life and Responsible Parenthood	18	1,260.00	378.00	90.00	1,350.00	90.00	540.00	300.00	4,008.00	
SECOND YEAR	1ST SEMESTER	TOL 02 -07	Civic Welfare Training Service (CWTS 2)	54	3,780.00	1,134.00	270.00	4,050.00	270.00	1,820.00	500.00	11,624.00	6,070.00
		TOL 02 -09	Rhythmic Activities (P.E. 2)	36	2,520.00	756.00	180.00	2,700.00	180.00	1,080.00	400.00	7,816.00	
		COM 02 -06	Computer Operation	54	3,780.00	1,134.00	270.00	4,050.00	270.00	1,820.00	500.00	11,624.00	
		COR 02 -01	Service & Repair Domestic Appliances	280	19,600.00	5,880.00	1,400.00	21,000.00	1,400.00	8,400.00	5,000.00	62,680.00	
		TOL 03 -01	Lead Workplace Communication	54	3,780.00	1,134.00	270.00	4,050.00	270.00	1,820.00	500.00	11,624.00	
		TOL 03 -02	Lead Small Team	36	2,520.00	756.00	180.00	2,700.00	180.00	1,080.00	400.00	7,816.00	
		TOL 03 -03	Plan/Organize Work	18	1,260.00	378.00	90.00	1,350.00	90.00	540.00	300.00	4,008.00	
		TOL 03 -04	Individual/Dual Sports (P.E. 3)	36	2,520.00	756.00	180.00	2,700.00	180.00	1,080.00	400.00	7,816.00	
	2ND SEMESTER	COM 03 -01	Maintain Electronic System & Components	54	3,780.00	1,134.00	270.00	4,050.00	270.00	1,820.00	10,000.00	21,124.00	7,893.60
		COM 03 -02	Test Electronic/Electromechanical Components and Devices	54	3,780.00	1,134.00	270.00	4,050.00	270.00	1,820.00	5,000.00	16,124.00	
		COR 03 -01	Service and Repair Audio Equipment Systems	180	12,600.00	3,780.00	900.00	13,500.00	900.00	5,400.00	5,000.00	42,080.00	
		COR 03 -02	Service and Repair Video Equipment Systems	180	12,600.00	3,780.00	900.00	13,500.00	900.00	5,400.00	10,000.00	47,080.00	
		TOL 04 -01	Utilize Specialize Communication Skills	54	3,780.00	1,134.00	270.00	4,050.00	270.00	1,820.00	500.00	11,624.00	
		TOL 04 -02	Develop Teams/Individual Needs	18	1,260.00	378.00	90.00	1,350.00	90.00	540.00	300.00	4,008.00	
		TOL 04 -03	Problem Solving (Solve/Apply)	36	2,520.00	756.00	180.00	2,700.00	180.00	1,080.00	400.00	7,816.00	
		TOL 03 -05	Recreational Activities & Team Sports (P.E. 4)	36	2,520.00	756.00	180.00	2,700.00	180.00	1,080.00	400.00	7,816.00	
		COM 04 -01	Perform Operation, Programming/Configuration Repair on Microprocessor	114	7,980.00	2,384.00	570.00	8,550.00	570.00	3,420.00	5,000.00	28,484.00	7,195.40
		COR 03 -03	Service and Repair Business Equipment	180	12,600.00	3,780.00	900.00	13,500.00	900.00	5,400.00	5,000.00	42,080.00	
		COR 04 -01	Service and Repair Personal Computer	180	12,600.00	3,780.00	900.00	13,500.00	900.00	5,400.00	5,000.00	42,080.00	
		SIT	Supervised Industrial Training	1,440		30,240.00						30,240.00	
					171,820.00	81,816.00	12,280.00	184,206.00	12,280.00	73,680.00	70,500.00	606,676.00	

17 The table provides a detailed information on a particular budgetary requirement for a particular cost centers. This material provides our faculty and staff a guide/advise to the prospective trainees who are potential to take skills program about the specific cost that they may incur.

Costs Shouldered by Partner

- ◆ Cost of Supplies and materials;
- ◆ Transportation allowance;
- ◆ Meals Allowance (Ave. PhP 25.00);
- ◆ Uniform allowance (Ave. PhP 300.00);
- ◆ Trainees allowance (75% of min. wage);
- ◆ Life/accident insurance

18 In the supervised in-plant training program the cooperating companies had assumed costs such as supplies and materials, transportation allowance, meals allowance, trainees allowance, uniform allowance as well as the payment for insurance. These cost are some incentive packages offered to our students.

Utilization of retained DTS Fund

- ◆ 50% capital expense;
- ◆ 20 % operational expense;
- ◆ 20 % DTS scholarship; and
- ◆ 10 % Trainees welfare and medical expense

20 To effectively handle the DTS fund retained by the school the sum of money were further subdivided to several allocations. The bigger share were allocated to capital expenses which will be used to improve the institutional facilities. While 20% were allocated to operational expense to manage the dual training program implementation.

To further motivate and encourage student to undertake DTS program a 20% scholarship allocation were appropriate. This is utilized to award poor but deserving students to undertake dual training. The 10% allocation was also appropriate for purposes of funding trainees welfare and medical assistance program.

Incentives

- ◆ Trainees allowance 75% of the regular wage (for those formally signed MOA);
- ◆ 90% of the of the trainees allowance paid to the student trainees;
- ◆ 10% of the trainees allowance retained by the school for operational expenses;
- ◆ Payment of life/accident insurance premium
- ◆ Non-monetary support e.g. equipment

19 The training system were able to afford several incentives, the institution were provided with trainees allowance at a minimum of 75% of the regular minimum wage (average of PhP 200.00 or USD 4.0). The institution pay the student-trainee 90% of trainees allowance and retained 10% to be used for schools operations.

Likewise some companies provided the school some equipment that can be used for training. One of these are:

- Automotive Engine and parts – Ford Philippines
- Automotive Engine and parts – Honda Philippines
- Computers and peripherals – Takata Philippines
- Office equipment – Panasonic Imaging Corp, Phils.

Thank you for listening

Training with production in the Botswana Brigades

Bester Mahube

This paper will discuss Training with Production in the context of Botswana from its inception in 1965 to the present. The writer will try to present a more practical approach to the discussion of training with production, citing policies and approaches that have contributed to modern day Botswana Brigades as proponents of the concept of training with production. The paper goes on to highlight the funding of the training with production programmes in the Brigades and its impact. The paper further highlights the achievements of Brigades over the years and spells out the challenges for the future.

1.0 Introduction

The first Brigade was founded in 1965 in the village of Serowe, a year before Botswana attained independence in 1966. The founder, Mr. Patrick van Rensburg was the Principal of Swaneng Hill School. There were a limited number of both primary and secondary schools when Botswana attained independence, and van Rensburg's response was to initiate a centre which offered theoretical and practical training combined with productive work, mainly to primary school standard seven dropouts in the form of the Serowe Builders Brigade hence the concept of 'training with production' which he had copied from similar institutions in Ghana.

The first review on Education was in 1976 leading to a National Policy on Education adopted in Government Paper No. 1 of 1977. This policy guided the development of education until a second review in 1993 that led to the Revised National Policy on Education (RNPE) adopted in Government Paper No. 2 of 1994 [1].

The RNPE of 1994 guides the education policy of Botswana inline with the National Vision 2016 developed through extensive national consultation in 1997. The National Vision 2016 espouses seven pillars one of which is the 'creation of an educated and informed nation'.

Recommendation no. 56 (e) in RNPE Government Paper No. 2 of 1994 states that 'the capacity of Brigades to provide vocational training should be strengthened and expanded through increased central government development expenditure whilst not diminishing their community based character'.

The National Vision 2016 and the RNPE, which resulted in the establishment of the Vocational Training Act No. 22 of 1998, thus guide the Brigades 'Training with Production' in Botswana. The Botswana Training Authority (BOTA) was established in 2000 to coordinate and regulate vocational training.

2.0 Training with production:

Training with Production as conceptualized by Patrick Van Rensburg in 1965 has evolved due to the political, social, economic and technological developments of the era of a global village.

At inception the young primary school leavers were enrolled into an on-the-job apprenticeship type of training under which they had 20% classroom learning and 80% production work. The trainees engaged in building projects for public authorities at relatively low costs and the earnings derived were used to cover costs of training they received.

In the eight years that followed, the Serowe Brigades trained 150 builders of whom almost all found employment. 75% of the trainees passed government trade tests examinations. This was achieved at no cost to the State and it resulted in the construction of a number of public projects in and around Serowe

Other rural communities throughout the country copied the concept of training with production as a viable alternative to mainstream education to;

- Fill a vacuum in skills development for many young people in rural areas by providing theoretical, practical and on-the-job training for primary school leavers (Std 7) in fields such as construction, mechanical, textiles and agriculture.
- Contribute to employment and income generation at village level through establishment of production activities such as brick moulding projects, hardware retail and horticultural projects.
- Act as 'social safety valve' harnessing the energies of large numbers of rural youth who might have otherwise become idle, disaffected and alienated.

The Brigades as Community Based Organizations (CBO) received a lot of support from the International Donor Community, which provided funding and technical support up to the early 90s when they withdrew support on the basis that Botswana had developed to become a middle-income country. The drying up of foreign funding shifted the burden of support to

government especially in light of failure by the Centres to sustain their operations, which was adversely affecting training provision.

The National Brigades Coordinating Committee (NBCC) was set through Presidential Directive CAB.27/69 as an advisory body to the government on Brigades matters. It was hoped that the NBCC would contribute to improving efficiency of Brigades by encouraging them to adopt, where appropriate uniform standards and procedures.

Brigades Development Centre (BRIDEC) a Ministry of Education unit formed in 1977 coordinated the activities of the Brigades by,

- Disbursing government subsidy for training and monitoring the usage as per conditions set in the Memorandum Of Agreement on Government Subvention (Subsidy)
- Carrying out leadership training, including training of instructors (short term or long term)
- Developing curriculum and upgrading syllabi, training materials and providing technical support.
- Giving advice to communities and government on establishment of new Centres. Assisting in the funding of various Brigades projects through the capital funding.

BRIDEC was later merged with the Department of Technical Education to form Department of Vocational Education and Training (DVET) in 1994 with dual responsibility for technical colleges that are 100% government institutions and Brigades.

A study on Small Scale and informal Enterprise (SSE) revealed that in the 1990, production income from the then 24 active Brigades amounted to 12,5 million pula generating a surplus of 4% on average, while some of them had achieved surpluses of as much as 12 to 15%. The report further stated that some brigades were in serious financial difficulties with their production activities, mainly due to management problems. [2]

The introduction of the universal basic education up to Junior Certificate (JC) in 1991 shifted the target clientele up the educational ladder from Std 7 to JC completers. The Brigades though maintaining their areas of training were compelled to review their curriculum to accommodate the upward shift of entry qualifications from the new entrants.

The failure by a majority of Centres to run viable production activities which could keep the trainees fully engaged and the shift from Std 7 to JC and later to O'levels changed the original concept of 'Training with Production' in the Brigades. There was a need to find a balance between provision of quality training and production activities. The Gaborone Conference of February 1996 on Training with Production; Finding the Balance agreed that there was a need to strike a balance between training and production activities in the Brigades.

3.0 Objectives

The Brigades in Botswana number 41 to date. The objectives of the Brigades have not changed over the years and the main focus is still to:

- Promote the social and economic development and advancement of the people of Botswana with particular regard to training and creation of employment opportunities
- Provide general vocational training facilities and to organize and arrange educational activities so as to equip people with highest possible degree of skills in their chosen vocation
- Take all necessary steps to raise financial aid for the Trust and to use any funds so secured specifically for the intended purpose.
- Endeavour to make the area and the nation more self-sufficient by producing goods and services that might otherwise be imported.
- Establish measures and policies to ensure that less advantage groups such as women, remote area dwellers and people with disabilities benefit full from operations of the Trust through admissions to training.

4.0 Implementation method/strategy

Brigades are governed by The Board of Trustees on behalf of their respective communities and are elected every three years. The Board of Trustees comprises;

- Four elected Community Members
- Three Ex-Officio Members (Chief, District Commissioner and Council Secretary)
- Two Ministry of Education nominees (from local Community)
- Staff and Trainee Representative (None voting)

The Ministry of Education pays Board members sitting allowances of US\$105 each for four scheduled meetings a year. The Board reports progress to the community through public meetings twice a year. The Board ensures that books of accounts are audited every end of financial year by qualified audit firms appointed by the Ministry.

The main occupational fields of study are listed on table 1 below:

Occupational field	No. Of Centre Offering
Bricklaying & Carpentry	22
Auto Mechanics	18
Business Studies:Accounting & Computers	19
Textiles	8
Electrical & Plumbing	5
Agriculture: Horticulture & Forestry	5

It is evident from the figures above that the construction trades remain dominant. The Brigades have not been able to diversify into new programmes largely because of their over dependence on government funding as it will be seen later on.

A Brigade Centre unit runs both the training and production function in the various fields of study i.e. a Builders Brigade Unit offers both classroom and practical workshop training following an approved curriculum by the Ministry of Education.

- The unit must be headed by a competent manager with skills in tendering and estimating and project management
- The unit is required to tender for construction jobs in the open market. The Centre is required to register with the Public Procurement & Asset Disposal Board to qualify to tender for government projects.
- The jobs secured by the unit are to be done by the trainees as part of their on the job training. The Centre employs extra labour for bigger projects.
- The trainees go out to the projects accompanied by their instructors or other experienced production workers.
- The funds generated from the projects are used to improve training facilities such as buying special tools for trainees not provided through subsidy and maintenance of machinery and buildings. Successful Brigades have put up new classrooms and bought equipment such as computers through such proceeds without government assistance.
- The trainees are paid allowances when they engage in production activities and some clever trainees use the allowances to pay school fees, rent or buy food to relieve their parents/guardians.
- Securing big projects for the Centres increases employment opportunities for local communities. Some skilled members of the communities get contracts for service in areas where the Brigade would not have readily available expertise.

The trainees view the exercise of training with production differently. There are those who view it as a good practice, which enables them to sharpen their skills and gain experience, while there are those (usually in the minority) who view the practice as an exploitative system intended to make money by the Brigades at their expense.

The current system of training is guided by the Training Guidelines issued by the Ministry of Education, which stipulates hours of study as shown on table 2 below;

Subjects	Year 1	Year 2	Year 3
English	4.5		
Bookkeeping		4.5	
Maths/Trade	3	4	4
Management			4.5
Technical drawing	4	4	4
Theory	6	7	7
Practical	13.5	11.5	11.5
Total per hours week	31	31	31
On-the-job per year	8 weeks	16 weeks	16 weeks

All numbers relate to weekly clock hours on the basis of 42 weeks per year

The amount of time spent on-the-job training in the first year accounts to 19% and 38% in the second and third years of training respectively. This is a big reduction from the original 80% production and 20% class. Trainees currently spend more time in class and at practical workshops thus reducing their exposure time on production.

The trainee/teacher ratio is 1:16 for trades groups and 1:20 for Business Studies.

The government pays subsidy at different rates based on the trade factor of the course taken and the level of training. Courses leading to a C or B certificate are paid less than those at National Craft Certificate level. Trainees with disabilities are paid at higher rates than their counterparts as shown on table 3 below

Course	Level	Subsidy
Bricklayers and Carpenters	C & B	\$1217
Bricklayers and Carpenters	National Craft	\$1439
Architectural Draughting	National Craft	\$1827
Hearing impaired Group (Carpenters)	C & B	\$1495
Auto Mechanics	C & B	\$1667
Auto Mechanics	National Craft	\$1992
Business Studies	National Certificate	\$1217

Currency in US\$: Subsidy denotes grant per capita per annum

- The total disbursements for the year 2006/2007 amount to US\$9 607 104 for 7513 trainees enrolled in the 41 Centres.
- This enrolment comprises 2708 female and 4805 male trainees.
- The government subsidy accounts for about 80 to 90% of the Brigades recurrent Budgets.
- The individual Centres are required to raise the remaining 10 to 20% through their income generating activities.
- The rate of success to raise the 20% differs from one Centre to the other.
- Some Centres have resorted to setting up commercial activities, which might not directly contribute to on the job training for trainees.

The Brigades Centres charge fees as a way of cost sharing. These fees vary from one Centre to the other and a recent study carried out in August 2006 showed that the lowest fees charged was US\$50 per annum and the highest at US\$125. Depending on the size of the Brigade in terms of student enrolment, Centres can raise between 3 to 5% of the total cost of training from school fees.

The government policy is that no child will be denied school for lack of school fees and trainees from destitute families are paid for by the social welfare system run by local authorities.

The Brigades are not exempted from paying the Value Added Tax, which is levied on a number of commodities used for training.

The government has set the following conditions for Brigades to qualify for subsidy;

- The Brigade is registered under the Notarial deed of Trust
- The Brigade shall have functioning Board of Trustees established according to criteria set in the Deed of Trust
- The Brigade shall have its own defined policies covering day-to-day management of the Brigade activities related to training.
- The Brigade shall offer approved training.

4.0 Results

The Brigades movement has experienced growth from having 24 active Centres in 1990 to 41 in 2006 in spite of the public perception that these institutions offer low quality training and that some of them mismanaged. Although Training with Production has undergone changes over the years, Botswana has made the experiment distinctive over 40 years with its role as a significant formal training provider; the Brigades have a combined enrolment of 7513 full-time trainees.

4.1 Details

- The Brigades have successfully continued to provide training with production programmes to many young people. The number of programmes offered currently stands at 20 different vocations. Three Brigades were upgraded in 1999 to offer programmes up to National Craft Certificate, which has resulted in noticeable trainee progression from B Certificate to National Craft Certificate.
- The Business courses offered at the Brigades; Certificate in Business and Accounts and Certificate in Secretarial Studies are examined by the Institute of Administration and Commerce and the qualifications gained is an entry requirement to a Diploma course at the same institute.
- 30% of the Centres were registered and accredited by BOTA by the end of June 2006. [3] This is an indication that Brigades meet BOTA standards and instructors have applied in large numbers for registration and accreditation as trainers and assessors.
- The government has relied on Brigades as vehicle for both skills provision and rural development. With the current unemployment estimated at 23%, the Brigades have continued to create employment opportunities in the rural areas and in some small villages the Centres remain the major employers.
- The Brigades serve their respective communities with affordable goods and services in spite of the stiff competition which has forced some of them to scale down their operations. The Centres still remain 'Centres of Development' for local communities since there are able to adopt and adapt to new technologies.
- Brigades graduates compete favourably in the job market with improved qualification. The introduction of business courses such as bookkeeping and accounts and entrepreneurship for all vocations has enabled some graduates to successfully venture into self-employment.

5.0 Challenges

The Ministry of Education commissioned a consultancy in 2001 undertake a comprehensive and independent evaluation of the Brigades in Botswana in order to evaluate their objectives and all aspects of their operation with a view of finding the most effective model for these institutions in serving the current and future social, technical and economic needs of their Communities and the nation at large. [4]

5.1 Details

The Consultancy recommended a major re-alignment of existing Brigades, which will necessitate the organisational separation of training from production.

- The training function of Brigades should in future be subsumed into Community Technical Colleges to be registered under the Education Act under portfolio responsibility of the Department of Vocational Education and Training.
- The Production to remain with Community Business Brigades, which shall be autonomous community, controlled retaining the original community ethos of early brigades. [5]

The Government is working on the viability of the recommendations and continues to consult communities and other stakeholders.

The Income tax (Amendment) Act 2003 regarding Public Trust, Charities, Sport Bodies etc which requires that 'from tax year 2004-2005 onwards the charitable, religious, educational institutions and public trusts as well as social or sporting associations will not enjoy blanket exemption from income tax as was the case before'. [6]

The Brigades which have not been tax in the past will have to pay tax on surplus not ploughed back to develop the Centres.

6.0 Conclusion

'The basic purpose of any educational system should be to prepare men and women who at every level of education and whatever moment they go out of the school, are able to integrate themselves into the active and productive life of society'. [7]

The writer hopes that the issues raised above will assist the people of Ethiopia in their deliberations towards the establishment of a workable and efficient TVET system which will go a long way in raising the skills level of its citizenry.

References

- [1] Revised National Policy on Education (RNPE) adopted in Government Paper No. 2
- [2] A Report of The Tracer and Evaluation Study of The Botswana Brigades, May 1995
- [3] BOTA News; Issue Number 16. June 2006
- [4] Final Report; A Comprehensive Evaluation of the Brigades in Botswana December 2001
- [5] Final Report: A Comprehensive Evaluation of the Brigades in Botswana. December 2001
- [6] Incentives to investment in Botswana –An income tax perspective: Botswana Unified Revenue Services
- [7] Education with Production: Volume 7 No 2 April 191 pp 7

Increasing training activities and income: the example of Lilongwe Technical College, Malawi

Godfrey B.C. Kafere

1.0 Lilongwe Technical College background

Lilongwe Technical College is responsible for providing the vocational and technical training as demanded by industry in particular and the nation at large. The College was established in 1963 with the overall goal of training and supplying craftsmen and women to meet the never-ending industrial demands. It is the biggest of the seven Public technical colleges in Malawi and it discharges its functions through six departments namely: Administration, Applied Sciences, Automobile, Commercial, Construction and Engineering.

2.0 Justification for the establishment of a production unit

The need for the Production Unit was based on the fact that the college faces problems of acquiring adequate materials and supplies especially hardware and raw materials for practical exercises, modern production techniques, and for the development of trainee manipulative skills. These shortages sometimes led to theoretical aspects gaining precedence at the expense of the acquisition of vital practical skills.

The funds which are generated, are used to purchase training materials such as hand tools, equipment, and textbooks plus paying utilities and part-time teachers and employees under the Production Unit.

3.0 Aims of the production unit

The aims of the Production Unit are as follows:

- a) To enrich or revitalize vocational and technical training programmes conducted by the college;
- b) To assist the college to generate extra funds through the production and sale of goods and services to the public;
- c) To provide industrial attachments to the students who fail to get attached to industry; and
- d) To promote self-reliance and entrepreneurial skills among trainees and their trainers by providing an opportunity to develop their attitudes towards industry, business, and producer-consumer relationships.

4.0 Advantages of the production unit

- a) Training programmes have become meaningful as theoretical knowledge and practical skills are proven to be useful by producing marketable items or rendering services.
- b) Trainees are motivated to learn as the knowledge and skills acquired enables them to see tangible evidence of the value of their skills in the form of a product;
- c) The instructors derive professional job satisfaction from the unit because it provides them with real opportunity to demonstrate their technical knowledge and skills, and keeps them up-to-date with the current technologies;
- d) The funds supplement the low funding the college gets from government;
- e) It gives students hands on experience where the college does not have training materials; and
- f) Items for sale are displayed on public 'open days' and act as an incentive to visit the college, as the items are available at a quality and cost not available elsewhere.

5.0 Limitations of the production unit

- a) Most of the staff members are civil servants and their primary duty involves teaching or training and not manufacturing or processing goods or rendering services. This makes it difficult to meet a production schedule.
- b) The physical facilities including classrooms, workshops, and machines are based essentially on a training need. Their quantity, location and type all reflect this and as such an instructor can interfere with learning if production orders are in progress.
- c) Conscientious teachers try to make use of the training materials by designing suitable projects for their courses. But some teachers take advantage of the production and use the materials for their own projects.
- d) The college charges are very minimal and as such it gets less profits.
- e) There are no specialized personnel and hence teachers end up handling the jobs.
- f) Some departments at times contribute more than others and this is unavoidable and should be recognized at the outset.

- g) Another practice that hinders the effective operations of the scheme is the widespread use of the facilities of the college by staff members. To regulate or control such practices is a great challenge for the operation of the scheme.

6.0 Share of training costs that are recovered

There are many ways of how the college generates its income and these are: hiring out facilities and offering services to the public, conducting consultancies, making items for sell and offering parallel programmes at economic value. The government authorized the public colleges to retain 100% of the funds realized from Income Generating Activities. Sharing of the funds is done as follows:

- a) Category A: The funds are used to pay full-time and part-time teachers per teaching hours of parallel programme courses and also paying members of staff from the Production Unit;
- b) Category B: The department conducting the consultancy or work gets 60% of the profits and the college retains 40%;
- c) Category C: Purchase of training materials, fuel and food for the students plus paying of utilities such as electricity, water, and phone bills; and
- d) Category D: Staff loans are given to members of staff at a recovery rate of 5% and also the funds are used for staff development in areas of specialization.

7.0 Activities that can strengthen income generation

In order to strengthen the income generating activities and to make production-supported training effective and efficient, the following guidelines should be observed:

- a) The primary function of the college is in training people for employment and the production of goods and services for marketing is secondary. Accordingly, training must not be subordinated to production but allied to it and supported by it whenever it is quite clear that the job has good training value.
- b) Particular job orders from staff members or outsiders must be accepted only if the work requested, adequately reinforces the training objectives of the disciplines involved.
- c) Certain raw materials supplied for a specific and particular production job order should be strictly used for that job.

- d) It is extremely important to secure the cooperation and the participation of all staff members in supporting and accepting the idea of establishing the Production Unit. They must be quite clear of the benefits, which will accrue both in job satisfaction and in monetary terms.
- e) There is need to regularly advertise and market the Production Unit through the media and holding of Open Days.

8.0 A suitable production order

The decision to what constitutes a suitable production order lies with the Heads of the Departments concerned as they use their professional and technical judgement. A suggested frame of reference of value to all orders including clients is as follows:

- a) A suitable job does not contradict the stated aims and objectives of the college, nor is its acceptance or its rejection influenced by the social status of the person requesting the job.
- b) A suitable job uses trainees at the appropriate stage in their development. It should fit their level of competence or slightly exceed it.
- c) The job will be more suitable if it uses less repetitive task elements.
- d) A job that requires an extended period of time to complete, is likely to be unsuitable (i.e. more than six weeks).
- e) A suitable job must cover at least the costs of materials, overheads expenses and labour.
- f) A production order that does not accept any imperfection in quality and workmanship is unsuitable. The customer should be made aware of this fact.
- g) A customer must agree to pay in full for the cost of the goods or services at the time of collection. The goods should not otherwise be released.

9.0 Increasing non-formal and tailor made training programmes

The college has gone into partnerships with other stakeholders in order to increase access and also improve capacity utilization. So far the college is working with the following:

- a) Malawi Rural Livelihoods in offering vocational and entrepreneurial skills to the districts assemblies. This is an outreach programme where the district assemblies identifies the people to be trained and the college develops the courses to be offered. These courses are offered in their respective districts and this helps the trainees to see and own what they have learned and produced.

- b) Malawi Industrial Training Association in offering tailor made courses at their factory premises. This is a grouping of the five major companies in Malawi which felt it important to train their employees right at their companies. The trainees learn using their equipment and machines and as a result they understand easily the various skills being taught.
- c) Ministry of Health in offering upgrading skills to their artisans in various fields of specializations.
- d) CISCO International in offering Computer Networking, IT Essential and shortly the college will be offering Wireless Networking. The agreement on this is that 30% of every class should be female and the college has seen a big jump in female enrolment.
- e) The College Departments in offering new programmes such as Marketing, Human Resource Management and Business Administration.
- f) Parallel Programmes were introduced by the college as a means to increase access and generate income. On increasing access, the college has managed to recruit more than a 1,000 students on parallel programme as compared to 400 full time students.
- g) Trainer of Trainers where the college trains trainers that eventually go to the impact areas and train the beneficiaries. The college has done so with the organizations such as: District Assemblies, World Vision International, UNICEF, Malawi Social Action Fund (MASAF), Non-Governmental Organizations, etc. This is taking the college services to the rural masses thereby increasing access.

10.0 Monitoring and regulating income generating activities

The college has a Production Unit Committee comprising of all Heads of Departments, the Principal, Deputy Principal, one Accounts Clerk and one member of the teaching staff and the Principal chairs the committee. A Foreman was hired to see the day to day running of the Production Unit and a teacher was assigned to be a Coordinator of the parallel programmes. The college opened a bank account specifically for the scheme. Monitoring on the Unit is through the issuing of gate passes, job cards and receipts plus the reviewing of job audits, profits generated and quarterly financial reports. While monitoring on the parallel programmes is through the daily attendance registers, number of students per class (minimum 10 to run a class) and claim forms which the teachers fill at the end of the month.

11.0 Conclusion

There is potential in allowing public institutions to engage in income generating activities as it supplements the low funding they get from government. The production units apart from generating income, provide real work experience and also attachment places for students who have failed to find attachment places in industries.

On increasing access to non-formal training, TVET institutions play a major role of training trainers who in turn train others in the rural areas. In recent times, Malawi has seen a lot of districts establishing village rural polytechnics that needs trainers.

Improving capacity utilization and income in TVET institutions in Sri Lanka

by Gaminie Gunasignhe

Background of the technical and vocational education and training (TVET) sector in Sri Lanka

1.1 An overview of the sector

Sri Lanka is an island in the Indian Ocean and has a land area of 65,525 Sq Km with a population of 19.7 million (2005). 21% of the population live in urban areas. The adult literacy rate is 90.4%. The national average of unemployment rate is 8.8%. Per capital gross national income is US\$ 1010 in 2004. Around 450,000 students sit for General Certificate of Education (Ordinary Level) examination annually. 24% to 30% of them qualify to continue to do G.C.E.(Advanced Level) examination expecting to get enrolled in university education. Although 50% of them qualify for enrollment, universities could accommodate only about 16,000 to 17,000 students only.

The Technical and Vocational Education and Training (TVET) has a long history in Sri Lanka, dating back to 1893 when the first Technical College was established in Colombo. Since then TVET has grown substantially. TVET plays an important role towards employability and productivity of individuals, the competitiveness of enterprises as well as on the national economy. As indicated earlier, the lack of places for GCE (A/L) passed out students in the conventional universities has led to further expansion of TVET as skills training is the only alternative channel for the youth and the school leavers. In addition, a large number of youth annually coming out of different points of school system are in search of avenues of education and training leading to gainful employment. To a lesser extent TEVT also provides opportunities for working adults to gain further qualifications through skills upgrading and further training and also retraining for new occupations. At present, there are about 1200 public and private sector Technical and Vocational Education and Training (TVET) institutions registered to conduct pre-employment training programmes.

The Ministry of Vocational and Technical Training (MVTT) has the major TVET providers under its wing accounting for most of the public sector TVET enrolment. MVTT has overall responsibility for policy formulation and coordination, provision of quality TVET and

other related services such as setting skills standards, accreditation of courses, testing and certification, teacher training and staff development, curriculum development and research and MVTT facilitates the above through the organizations under its purview.

The government sector TVET providers could basically be identified as Government Departments and statutory bodies. The Department of Technical Education and Training (DTET) as the only department under MVTT has an island-wide network of 38 technical colleges. The Vocational Training Authority (VTA) which caters mainly to the rural youth provides training through a network of 218 Vocational Training Centres. National Apprenticeship and Industrial Training Authority (NAITA) established to broad base the traditional apprenticeship training to make it accessible to a wider section of the population, deliver the industry based on-the-job training to the school leavers and has 3 national level training centers. Beside these institutions, Tertiary and Vocational Education Commission (TVEC) function as the apex body of the TVET sector and is responsible for policy formulation, registration of providers and accreditation of courses. National Institute of Technical Education (NITE) is mainly responsible for technical teacher training and curriculum development. The latter four are falling under the category of Statutory Bodies.

This categorization is based on where and with whom the powers are vested with regard to the general and financial management matters. Both categories get funds from government consolidated fund (Tax revenue) voted into the respective Ministries and Departments and Ministries, in turn allocate funds to public sector TVET providers. However, the TVET providers differ in;

- i. Governing Council/Board of Management: DTET has no governing council whereas statutory bodies are governed by such councils appointed for a fixed term.
- ii. Flexibility in financial and administrative regulations: DTET is not flexible whereas statutory bodies have limited flexibility as governing councils or board of management can take decisions on general and financial matters.

- iii. A statutory authority can introduce its own financial rules and regulations or adopt Government Financial rules and regulations.
- iv. Departments are given the financial allocations through annual estimates voted by the parliament under various vote numbers and headings where transfers cannot generally be made from a capital item to recurrent item.
- v. Statutory bodies are given block grants for capital and recurrent costs
- vi. Any generated income needs to be sent to consolidated fund by Government Departments, Authorities/Boards can retain same to meet their own expenses. However Treasury will deduct the estimated annual income from the annual grant.

In addition to MVTT, Ministries of Skills Development, Education, Sports, Fisheries, Housing and Social Services are also involved in TVET to a certain extent.

1.2 Major issues in TVET

- i. Public Sector TVET providers cannot meet the ever changing skills need of the industry. Employers are concerned over inadequacy of the quality and relevance of the products of the training.
- ii. Lack of unified system for quality assurance make the comparison of the products from different training providers a difficult task.
- iii. The curriculum content and the modes of delivery of training is lacking in work place ethics due to inadequate relationships with the world of work.
- iv. Lack of resources, mainly funds for upgrading of equipment, machinery and curricula.

1.3 Reforms introduced

Presently, the TVET sector reforms are being implemented and a number of significant changes relating to quality and relevance aspects have occurred.

The Major reforms include;

- i. Developing a National Policy on TVET and adopting of a unified National Technical and Vocational Training System introducing Competency Based Training (CBT) and establishing a National Vocational Qualifications (NVQ framework).
- ii. Rationalization and coordinating training activities implemented by TVET providers
- iii. Promoting private sector participation in TVET
- iv. Changing the role of government from provider to facilitator and standard setter and the related encouragement for cost-recovery, self-financing, autonomy and cost sharing by beneficiaries.

2.0 Funding for TVET.

2.1 Main source of funding

Government is the main funding source for the public training providers.

Comparison of Allocation of Funds to TVET sector against that of HRD , Ministry of education and the total allocations to all Ministries

Year	2004 LKR '000	2005 LKR '000	2006 LKR '000 estimate	2007 LKR'000 estimate
Allocations to all Ministries	481,587,521	609,122,026	721,661,931	628,451,306
Human resource Development %	60,677,871	73,171,011	93,674,458	114,223,668
Ministry of Education	12.6%	12.0%	13.0%	18.2%
MVTT and DTET	13,850,590	16,822,900	22,127,710	24,909,640
%	1,845,943	2,722,270	4,441,750	5,085,950
%	0.38%	0.45%	0.62%	0.81%

It is clear that there is a steady increase of funds for TVET sector over the years

The funding for TEVT is 0.20% in terms of Gross Domestic Product in 2006

In addition, this public funding is supplemented by funding from donor and lending agencies/development partners and usually this funding is utilized for procurement of advanced training equipment (support for initial capital expenses) and staff development programs in selected areas.

2.2 Funding issues

It has been an accepted fact for the last one-decade or two that government funding alone cannot be justified for the enhancement TVET in Sri Lanka.

Service oriented operation of the Government TVET providers does not promote or emphasize the need for cost effective mechanism where as the need for such mechanism has repeatedly emphasized by some donors and lending agencies Thereby finding ways and means for implementing the TVET reform components of cost-recovery, self-financing and autonomy came in to affect.

2.3 Alternative funding methods

Identifying alternative methods for financing TVET and exploring how the existing financial resources could optimally be utilized, depend on methodologies of training delivery and the venues where the TVET is delivered.

The modes of delivery of TVET have a direct impact on the cost of training, the control and regulatory mechanisms, responsibility for training provision and also to who contribute towards the cost.

Institute-based face-to-face delivery

This is the method mainly adopted by majority of the training providers and the institutes have their own staff for this mode of delivery. This training delivery is comparatively expensive and courses are conducted on full-time and part-time basis. As the part-time courses are meant for employees from the industries course fee is levied by the providers.

i) Increasing of course fees charged from students coming from industry on a part time basis to follow courses during week ends and evenings

Experience of DTET

DTET conduct part time courses of 3 and 2 year duration through the Technical Colleges, and the annual expenditure is about LKR. 21 Million. In 2002 the cost recovered was just LKR 2.8 Million by levying a course fee of LKR 750 per student year. As the expenditure is very high, to recover a significant portion of the cost, the course fee was increased to LKR 2000 in 2004. The table given below explains the increase in course fee.

Course fees charged by DTET

	1998	1999	2000-2003	2004
Long term	LKR.	LKR.	LKR.	LKR.
courses duration	450.00	675.00	750.00	2000.00
1 year or above				

ii) Examination fees from part-time students and the repeaters in full time courses – experience from DTET

All part time students who are sitting for the final examination and the full time students who are repeating the examination are charged examination fees based on the number of subjects as details below:

- One subject- LKR 25.00
- Two subject-LKR 50.00
- Three subject-LKR 65.00
- More than Three subjects-LKR. 85.00

iii) Conducting fee levying courses – experiences of DTET

Courses in information technology offered to school leavers on fee levying basis generally are popular and costing of the courses is done considering the expenditure for remuneration of personnel, material, electricity, water and telecommunications etc. and includes an additional amount for maintenance requirements with a certain percentage of income to be sent to the government revenue, as explained in earlier. The charges will be per student basis and all income will be credited to the government revenue and required expenses will be borne by the treasury.

Income generated (IGA) by technical colleges- comparison for three years in LKR '000

Year	2003	2004	2005
Total Received in LKR '000	16,446,761	21,539,054	21,461,625
Annual budget expenditure	419,054,070	425,482,665	602,305,000
IGA as a % of annual budget	3.92%	5.06%	3.56%

The amount remitted by the technical colleges to DTET account includes collection of student registration and course fees, examination fees, and money received by selling products made by students during their practical work etc.

Income generated by NAITA in LKR' million

Year	2003	2004	2005	2006 Estimate
Income Generated	7.4	16.0	8.5	13.0
Total Expenditure	225	257	288	380
IGAs as %	3.2%	6.2%	2.9%	3.4%

Income generated by VTA in LKR' million

Year	2004	2005	2006 Estimate
Income generated	16	16	22
Total budget	278	298	445
IGAs as %	5.8%	5.4%	4.9%

IGAs of NAITA and VTA are mainly through registration fees, course fees, and trade testing etc.

iv) Technical colleges as Production and Service Centers- Examples from DTET

The technical colleges (TCC) operating under DTET will undertake possible production or service oriented activities from out side. This method was devised to serve the following purposes;

1. Student learn in simulated world of work enhancing their chances for employability through developing self-confidence and entrepreneurial competencies
2. It will create entrepreneurial management culture in TCC
3. It will also optimize human and physical resources utilization
4. It acts as an income generating (cost recovery) exercise.

The work undertaken depends upon the type of technology and skills taught in the TCC. It also depends on the capabilities and attitudes of the relevant teachers and the TCC management.

TCC generally lack in entrepreneurial skills or attitudes for such ventures. There are no motivations for colleges to undertake such work because any income generated will be remitted to government revenue and the treasury provides funds for this kind of activity. However the income generated will cover only the cost of services plus an additional 10 % for the amount of funds utilized for the purpose. Although this method has been evaluated as an insignificant mean of income generation it keeps teachers in the TCC for longer period than their contact hours with the students and provides additional income for them and a remuneration for the services rendered by the students. It is expected that only the students just completed the courses will be utilized in the production work, but some times such course completers are not available. DTET regulates the work in production units through circulars giving guidelines.

Furniture making or repairs , auto servicing & repairs to vehicles, production of metal parts in the machine shops, material testing for civil construction , service contracts for servicing of electronic house hold items, refrigerators and air conditioners are good examples. The table given below shows to what extent the provisions for Production Units are being made used by TCC. It is apparent that, TCC are not yet motivated to generate income and to look for income generating opportunities.

Year	2004	2005	2006
Funds allocated	2,000	3,000	4,000
LKR'000			
% Utilized by TCC	7%	42%	49%

v) Commercial Arm

Establishment of Commercial arms in two colleges on pilot basis

Giving autonomous status to two technical colleges is a condition agreed on for a loan given to Government of Sri Lanka (GOSL) by the Asian Development Bank (ADB) to develop Technical Education and Vocational Training through Skills Development Project in 1999. Two separate commercial arms have been established in the two colleges as the first step in 2005 .The Technology Development & Training (Guarantee) Limited (TDT), Commercial arm of the TC in Colombo was established in December 2006. It is a limited liability , fully government owned business undertaking under DTET and the Ministry of Vocational and Technical Training, registered under the Registrar of Companies. It has a Chairman, Board of Directors and a CEO. The chairman is assisted by an Advisory Council comprising representatives from industry.

TDT has developed its marketing plan outlining the approach to obtain a significant growth in TVET by planning implementing and managing VT programmes and their services. It is expected to enhance the internal efficiency of Technical College. The surplus income will be reinvested in vocational training and other activities.

TDT has been granted approval in the use of all assets at the College in the implementation of programmes by TDT, once Board of Directors approve such activities. However all current programmes implemented by Technical College will remain unaltered and undisturbed.

TDT offers a mix of TVET programmes over the week ends and as evening courses as suitable.

Presently pricing is on a cost plus marginal profit basis with a facility to increase pricing based on demand and popularity.

Teachers designing and managing new programmes are being adequately compensated with financial prospects and opportunities for professional development.

Current status

The income generated in its first year is LKR. 1.5 million through offering training programmes, conducting examinations for various organizations for staff recruitment, efficiency bar and staff promotional purposes, offering courses for different target groups, preparing students for professional examinations both national and international and providing consultancy services to small and medium enterprises etc. Presently about 1/3 of full time teachers are involved in the activities of TDT

vi) NGO sponsored courses

Tailor made courses or regular short term courses are conducted on the request of Non Governmental Organization or sponsors. Alternatively, managers of the technical colleges may also approach such organization to get sponsorships for courses that are in demand. Here all recurrent cost and capital expenditure excluding the cost of infrastructure will be borne by the external agencies. As per existing regulations of DTET, fees for the use of resources of the VTI will be charged and remitted to the government revenue. This method is widely used by TCC in tsunami affected areas in the coastal belt of the country where the demand for skilled manpower for reconstruction and rehabilitation activities is very high. Conducting short-term courses in building trades is an excellent example.

vii) Public Private Partnership (PPP):

All income generated needs to be directed to government coffers and nothing can be made used even for remuneration for personnel for any extra work, let alone plowing back to cater to development/maintenance needs of the college, courses levying fees from individual students are not being favored by TCC. Instead such part-time courses are tailor made to the requirements of organizations and through an agreement or memorandum of understanding with such organizations, whether professional bodies, government institutions or even companies in the private sector. The fees could be charged as per the agreed rates to cover cost for remuneration of personnel, utilization of equipment & facilities, material cost, utility costs like electricity, water and telecommunications with additional amount for purchasing consumables, maintenance work which are all being laid down in the Agreement with some percentage of income to be sent to the government funds also being indicated. This way institutions could recover cost of offering such tailor made courses. Signing a MoU is a way forward for making use of part of the income back in the college once the

items for cost recovery are clearly written in the agreement, without diverting all income to the government. Here the partner organization usually advertises, recruits and collects the fees from the trainees and pays for the agreed items in the cost estimation.

In some instances, the partner may provide resource persons, equipment consumables and also reproduce teaching materials which call for changes accordingly in conditions in the agreement.

viii) Donor Funding

Donor support has also been vital for TVET development. Funding will usually be for providing equipment, infrastructure facilities, staff training and upgrading. Most donor support is for short term and mainly for capital costs and helps the TEVT system to receive advanced technology. DTET institutions are presently being supported by donor funding as indicated below.

Funds from German Federal Ministry for Economic Cooperation and Development and implemented by GTZ during the period from July 2005 to December, 2008 up to euro 10 million

Funds from government of Japan through JICA to be utilized from July, 2005 to June, 2009 costing US\$ 5.0 Million

Funds from South Korea from 2005 to 2007 through KOICA costing US\$ 2.30 Million

Conclusion

Overall cost of technical and vocational training is on the increase and budgetary constraints are more severe in Sri Lanka, where vocational training is mainly financed by the state funds. It has been an accepted fact for the last one-decade or two that government funding alone cannot be justified for the enhancement of TVET in Sri Lanka. Staff emoluments and fixed costs consume the major share of the cost. However service oriented operation of the Government TVET providers does not promote or emphasize the need for cost effective mechanism. In most instances training is provided entirely free of charge, few courses are fees levied, while many trainees also receive a stipend during training. The need for cost recovery mechanism has repeatedly emphasized by some donors and lending agencies. Thereby finding ways and means for implementing the TVET reform components of cost-recovery, self-financing and autonomy came in to affect.

Income generation was never considered as a priority, Recovery of the cost is the term usually used for various initiatives promoted. IGAs account around 5 to 6% of the total annual budget of the public TVET providers.

Some of the initiatives like Production Unit concepts were introduced for the purpose of maximizing the utilizations of both physical and human resources and also to give the world of work experience to trainees who have completed the courses.

Course fees levied to recover the cost needs to be remitted to state coffers and cannot be retained and used by the training centre. The IGAs account for only 5-6% of the total annual budget of all training providers. Obviously there is no incentives for institutions to go for income generating activities.

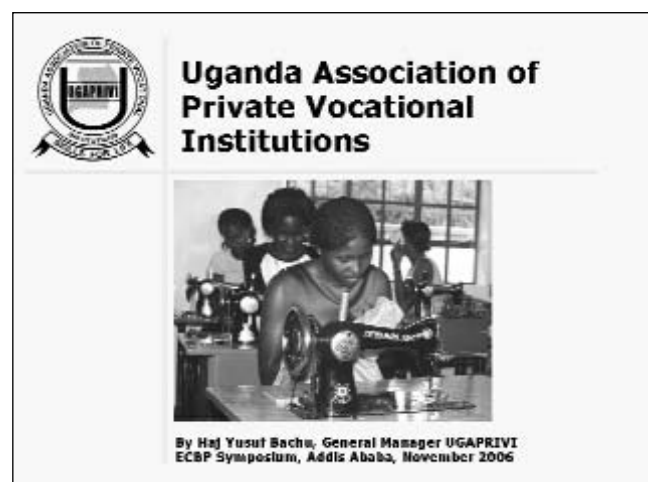
Conducting of fee levying tailor made courses for identified target groups in collaboration with private sector and public sector organizations, and professional bodies where agreements or Memorandum of Understanding signed seems a better option as part of income could be utilized for maintenance/development activities if identified in the agreement.

The recent initiative of establishing commercial arms, the fully government owned business undertaking under DTET, registered under the Registrar of Companies has potential to be accepted by both teachers and DTET officials.

However the success of such ventures depends to a large extent on the capacities of the managers and the teachers of technical colleges to accept the challenge of being entrepreneurs. There is great need for having proper performance appraisal system for staff where performance will be measured on outcome and quality and here due recognition could be given to individuals who really take up the challenge to be innovative and entrepreneurial. The government of the day should develop an conducive environment with adequate changes in organizational system and procedures such that staff and the institutions are motivated to look for opportunities for cost recovery, and income generation and increasing of capacity utilization thus improving efficiency and effectiveness of technical education and training.

Promotion of private training providers in Uganda

by Yusuf Bachu



Uganda Association of Private Vocational Institutions UGAPRIVI

Contents

1. Overview of Private Vocational Sector
2. Short description of UGAPRIVI
3. Brief statements on Government's policy towards Vocational Training
4. Financial situation of Private Training Institutions
5. Suggestions to strengthen the Private Training Sector

Uganda Association of Private Vocational Institutions UGAPRIVI

1. Overview of Private Vocational Sector

Public vs. Private

- 50 public institutions vs. more than 600 private BT/VET institutions
- Public institutions are not present in all districts
- 80% admission of students to the BT/VET sub sector is in private institutions
- Private inst. are usually bigger in size

Uganda Association of Private Vocational Institutions UGAPRIVI

1. Overview of Private Vocational Sector

Characteristics

- Formal (with academic entry requirements) & Non Formal (without academic entry req.)
- 2 forms of exam bodies: DIT and UNEB
- Rural, peri-urban & urban
- Single and mixed gender institutions
- Predominant male students
- Various founding bodies i.e. NGOs, Church

Uganda Association of Private Vocational Institutions UGAPRIVI

1. Overview of Private Vocational Sector

Challenges

- Untrained instructors; Qualified instructors go to public institutions
- Differing standards
- Negative attitude from the public
- Out-dated curriculum
- Poor administration
- Insufficient communication between PTPs

Uganda Association of Private Vocational Institutions UGAPRIVI

1. Overview of Private Vocational Sector

Lessons learnt

- Strong Public Private Partnership emerging
- Quality & standards monitoring by MoES
- Networking has improved
- Funding sources are stronger in private inst.
- Private institutions are more efficient in training
- Private institutions cover the whole nation



Uganda Association of Private
Vocational Institutions UGAPRIVI

2. Short description of UGAPRIVI

Improving the
**Quality and Image of
Vocational Training**



Uganda Association of Private
Vocational Institutions UGAPRIVI

2. Short description of UGAPRIVI

Vision

To build a strong bedrock for pedagogical concerns, cultural perspectives, sustainable development, and universal ethics for nation building amongst private vocational institutions.

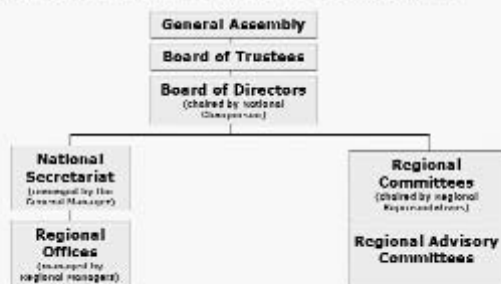
Mission

To enhance unity and development, and provide facilities for collaboration, networking and partnerships between private vocational institutions and other actors.



Uganda Association of Private
Vocational Institutions UGAPRIVI

2. Short description of UGAPRIVI



Uganda Association of Private
Vocational Institutions UGAPRIVI

2. Short description of UGAPRIVI



Regional UGAPRIVI
Regional Office in Kampala



Regional Office in Lira



Uganda Association of Private
Vocational Institutions UGAPRIVI

2. Short description of UGAPRIVI

Networking



Collaboration



Partnerships



Uganda Association of Private
Vocational Institutions UGAPRIVI

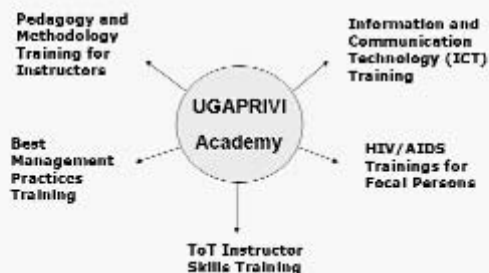
2. Short description of UGAPRIVI





Uganda Association of Private
Vocational Institutions UGAPRIVI

2. Short description of UGAPRIVI



Uganda Association of Private
Vocational Institutions UGAPRIVI

2. Short description of UGAPRIVI

Project icity

- Public Private Partnership between UGAPRIVI, Diamond ICT and SEQUA
- To initiate a professional ICT knowledge transfer within Vocational Training sector throughout Uganda
- Curricula based on international acknowledged standards are used



Computer lab in the Regional Office in Kabale



Uganda Association of Private
Vocational Institutions UGAPRIVI

2. Short description of UGAPRIVI

Measurable Results

- Trainings offered (ICT, Management, Pedagogy and HIV/AIDS)
- Advocacy, e.g. UPPET, Standards & UVQF
- Registration of members with MoES
- New partners joining UGAPRIVI

Lessons learnt

- Transparency/accountability to attract donors
- Professionalize association (management structures/financial system)



Uganda Association of Private
Vocational Institutions UGAPRIVI

3. Brief statements on Government's policy towards Vocational Training

- Liberalization in Uganda Economy
- Accreditation/licensing system by MoES
- UVQF not yet legalized
- DIT to be amended
- Education bill (UVQF, DIT, etc.) to be tabled in Parliament
- UGAPRIVI actively participates in the initial draft of these public policies



Uganda Association of Private
Vocational Institutions UGAPRIVI

4. Financial situation of Private Training Providers

Financial background

- Private savings
- Tuition fees from students
- Income generation through sale of products
- NGO or Church-founded
- Loans and grants



Uganda Association of Private
Vocational Institutions UGAPRIVI

4. Financial situation of Private Training Providers

Support for poor students

- NGOs support poor by paying tuition fees
- Modularized training packages
- Arrangements i.e. free tuition for labour in workshops (work for fees)
- Payment-in-kind e.g. bringing food items for boarding facilities



Uganda Association of Private
Vocational Institutions UGAPRIVI

4. Financial situation of Private Training Providers

Public financial support

- No subsidies by government to private sector
- Removal of taxes on education institutions
- UPPET selected PTPs will receive a capitation grant to cover overheads in addition to the tuition fees for gov.-sponsored students
- Secondment of trained instructors



Uganda Association of Private
Vocational Institutions UGAPRIVI

5. Suggestions to strengthen the Private Training Sector

- Improved quality of training, trained instructors and equipment
- Improved curriculum
- Entrepreneurship skills for graduates



Uganda Association of Private
Vocational Institutions UGAPRIVI

**Thank you very
much for your
attention!**

Promotion of employers' involvement in the formal and informal sectors in Malawi

by Elliot Mulanje

1.0 Introduction

Technical Vocational Education and Training (TVET) has of late taken a very important role in most developing countries with more pronouncement, visibility and contributions to the social and economical development of the Countries. Particular emphasis and efforts are being made on the enhancement of partnership amongst the different players i.e. Government, the training providers and the private sector or indeed between the public and the Private Sector.

In Malawi, backed by the TEVET Act, active governance and management structures, effective implementation of meaningful training programmes, and aggressive Information, Education and Communication (IEC) campaigns, both the TEVET System as well as the Authority has settled in very well in the social and economic landscape of the country. As opposed to the previous technical and vocational training and education system, which was characterized by minimum involvement of the private sector, non-responsive institutional structures, outdated curricula, inappropriate legislation, and unsustainable financial base, the current TEVET System is enjoying reasonable recognition and support in Malawi. Through the act, the TEVET system is anchored by a policy, which has put in place Governance and management Structures complete with funding arrangements to ensure the sustainability of the System.

The pedestal of the TEVET System in Malawi stands to be the TEVET Fund which supports the implementation of the TEVET Programmes. The Employers in the Private and Public Sectors, through the TEVET Levy, largely contribute to this Fund. Employers in the Private Sector contribute over 80 % of the TEVET Levy. Similarly, most of the TEVET Programmes can only excel with the support from the Private Sector Employers. This being the case, a lot of effort and thrust is placed on strengthening the partnership between the TEVET Authority and the employers in the private sector. Among other things, this entails development of Programmes and strategies that enhances the involvement of the private sector employers in TEVET, both in the formal and informal sector. Our experiences in this respect have been a combination of success, and a stride through problems and challenges.

In line with the theme of this Symposium, this presentation focuses on Malawi's experiences in the promotion of Employer's involvement in the Formal and Informal Sector as a means of promoting private sector investment in the TEVET System. The salient issues include; the Governance structures institutionally anchoring the involvement of the employers, the extent of the involvement, services and/or type of partnerships offered by the TEVET Authority to stimulate the employer's involvement, incentives incorporated, experiences, lessons learnt as well as challenges being faced.

2.0 Background

The Technical, Entrepreneurial, Vocational Education and Training Authority (TEVETA) in Malawi was established by an Act of Parliament in July, 1999 and charged with the responsibility of promoting, facilitating and regulating technical, entrepreneurial and vocational education and training. The major purpose is to contribute to the human resource development (skilled workforce) in the areas of Technical, Entrepreneurial and Vocational Education and Training.

Prior to the establishment of the new TEVET System and the Authority in Malawi, through studies and practice on the ground then, government realized that the technical and vocational training was facing serious challenges and needed a reform. These challenges emanated from;

- An existence of a fragmented System
- Lack of national coherent, demand driven policy
- Minimum involvement of the Private Sector –as major users of the skills
- Inappropriate legislation, guidelines and by laws
- Limited national technical qualification system based on outdated curriculum and without recognized standards
- Non-responsive, non-flexible institutional structures
- Insufficient, unsustainable financial base and effective financing mechanisms.

The process, therefore, included conducting studies of the previous system, development and launching of the TEVET Policy, formulation and passing of the Act, and establishment of the TEVET Authority.

2.1 Objectives the TEVET system in Malawi

In line with the TEVET Act and policy, the objectives include:

- To promote an integrated, demand-driven, competency-based modular technical Entrepreneurial and vocational education and training system;
- To monitor gaps between supply of and demand for skills;
- To support the adoption of and application of appropriate technologies;
- To promote managerial and business skills and the spirit of entrepreneurial culture with regard to both wage and self employment;
- To facilitate sound and sustainable financing and funding mechanisms; and
- To facilitate and bring together the expertise and moderate the different interests of all stakeholders.

2.2 Guiding principles

The TEVET System and Programmes in Malawi are implemented based on the following guiding principles:

- Integration of the formal and non-formal training programmes;
- Demand-driven provision of the training and services;
- Establishment and maintenance of a private- public partnership, with shared responsibilities between the public and the private sector leading the partners to win-win situations;
- Comprehensiveness in nature;
- Equitability;
- Independent and autonomous management and governance.

2.3 TEVETA programmes

Based on the objectives and principles governing the TEVET system, there are a number of programmes that are being implemented by the TEVET Authority in Malawi which are aimed at the human resource skills development for both the Formal and Informal Sector. Amongst these, the main programmes are:

1. The Private Sector Training Programme
2. The Informal Sector Outreach Programme
3. The Apprenticeship Training Programme
4. Quality Assurance (Standards and Curricula Development, Assessment & Certification, TEVET Qualification Framework, Registration and Accreditation of the Training Providers)
5. Levy Collection and Fund Management
6. Planning and Monitoring
7. Teacher Training
8. Information, Education and Communication (IEC)

2.4 Governance and management structures

The TEVET System in Malawi is led by the TEVET Authority which is an independent and autonomous governance structure, set-up by Government, supported by responsive and flexible management system which ensures strategic relationships and linkages based on smart partnerships with other stakeholders. The Authority is charged with the responsibility of formulating policies, strategies and facilitating the implementation of the TEVET Programmes. The Governance and Management structure includes ;

- The TEVET Board – This is a supreme governing body of the Authority, on TEVET matters including policy, with membership by representation Of stakeholders from the Private and Public Sectors, Civil Society and NGOs. The Board gives directions on the TEVET Programmes, scrutinizes, approves and monitors Annual Budgets and Plans.
- The TEVET Secretariat – This is headed by the Executive Director, and is responsible for the day-to-day management and implementation of the decisions made, and programmes approved by the Board, and supports the Board.
- The Resource/Service Centres – 3 No, one in each region of the country, viz, Blantyre, Lilongwe and Mzuzu, for the South, Central and Northern Regions, respectively. These are multi-functional TEVET Resource centres, which serve as Satellite Centres for specialized TEVET services, implementation units for TEVET Programmes, and bring the activities and services of the TEVET Authority closer to the people.

3.0 TEVET programmes/activities and the involvement of the private sector employers

The success of the implementation of the TEVET Programmes and activities in Malawi has largely depended on the support and involvement of the Private Sector Employers. This will continue to be so, recognizing the pivotal role the Private Sector plays in the TEVET System. The involvement and support by the Private Sector's Employers to the TEVET System and Programmes spurs from:

- Their inclusion in the Governance and Management Structures of TEVETA
- Contributions to the TEVET Levy
- Advisory roles to the few SACs that have been established i.e. the Catering and Hospitality SAC and the Malawi Industrial Training Association (MITA)
- Their plausible and active participation in the Apprenticeship Training Programme
- Curricula Development; Assessment and Certification

- Informal Sector Outreach Training Programme's Traditional Apprentice Training Programme, namely On-the-Job Training Programme (OJTP)
- Teacher Training
- And the formidable partnerships in the implementation of the Private Sector Training Programme itself.

In general, the employers have shown willingness and preparedness to work in partnership with TEVETA and contribute to the TEVET system despite some exceptional situations and occasions. The catch principles have been accountability, desire for tangible results in terms of availability of competent and skilled artisans on the labour market, and realization of direct benefits.

3.1 Funding and financing

The major source of funding and financing TEVET in Malawi is the TEVET Levy. This is as provided by the law through the TEVET Act No. 6 of 1999 demanding both Government and Private Sector employers to oblige in paying the levy. Currently, the TEVET levy is calculated and paid at 1% of the total annual wage-bill based on the pay roll by both the Private and Public Sector. This was initially proposed to be at 2% of the total annual wage bill, but had to be reduced due to private sector resistance, as they viewed the levy as simply another form of tax. Currently, over 80% of the levy is contributed by the Private Sector.

Through vigorous Information Education and Communication (IEC) campaigns, private sector's involvement in contributing to the TEVET levy has been growing over the past years. The levy contribution from the Private Sector has been very phenomenon with an annual average growth rate of over 50% per year for the past five years. For instance, the Financial year 2004/2005 the total contribution amounted to MK180,000,000 and later exponentially grew to over MK350,000,000 in the year 2005/2006. Also the number of private companies paying the levy has been increasing every year. The private sector, in general, now understands the need to have the fund that is used to train the workforce in the country.

To involve the Private Sector more on the running of the TEVET system, a number of positive contributions to the Private Sector by TEVETA have been included reciprocal to the TEVET Levy, both as an obligation and to bring immediate benefits to the Private Sector. Some incentives, in the form of reimbursements of direct training costs on the implementation of tailor-made short term courses at the workplace were introduced to benefit the levy-compliant companies. This incentive has assisted to boost the levy collections and enhancement of the partnership between TEVETA and the Private Sector. However, a good number of the employ-

ers are still generally contributing to the Levy from the legal obligation point of view. It is viewed that the success and sustainability of the TEVET Funding mechanism lays on balancing the legal obligation/ aspect, with tangible results or benefits and incentives.

Another form of funding that is increasingly getting popular in Malawi is the donation of equipment in the technical colleges and provision of scholarships to best students in some trades by some companies in the private sector. For instance, one company, namely Press Trust Ltd has disbursed about MK 20,000,000 (USD 144,000) to technical colleges for workshop equipment. Another company in the cement manufacturing – LAFARGE Ltd has offered scholarships to one best student – pursuing Bricklaying Apprentice Course at each Technical College in Malawi.

As technology advances, companies are replacing their workshop equipment frequently. The old equipment is then donated to the technical colleges to be used for training. This form of funding is ensuring that the gaps between the technologies that the trainees use in colleges are in tandem with the ones at the industry. The ILLOVO Sugar Company and others has made positive contributions on this aspect. Some have donated new equipment ie CISCO donates computers to the colleges.

3.2 Governance and management

The involvement of the Employers from the Private Sector in the TEVET System and programmes in Malawi is well institutionally anchored by presence and participation of private sector representatives in the various bodies or organs of the Governance and Management structures of the TEVET Authority. This puts the private sector to have a position of influence to the implementation of the TEVET system and programmes in Malawi that are beneficial and have a positive impact to their Sector which is the engine for economic growth in the country.

Their representation are in the TEVETA Board (currently, most members in the Board are from the Private Sector), and in the Sector Advisory Committees (SACs). The SACs are small out-put oriented working groups within a sector in the private sector with the aim of determining sector-specific training needs, setting TEVET standards and modules for occupations and promoting TEVET programmes and qualifications within the sector.

The formation of the SACs in Malawi has faced a number of challenges, and continues to be so. To date, only a few SACs have been formed and are operational. The most active one is the Malawi Industrial Training Association (MITA), though not being a full SAC as such, as per the requirement. This is a grouping of now ten companies from the Manufacturing/Production and

Engineering services sector with the common objectives of up-skilling and multi-skilling of artisans at the workplace for purposes of improved productivity and performance. This group was pioneered by three large companies, namely: Carlsberg/Sobo, Illovo Sugar and Portland Cement. So far, this Association has trained over 200 Artisans since 2003 in various occupations i.e. Welding, General Fitting, Boiler operations and maintenance etc.

The establishment and growth of the Sector Advisory Committees (SACs) has generally been slow in Malawi.

Among other factors this has been due to the following:

- 1) This a new concept and therefore has taken more time to be appreciated and accepted by the Private Sector
- 2) The Private Sector also seems to have capacity limitations to cope with the requirements of the SACs.
- 3) The Private Sector itself does not seem to have a well defined and Proper demarcation of sectors within itself.

3.3 Participation/involvement of the private sector employers in the formal sector/training

Apart from the levy contributions and the participation in the governance and management structures, the Employers in the Private Sector are largely involved in the following Formal Sector programmes and activities:

3.31 Implementation of the private sector training programmes (PSTPs)

This is one of the major and priority programmes within the TEVET System in Malawi which aims at promoting skills at the workplaces for purposes of improved productivity, performance and delivery of quality goods and services. Under this programme TEVETA assists the companies in conducting Training Needs Analysis (TNAs), actual implementation of the training programmes, and reimbursement of part of the training costs to only the companies which are Levy – compliant. In a way, this programme is being implemented as a stimulant to the involvement of the Private sector in the TEVET programmes and an enhancement to the partnership. Skills of conducting appropriate and effective training needs analysis are noted not to be wide spread in the Private Sector. TEVETA therefore assists by conducting TNAs in various companies in collaboration with the employers. Further TEVETA has now introduced tailor made courses in conducting TNAs; targeting the Human Resources and Training Managers in the various companies in the Private Sector to equip them with relevant skills for conducting own TNAs in their respective companies.

The actual PSTP programmes are often short-term tailor made courses in both technical and vocational skills at all levels in the Companies. Additionally, the current policy provides for 33% of the total training costs incurred in the implementation of the PSTPs as reimbursable by TEVETA. This acts as an INCENTIVE for both the implementation of the training programmes in the various companies and also their contribution to the TEVET Levy. In the past five years reimbursement claims for implementation of PSTPs have grown quite substantially. These have mostly been enjoyed by the larger companies that often implement more PSTPs

Many Companies from the Private Sector have benefited from this program in terms of conducting TNAs, training implementation and reimbursements hence reduction of training costs. They perceive this as a way of deriving direct benefits from the TEVET system and its fund. TEVETA, in collaboration with the Private Sector Companies, has geared up to improve further the provision of short-term tailor-made private sector training courses aimed at skills development. Currently, the PSTP programme is being further developed to include the implementation of commonly demanded short-term tailor made courses in various occupations for joint participation of all companies at one go.

The other strategy on this PSTP window is the MITA training programme, as already explained in the earlier sections of the paper. Though specific to a particular Association through a memorandum of understanding, the terms governing the implementation of the training programmes are similar to the PSTP. However, the reimbursement enjoyable in the implementation of training programmes through this window is 50 %.

Our experience on both the implementation of the PSTP and MITA programmes has been successful and encouraging. Overall, these programmes have promoted the trainings and skills development at the workplace, and greatly boosted the support of the private sector employers to the TEVET system in the Malawi.

This is evidenced by the fact that most of the Companies that are active to the TEVET system and contribute more and regularly to the TEVET levy are those that often implement the Private Sector Training Programmes. Both the implementation of the PSTPs and claims for training costs reimbursement are popular amongst the Banking Sector, which also lead in the contribution towards the levy, as a sector.

3.32 Apprenticeship training

Apprenticeship training is one of the major forms of

formal training that is immensely supported and anchored by the employers in the private sector. Amongst others, part of the TEVET Levy is used in providing training materials subsidies to the colleges to assist in the effective delivery of the Apprenticeship training programme, development of equipment for training and provision of Bursaries for needy students.

The need for participation by the private sector is even greater now, in view of the newly introduced Competency Based Education and Training (CBET) approach being implemented in the reformed Apprenticeship Programme in Malawi. This requires a MUST coverage and attainment of both “Institutional Modules” (attained and assessed at the colleges) and “Industrial Modules” (attained and assessed at the industry).

The private sector provides the most needed attachment places for apprentices under this training programme. Technical teachers during vacations periods are also attached to the industry for upgrading in skills to ensure that their course delivery in colleges is in line with the industry demands. The industry further assists in payment of fees to the colleges for apprentice students attached at their companies. Though this is perceived as an additional financial burden on their part, most companies oblige. However, this is facing some challenges as it is seen to limit the availability of the needy places for attachment.

The private sector is also involved in what is referred to as “direct recruitment” for the employees working with them for a long time without proper training and qualification, and requiring training and artisans qualifications. This ensures ready availability of attachment places and assists in the upgrading of their unskilled workers into skilled and qualified artisans. The demand of this facility is overwhelming and limits competition and equal opportunities for entry into the apprenticeship training programme. Professions from the private sector, in various fields i.e. business management, health and safety etc are also, sometimes, engaged to teach at the colleges Fundamental Modules required in the new CBET system when teachers in these areas are not available at the colleges.

3.33 Other special apprentice training programmes driven by technological changes

These are private sector driven initiatives responsive to demands and technological Changes, very welcomed within the TEVET system. So far, the Daimler Chrysler, the makers of Mercedes Benz cars in Germany (a private company) in collaboration with the local franchise holder, Stansfield Motors Ltd

(another private sector company in Malawi) and TEVETA through support from GTZ have introduced a course in MECHATRONICS. This course aims at training apprentices right at Stansfield Motors major elements of modern car mechanical and electronic developments so that the artisans are able to service and maintain cars that are becoming more electronic based in most of their systems. This cooperation is in the framework of Public Private Partnership (PPP). The aim of this PPP cooperation is to provide practical training experience in line with the requirements for trainers and trainees in the field of automotive mechatronics. Malawi has been selected to serve as the centre for Angola, Zambia and Zimbabwe.

TEVETA has been incorporated to ensure that the courses offered meet the requirements of the Malawi TEVET Qualification Framework. The training will commence in January 2007. Technical teachers from Malawi will also be trained to ensure that they are able to train and supervise mechatronic students in their colleges in future when the mechatronics program will be integrated into the current apprenticeship training programme.

Other such technology changes-driven special training programmes are looming in the Painting Industry and Building Industry’s sub-sector of Building fittings and Cabinet Making.

3.34 Curriculum development

As Malawi has embraced the Competency Based Education and Training (CBET) which emphasizes demonstration of competence by the trainees and ensures life long learning, its curricula – by design – has to be developed in close collaboration with the “end users of the product that the system is trying to produce”. The private sector is therefore directly involved in the curriculum development process to ensure that the needs of the private sector are taken care of right at the very beginning of the development of the courses that will eventually be used to shape the future employee of the private sector. In this case, the Private Sector releases its experts in various fields and occupations to curricula development workshops to develop Standards, Modules, Assessment Tools etc for respective curricula. So far, a numbers of curricula in various occupations have been developed in Malawi with remarkable participations and contributions by the Private Sector. This signifies the Private Sector’s commitment and recognition of their valuable role to the curriculum development process. However, capacity limitation from the companies in the Private Sector have been noted to impede the Curriculum Development and other quality assurance activities.

3.35 Assessment

The CBET approach that is used in Malawi also entails that the students are assessed in colleges by their instructors. An External Verifier then verifies such assessment. This ensures that the competence that the student is certified to have attained is indeed the one required at a particular level on the National Qualifications Framework (TQF). The private sector is the major partner in this process of Verification. Similarly, when the trainees are at the industry for attachment (covering industrial modules), the employers become the trainers and the Internal Verifiers at the industry. The involvement of the private sector in the assessment brings confidence to the student results as it shows that the student is ready to join the private sector or indeed any other sector and perform according to the standards expected of a graduate of a particular level.

4.40 Participation/involvement of the private sector employers in the informal sector/training

In Malawi, the Private Sector's involvement is appropriately entrenched to the extent that it is involved in the Informal Sector Training. This has been seen to be a very good and welcomed development as the informal sector forms a big part of the demand for TVET. In the past, it was very difficult to convince the private sector to be involved in the informal training. The mere use of TEVET levy funds for informal sector training, initially caused an uproar in the private sector because it was considered that the informal sector was a competitor. The private sector now recognizes the importance of training in the informal sector and the synergy that exists between the informal sector and the private sector.

One of the popular and successful training programmes being implemented in the informal sector with the support of the private sector is the modernized traditional apprentice training approach; namely, "On-the-job training" (OTJTP). In this training approach, TEVETA goes into a Memorandum of Understanding with donor organisations such as DFID, Norwegian Church Aid and other national projects such as the Malawi Social Action Fund (MASAF) and the Secondary Centres Development Project (SCDP) that construct infrastructure such as school blocks and other community amenities to train youths from around the areas where these construction projects are taking place. The youths are trained in trades or occupations like bricklaying, carpentry, plumbing and many more, following a properly developed curricula and set modules. Such training is delivered by private sector contractors that are engaged in the construction of the infrastructure – through their Foremen and Supervisors as the Trainers. TEVETA facilitates the

implementation of all activities from sensitisations and recruitment to certification, and provides the training modules and assessment and certification of the training.

Provision is also now being considered to give an opportunity for the willing graduates from this OJTP to enter into the formal apprenticeship training by exempting them from some of the learning outcomes already acquired through this programme. In a way, this will also assist in the integration of the formal and informal sector training.

5.0 Challenges

The involvement of the private sector Employers in the TEVET activities in Malawi has not been without challenges. Among others, the following have been the major challenges and the efforts being made to address them:

5.10 Low quality of trained artisans

There appear to be a continuing lack of sufficient desirable quality of skilled and competent Artisans, as well as technicians and other technical staff responsive to the market. This need is seriously felt in the production/Manufacturing and Engineering services sector. This challenge is mainly being addressed by the new apprenticeship reformed programme that embraces the Competency Based Education and Training (CBET) approach.

5.20 Lack of skills development in the private sector

It is noted that still a good number of the private sector companies are not training their employees enough to cope with the ever-changing world technology and economy. Some reasons given for not training employees is that private companies easily lose them when their skills are upgraded because they look for better pay and conditions of services elsewhere. This is a self-defeating strategy on the part of the private sector as they render themselves uncompetitive even within their own sector thereby risk going under.

5.30 Poor technical and vocational training infrastructure

Though efforts to develop the colleges offering technical and vocational skills are being pursued, the infrastructure are still generally very poor and not up to the required standard. Most colleges do not have good training workshops for practical work and even those that have do not possess the requisite and adequate equipment for training in the courses they offer. This situation

undermines the effective delivery of the Apprenticeship training programme which is key to the partnership between the private sector and the TEVET Authority and system. The situation also hinders the registration and accreditation of the technical and vocational colleges, as a lot of them do not meet the minimum standards for registration.

5.40 Private sector's reluctance to be involved

Reluctance by the private sector to release their members of staff to be involved in the development of the TVET curricula or even participate in Sector Advisory Committee (SAC) where the private sector are members of the TVET Boards or Committees, affects the progress and success of the TEVET system. This is evident as we struggle to form the required SACs in Malawi or set into active gear the existing SACs, with exception of the MITA SAC. This is so mostly because private sector seems to be busy and not having time to spare for these activities, and that the people that would be sent for activities like the standards and curriculum development are usually the ones the private sector relies on in the day-to-day work of the companies.

5.50 Lack of culture and attitude of working together amongst the private sector

It is also a notable fact that some companies do not have a culture of working together within their sector. Companies in most sectors seem to be myopic about business being competition and that working together can jeopardise the business. They appear to value less in working together, identifying and sharing common problems and solutions, and indeed training together reduce to costs. This problem has contributed to the slow pace in the formation of SACs in Malawi.

5.50 Lack of coordination between the private Sector, TEVET Authority and the training providers

Although a number of programmes are being implemented involving the combination of the Private Sector, TEVET Authority and the Training Providers (Technical Colleges), such as the Apprenticeship Training Programme, there appears to be lack of proper co-ordination and sharing information to bring the required interface. This is mainly between the industry and the Technical Colleges whereby, generally, the industry does not seem to know what is happening and required at the training institutions, and vice-versa. Proper mechanisms to improve the flow of information, co-ordination and indeed the interface between the industry and the training institutions are still desirable.

5.60 Lack of positive dialogue between the TEVET Authority, the private sector and government

Our observations has also been that most of the problems that currently sometimes emerge between the private sector and the TEVET Authority, as a regulating body, are exacerbated by lack of communication. The private sector may be deemed as not interested in participating in TVET yet the private sector does not know what the current TVET system entails in terms of possible inputs from the private sector.

This affects their active participation and levels of their involvement. The mere indication and understanding of the importance of TVET to the national economies and breadth of the Private sector, through proper policies and mechanisms may do wonders in enticing the private sector to participate more actively in the TVET activities.

5.70 The burgeoning demand for PSTP reimbursement incentives

The introduced Private Sector Training Costs reimbursement as an incentive has received an overwhelming demand to the extent that there are fears that this may not be sustainable in the long run. Most and large amounts of claims are being processed and enjoyed by the Banking Sector and the other large companies. Whilst the reimbursement is a very big incentive for Private Sector's involvement in the TEVET system and programmes, it is also viewed as a recipe for de-capitalisation of the TEVET Fund in the long run as demands grow at par with the funds. However, a re-think and withdrawal of such incentives, at some point in future, may be equally damaging to the TEVET programmes and our relationship and partnership with the private sector. The cautious solution is to be continuously reviewing the guiding principles and rules. Currently, this is being limited by a maximum reimbursable amount of 33% of the total levy contribution by the respective companies, as a ceiling.

6.0 Conclusion

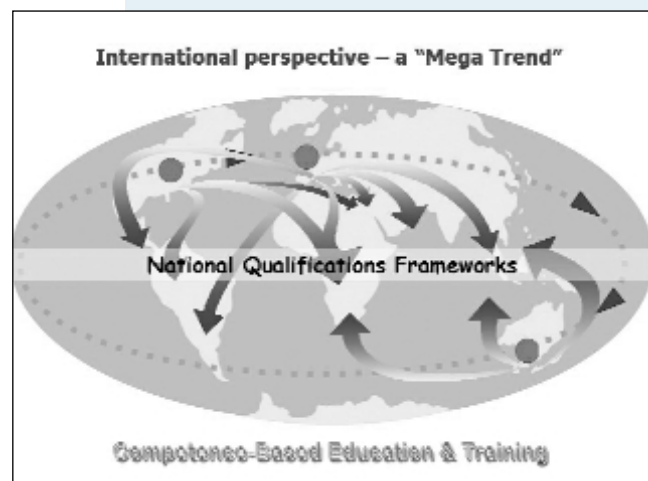
The challenges outlined in this presentation are not exhaustive, but appear to be the most critical ones in Malawi. Hopefully, these may also be typical in most of the countries. I hope, through this symposium, the Malawian experiences and challenges being faced, will assist and guide the Ethiopian decision-makers, implementers, and stakeholders at all levels to develop and implement sustainable mechanisms of financing TVET with a good emphasis on the public- private partnership.

In Malawi today, despite the challenges that are being faced, the new reformed TEVET system has made headway. The involvement of the Private Sector Employers in TEVET programmes and activities is encouraging and ever growing. There is a general realization that the Private Sector cannot work in isolation from TEVET system, and vice-versa. This is being affirmed by the recent inclusion of the TEVET Authority in most of the private sector activities and programmes, and policy making bodies within the private sector. Amongst others, these include the Malawi Confederation Chambers of Commerce and Industries (MCCI) – a consortium of the private sector companies and organisations, the Trade Policy National Working Group (TPNWG) and Malawi National Export Strategy Competence Development Working Group.

However, despite the increased level of participation and involvement by the private sector employers in the TEVET system, government is still being considered a key player as most of the Training Institutions (Technical Colleges) are still under government. The involvement of the Private sector is therefore not being considered as a replacement of Government support and involvement in the TEVET system in Malawi. Government needs to continue complementing the private sector efforts by maximising its attention on key strategic areas of funding and capacity development in the Public Training Institutions, plus obliging consistently to the TEVET Levy.

Costs of standard setting and competence-based assessment

by Gerhard Kohn



Overview of presentation

- TVET Qualifications Framework (TQF)
- Cost factors of building a TQF
- Standards products with different degree of detail
- Cost indicators of standards setting
- Assessment approaches
- Cost indicator on assessment
- Estimated cost of developing a TQF
- Conclusions

1 What is a TVET-Qualifications Framework?

In essence, a TQF is a mechanism (process, rules, formats) to:

- ⇒ define the occupational skills requirements in employment (=standards setting)
- ⇒ assess learners against these standards (=assessment)
- ⇒ award TVET qualifications to learners who prove that they meet the standards (= certification)
- ⇒ arrange qualifications on a national grid of qualifications (by level) to provide for bridges and ladders for learners (called 'permeability' in Ethiopia)

2 Cost factors of building a TQF

- setting occupational / unit **standards** (for 100 + occupations/qualifications)
- developing **assessment instruments**
- establish **implementation structure** TQF
- developing **modular curricula** Learning
- developing **training materials**
- **updating** all of the above after a certain time
- plus lots of **training** for instructors, teachers, managers of institutions, and assessors

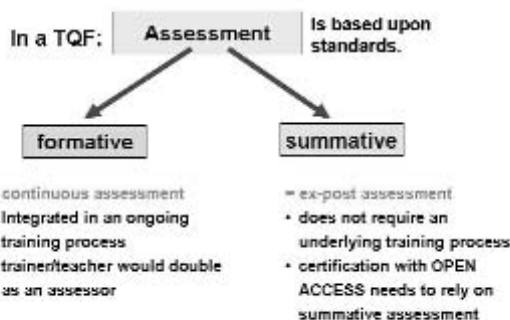
3 Products with different degree of detail

Product	Country A	Country B
Occupational Profile		Duties and Tasks
Unit standards	Units, Elements, Performance criteria, Range	
Assessment instruments	Evidence guides	Test items banks (nuclei); Performance & knowledge test items
Modular curricula	Modular curriculum guides	Modular curriculum guides
Training materials (incl. delivery guides)	Variety of written material	

4 Cost indicators of standards (€/occupation)

Product	Country A	Country B
Occupational Profile		1,500
Unit standards	9,000	
Assessment instruments	10,000	5,500
Modular curricula	5,000	5,500
Training materials	11,000	
[Total]	[35,000]	[12,500]

5 Assessment approaches



6 Cost indicator - summative assessment

Example

Pilots of summative assessment (=knowledge + performance test)

- for a full occupation (level 2)
- in Country B
- using panels of 3 assessors per test (group)
- and assessing up to 16 candidates in one go (2 days) reveal:

Average cost/candidate = about 200 €
(which can certainly be reduced to about 150 €)

Example from UK

Price List

for NVQ Prices, please download the price list by clicking on download.

[Download](#)

Health and Social Care NVQ Level 2

Cost:-
• work based assessor £750.00 + vat + reg & cert.
• reg'd portfolio assessment £999.00 + vat + reg & cert.

[More Info](#)

Health and Social Care NVQ Level 3

Cost:-
• work based assessor £900.00 + vat + reg & cert.
• reg'd portfolio assessment £1200.00 + vat + reg & cert.

[More Info](#)

Health and Social Care NVQ Level 4

Cost:-
• reg'd portfolio assessment £1600.00 + vat + reg & cert.

[More Info](#)

7 Estimated cost to establish a TQF

Example Country B for 3 years: (development + recurrent budgets)

Year 1:	750,000 €
Year 2:	1,300,000 €
Year 3:	1,800,000 €
TOTAL:	3,850,000 €

8 Conclusions

- A word of caution: the cost of standards setting, development of related instruments, and open access assessment can be easily under-estimated – costing of planned interventions strongly recommended
- It is advisable to pilot models chosen before going to scale
- If possible, over-detailing of standards to be avoided
- Analyse thoroughly what can be procured from other countries and what should be developed indigenously

Conclusions (continued)

- A Test Instruments Bank may be useful for both:
 - formative assessment integrated into institutional training, and
 - summative assessment (open access) of non-formally (work-based) acquired skills
- Consider to integrate development (or procurement and adaptation) of learning materials into teacher / instructor training
- The implementation structure to introduce a standards-based TVET system should be kept lean

Lessons and questions learned

by Jon Lauglo

Lessons and questions learned

by Jon Lauglo

From Adams (1): Partnership

- Helps maximize TVET supply and finance.
- Should NOT assume that "private = more effective/efficient". Great variation likely as to quality, efficiency and nature of private providers.
- Long way to go before we see what Partnership will mean in practice.
- Minimally, private: "quality assured", certified & included in consultations, statistics.
Maximally: "Level playing field" for public finance.

(2): "Poverty"

- Now: public TVET is post secondary.
- Fits "skill gap at middle level" but conflicts with poverty orientation.
- Means tested waiving of fees, or stipends will not suffice. (Nor will focus on rural areas suffice)
- Nonformal skills training for those with no schooling and very little schooling will **need attention**. (which has little attn in Strategy document)

(3): Performance?

- Financing tied to Impact?
- Outcomes? Pass rates?
- Output? Course completers?
- Capitation grants for enrolments (adjusted for type of TVET)?

From Gasskov (1)

- Very great variety of financing mechanisms exist.
- There is documentation on these practices
- Output based: payment for what is "delivered".
- To be defined: "Delivery" means:
"student guided hours"?
"course completers"?
"course completers placed in job"?

From Gasskov (2)

How to ensure that financing mechanisms

- Be simple enough
- That indicators used will foster "inner springs of professionalism"..

From Panel 2 on IGA in & for TVET

- IGA by TVET is complex issue, and has many risks.
- Production units: take much investment of finance and intense assistance over long time, to become sustainable.
- "Production units" can be justified as needed training practice. Can also be separated from training because they interfere with training goals
- Short courses for "outside buyers" may be more easily mounted as IGA for TVET because they tally with TVET's main activity.

From Panel 1: Financial implications of cooperative TVET

- German dual system was explained, w costs and benefits for firms.
- Germany benefits from long tradition.
- Group recommends: Assess potential of individual elements
- Own view: The dual system (with training mainly based in the firm) has not exported well beyond its core area. Agree with group that there are elements worth looking at. ("traineeship"? "attachment"?)
- Own comment on cost: German research has shown dual system to be more costly in engineering industries and less costly to employers in small scale craft production.
- Interesting that German employers have resisted subsidies. (So have Brazilian employers with regard to their school-based TVET)

Cautions from Ziderman

- Loans. High risk of low % recaptured; and weak (?) instrument to promote equity
- Graduate tax. Efficiency unknown. Delays repayment
- Recommends "slow raising of fees, with much monitoring" and exemptions for the "needy".
- Caution from me: Show me a means-tested program that works on a large scale anywhere in in Low Income Countries?

From Panel 6. Kohn

- Developing good assessment systems based on occupational standards is costly. Best to focus on small set of occupations, take care to avoid "too much detail".

Concluding Remarks

by Ato Teshome Zewde, Ethiopian Employers Federation

Your Excellency Ato Wondwossen, State Minister for Education,

Dear specialists and practitioners from abroad who gave us so many new insights in the challenging area on how to practically finance TVET

Dear representatives of stakeholders of the Ethiopian TVET system from the Government, the private sector, from TVET institutions and from international cooperation partners, Ladies and Gentlemen,

Thank you for these very instructive two days and for the efforts, MoE and ECBP undertook to enrich the discussion about how to make the TVET system under reform financially sustainable. We appreciate the opening of the discussion which made us learn from the experience of such competent resource persons from countries nearly all over the world.

Thank you as well for allowing us to give some concluding remarks just before the State Minister in charge of TVET will officially close this conference.

Questions on how to practically finance TVET are of high concern for the business community in Ethiopia. Not everybody has understood it already, since many do still believe that the development of skills is the responsibility of the Government alone. But this is “old thinking” and I can speak not only as the President of the Ethiopian Employers Federation, but also with a mandate from the Ethiopian Chamber of Commerce and the Ethiopian Manufacturing Industries Association, when I come to give some concluding remarks to this symposium.

EEF, ECC and EMIA, the three business membership organisations in Ethiopia which work on Federal level and across the sectors know how important TVET is for the socio-economic development of the country. We share the belief that strong and competent organisations of the enterprises are needed in order to come to agreements with the government. We are also aware of the fact that TVET is expensive and that the Government can not shoulder the burden alone.

Changes are already on the way. Even with our history of developments being brought about by the State, even centre-based formal TVET is increasingly delivered by private providers. We have reason to believe that already today there are more trainees in private training institutions – admittedly often in the less costly business- and management skill related courses – than in public-ones. This indicates also that the families are already investing

a lot in the development of the skills of their youngsters, because training in private colleges is sometimes relatively expensive.

But also the enterprises are increasingly contributing their share: Internships in enterprises for trainees of public and non-public centres have been introduced. The strategy papers under consideration these days foresee a considerable extension of the time trainees will be attached to enterprises in the course of their TVET “carrier”.

In addition, I have to mention, that in our country, where 90% of the population lives in the countryside as small holder farmers, knowledge and skills are usually passed on in more or less informal ways. This is also true for the numerous yet uncounted traditional apprenticeships in the urban and rural areas. Another area, where VET is funded by (small-scale)-enterprises, their trainees/apprentices and their families.

Even according to the draft strategy of the MoE on how to finance TVET, by the year 2008 (EC) and with regard to formal, middle-level TVET, private TVET providers and firms would be almost equal to the Government if recurrent costs and capital costs are counted.

What does that mean? We are already in a situation where the contribution of families and of the private sector (leave alone for a moment the role of public enterprises in the provision of TVET and of industrial attachments) is very important in terms of quantity and quality.

We heard about the importance of partnership between the Government and other stakeholders, especially the private sector. In the light of the situation described above we ask: Is the present setting for governing the TVET system reflecting the real role and importance of the private sector? At the moment, I’m afraid that the answer is no. We have no living and continued dialogue between the Government and the business community on the issues raised in this symposium. We appreciate that we had open discussions in the course of the last two days, but we really have to improve especially the quality of our dialogue very soon! We know that also we, the business membership organizations have to professionalize our interventions in the area of TVET. ECC has established a pretty active TVET-unit and ECC, EEF and EMIA have forged a strong union where issues related to TVET are discussed and common activities are planned. This is not enough but we are already on a promising path into the right direction.

But also the Government has to pay more attention to this dialogue. We need this dialogue also because many of our members do not feel a commitment of getting involved into TVET with time and money. The best way to convince them is demonstrating that positive action is honoured. Let us finish the search for scapegoats and let us start with regular, professional – and decision-making! – TVET council meetings in all regions! We are ready to play a constructive role.

What else will we take from this symposium back into our daily TVET-discussions in Ethiopia? Let me highlight four points:

1. The idea of associations of (private) TVET providers as a tool to improve quality (and the bargaining power) appears worth to be followed up more intensively. We do already have an association of private training providers of education, but we would like to continue learning from such experiences as highlighted by our colleague from Uganda where the association did not only deliver needed services to its members but also became a strong and esteemed interlocutor to the Government.
2. With regard to the income-generating activities of TVET institutions, we admit that there has been suspicion in Ethiopia. Enterprises fear unfair competition. But we have also said at various occasions that we believe in the possibility of a win-win situation in this context. Pre-requisite is – once again – a sound and participatory governance at the respective operational level of an income-generating TVET institution as required in the TVET strategy and in the TVET proclamation. Also should – as discussed with the colleagues from Botswana – the products and services of TVET institutions be offered at real costs.
3. The promotion of cooperative forms of delivering TVET is welcome and we listened with interest to the experience brought to our attention from Germany and the Philippines. But when it comes to financing this kind of training, its trainers, the equipments, consumables and so on, we have to be aware of the Ethiopian context, where there are not enough strong Chambers and Associations to whom TVET-related tasks can be delegated. German Chambers for instance can deliver important services in the area of TVET because the system of mandatory membership provides for regular income. But the Ethiopian proclamation on the establishment of Chambers of Commerce and Sectorial Associations, does not provide for financially sustainable business membership organisations. We wonder, if an approach concentrating on relatively few and mostly bigger enterprises will have sufficient impact. Dual approaches of TVET require proper dialogue and if successful cooperation between TVET institutions

(public or non-public) with enterprises has to become a reality, then the conditions have to be discussed mutually and in an atmosphere of trust. This climate needs to be established yet. The upcoming public private partnership fora where the Ministry of Trade and Industry and UNDP are willing to play a facilitation role may serve also that purpose.

4. We do not have an operational system of competency-based assessments yet. But Ethiopia has a lot to learn and in this sense I was happy for the consideration of “costs of standard setting and competency-based assessment” and the respective experience shared from Uganda. We nearly got our fingers burned on that issue. Given the difficulties of making such a system self-reliant and given the present delay in the implementation of such a system here, I would like to appeal to those who fund its introduction here to be patient – not only with the Government. We were foreseen to run one of the trade testing centres from the private sector but we feel that – besides our own shortcomings – also the donors came up with unrealistic time lines and unrealistic expectations for the financial viability of competency-based trade testing. We accept that the envisaged outcome based system has its price. But all clients, trainees as well as enterprises need transparent and realistic assumptions on this issue. Let us review the approach soon and in a climate of mutual cooperation!

Ladies and Gentlemen,

In general, the last two days were a striking example of how we can learn by sharing experience and by discussing even critical issues openly and with experienced resource persons from in- and outside the country. We thank you for that and we are now looking forward to continue such discussions in the fora foreseen for that in the TVET strategy to which we have also contributed our view.

We would like your feedback ...

We are interested in your thoughts and suggestions.

Please leave the filled-in form at the registration desk. Thank you!

**1. What kind of organisation do you work for?
(please mark the appropriate answer):**

- ☐ Government of Ethiopia
- ☐ Academic Institution
- ☐ Private Sector Company
- ☐ Private Sector Association
- ☐ Civil Society (NGO)
- ☐ International Development Agency
- ☐ Other (please specify):

2. Which country do you work in?

**3. What were your expectations vis-à-vis the
symposium?**

**4. To what extent did the symposium meet your
expectations?**

- ☐ met completely
- ☐ largely met
- ☐ partly met
- ☐ not at all satisfied

**5. After attending the symposium, do you feel
better prepared to deal with issues related to
the implementation of diverse financing
strategies for TVET? (please mark the appro-
priate answer)**

- ☐ yes
- ☐ to some extent
- ☐ partly
- ☐ hardly

6. What was...
the best experience in the course of the symposium?

not such a good experience?

**7. The following session was particularly
interesting for me:**

Because

I missed the following topics, issues, etc.

My further comments and suggestions:

Thank you. For further feed back, please email:
julia.schmidt@gtz.de

List of Participants

Name	Institution		E-mail
A. L. Badurdeen	GTZ REVO Project	Sri Lanka	
A. Van den Hoevel	ECBP – GDC	Ethiopia	andreasvandenhoevel@ googlemail.com
Adebabay Abay	Ministry of Capacity Building	Ethiopia	adebabay-g@yahoo.com
Adrian Ziderman	Bar Ilan University	Israel	zidera37@bezeqint.net
Ajib Mohammed	Regional TVET Commissioner Harar	Ethiopia	
Alemayehu Eshete	Ethiopian Electric Power Corporation (EEPCo)	Ethiopia	
Amare G/Wold	Ministry of Revenue	Ethiopia	amare_gwold@yahoo.com
Andreas König	ECBP – GDC	Ethiopia	andreas.koenig@gtz.de
Anteneh Getnet	Ethiopian Teachers Association	Ethiopia	
Anteneh Mohammed	Kombolcha ITC TVET College	Ethiopia	anteneh67@yahoo.com
Arvil V.Adams	Consultant	USA	aadams1@worldbank.org
Asrat Abebe	Ethiopian Manufacturing Industries Association	Ethiopia	epica@ethionet.et
Bernd Sandhaas	Institut für Internationale Zusammen- arbeit des Deutschen Volkshochschul- Verbandes (IIZ/DVV)	Germany	info@dvv-international.de iiz.dvv@ethionet.et
Bester Mahube	Tswelelopele Development Trust	Botswana	bestermahube@yahoo.com
Biruk Tegegne	Ethiopian Electric Power Corporation (EEPCo)	Ethiopia	tegou@yahoo.com
Bizuneh Debebe	Ministry of Education	Ethiopia	Bizunehd2003@yahoo.com
Chala Yai	Regional TVET Commissioner Oromia	Ethiopia	
Dagnachew Yilma	Private Higher Education Institution Association (PHEIA)	Ethiopia	dyilmak@yahoo.com
Daniel Assefa	Regional TVET Commissioner Dire Dawa	Ethiopia	Danielredbeer@yahoo.co.uk
Daniel Belay	Bureau of Finance and Economic Development (BOFED), Addis Ababa	Ethiopia	dedf@ethionet.et
Daniel Mulugeta		Ethiopia	
Demelash Megersa	Ministry of Finance and Economic Development (MoFED)	Ethiopia	dmegersh@yahoo.com
Dereje Belachew	Entoto TVET College	Ethiopia	derebelachew@yahoo.com
Dessalegn Mulaw	TVET System Reform and Capacity Building Department, Ministry of Education	Ethiopia	dessalegnmy@yahoo.com
Dinknesh Mulugeta		Ethiopia	
Elliot P.W. Mulanje	Technical, Entrepreneurial and Vocational Education and Training Authority (TEVETA)	Malawi	emulanje@scblantyre1. malawi.net
Erhard Lehmkuhl	ECBP – GDC	Ethiopia	Erhard.lehmkuhl@gtz.de
Eshetu Ayele	Amhara TVET Promotion Agency	Ethiopia	
Eshetu Mulugeta	Awassa TVET College	Ethiopia	eshemulu@yahoo.com
Eva Castañer	Consultant	Germany	eva.castaner@t-online.de
Evelyn Stöckle	ECBP – GDC	Ethiopia	Evelyn.Stoeckle@gtz.de
Fantanesh Hailegiorgis Feleke	Higher Education System Reform Department, Ministry of Education	Ethiopia	
Fekadu Asrat	ECBP – GDC	Ethiopia	fekadu.asrat@gtz.de
Folkmar Kath	Consultant	Germany	folkmar@familie-kath.de
G/Kristos W/Michael	Hosana TVET College	Ethiopia	

Name	Institution		E-mail
Gaminie Gunasinghe	GTZ – REVO Project	Sri Lanka	gaminie-gtz-revo@yahoo.com
Genet Meseret	ECBP – Ministry of Capacity Building	Ethiopia	mesgen2004@yahoo.com
Georges Lenain	Association pour la Promotion de l'Education et de la Formation à l'Etranger (APEFE)	Rwanda	g.lenain@apefe.org
Gerhard Kohn	INBAS (Institut für berufliche Bildung, Arbeitsmarkt- und Sozialpolitik – Institute for Vocational Training, Labour Market and Social Policy)	Germany	g-kohn@t-online.de
Gerhard Quincke	ECC (Ethiopian Chamber of Commerce) – HWK (German Chamber for Skilled Crafts of the Rhein-Main area) Partnership Project	Ethiopia	quincke@ethionet.et
Godfrey Kafere	Lilongwe Technical College	Malawi	kafereg@yahoo.com
Gunnar Specht	PLANCO Consulting GmbH	Germany	contact@planco.org
Hailu Workeneh	UNICEF	Ethiopia	hailuworkeneh@yahoo.com
Hailegeorgis Feleke	Higher Education System Reform Department, Ministry of Education	Ethiopia	hailegf@yahoo.com
Hanno F. Knaup	ECBP – GDC	Ethiopia	hanno.knaup@gtz.de
Hartmut Stichel	Oromiya Education Bureau-TVET	Ethiopia	h-stichel@web.de
Hawoltu Afework	Ministry of Education	Ethiopia	haworku19@yahoo.com
Heinz Ropertz	SNNPR Regional Education Bureau, Awassa	Ethiopia	ropertz@ethionet.et
Helmut Knechtel	KfW	Ethiopia	helmut.knechtel@kfw.de
Holger Heisel	Amhara TVET Promotion Agency, Bahir Dar	Ethiopia	heisel@ethionet.et
Jon Lauglo	University of Oslo	Norway	jon.lauglo@ped.uio.no
Josef Most	ECBP – GDC	Ethiopia	josef.most@gtz.de
Julia Schmidt	ECBP – GDC	Ethiopia	julia.schmidt@gtz.de
Jutta Franz	Consultant	Germany	franzjutta@web.de
Jörg Schrader	Tigray TVET Commission Mekelle	Ethiopia	jorgrosi@ethionet.et
Kebede Wolde	Regional Education Bureau Addis Ababa	Ethiopia	
Kiros Teka	TVET College Bahir Dar	Ethiopia	kiros1957@yahoo.com
Kirsten Brehm	GTZ – REVO Project	Sri Lanka	kirsten.brehm@gtz.de
Kornsa Sifir	SNNPR Regional Education Bureau, Awassa	Ethiopia	konasfr@yahoo.com
Mahome Lemma	Walta Information Center	Ethiopia	wic@waltainfo.com
Mariye Yigzaw	College of Telecommunication and Information Technology (CTIT) of Ethiopian Telecommunications Corporation (ETC)	Ethiopia	my.fa1992@yahoo.com
Massresha Tadess	Ethiopian News Agency (ENA)	Ethiopia	ena@ethionet.et
Mekonnen Tadesse	Ethiopian Employers Federation (EEF)	Ethiopia	eef@ethionet.et
Melkamhiwot Ehisu	Walta Information Centre	Ethiopia	wic@waltainfo.com
Meselech Assefa	Ministry of Labor and Social Affairs (MoLSA)	Ethiopia	meselechassefa@yahoo.com
Mesfin Shimeles	Ethiopian Chamber of Commerce (ECC)	Ethiopia	ecc-hwk@ethionet.et
Michael Dangelmeyer	Oromiya Education Bureau-TVET	Ethiopia	dangelm@ethionet.et
Michael H/Slassie	Adigrat TVET College	Ethiopia	
Muzeyen Ahmed	Technical College Maichew	Ethiopia	mtc@ethionet.et
Myriam Fernando	ECBP – GDC	Ethiopia	myriam.fernando@gtz.de
Ochan Okello	TVET coordinator	Ethiopia	

Name	Institution		E-mail
Oliver Ahnfeld	PLANCO Consulting GmbH	Germany	contact@planco.org
P.J. Rajapakshe	GTZ – REVO Project	Sri Lanka	
Phanuel Getahun	Construction Contractors Association of Ethiopia	Ethiopia	consass@ethionet.et
Robel Metiku	Technical College Maichew	Ethiopia	robelmetiku@walla.com
Roberto Niez	Jacobo Z. Gonzales Memorial School of Arts and Trades	Philippines	roberto_niez@yahoo.com
Romina Kochius	Bahir Dar University	Ethiopia	romina.kochius@yahoo.com
S.M. Samarakoon	GTZ – REVO Project	Sri Lanka	
Sappa Satta	TVET College Arbaminch	Ethiopia	
Seife G.Kirstos	Ethiopian Customs Authority	Ethiopia	customs@telcom.net.et
Seleyman Mohammed	Regional TVET Commissioner Harar	Ethiopia	
Semahagn Mengistu	Ministry of Water Resources	Ethiopia	
Shimeles Worku	World Bank	Ethiopia	sworku@worldbank.org
Sigrid Demeester	Association pour la Promotion de l'Education et de la Formation à l'Etranger (APEFE)	Rwanda	
Sister Almaz Siraj	Federal Ministry of Health (FMoH)	Ethiopia	
Solomon Hailu	General Wingate TVET College	Ethiopia	
Suleyman	Harari Education Bureau	Ethiopia	
Takele Alemu	Gender and Educational Equity Department Ministry of Education	Ethiopia	takalemu@yahoo.com
Tamiru Kassa	Seheen Business College	Ethiopia	tamiruteleke@yahoo.com
Tamrat Difabachew	Ministry of Agriculture and Rural Development, (MoARD)	Ethiopia	tdifaw@yahoo.com
Tesfaye Ayele	Universal Electricity Access Program (UEAP) of Ethiopian Electric Power Corporation (EEPCo)	Ethiopia	eikiretest@yahoo.com
Tesfaye Yeshanew	Tegbareid TVET College	Ethiopia	tesfaye-yeshanew@yahoo.com
Teshome Alemu	TVET College Asella	Ethiopia	
Teshome Zawde	Ethiopian Employers Federation	Ethiopia	
Tibebu Tegegne	Ministry of Education	Ethiopia	tibebu-t@yahoo.com
U. D. Kuruppu	Department of Technical Education	Sri Lanka	
Ute Hoffmann	GTZ	Rwanda	ute.hoffmann@gtz.de
Vladimir Gasskov	Skills and Employability Department International Labour Office (ILO)	Switzerland	gasskov@ilo.org
Wanda Moennig	Addis Abeba Education Bureau – TVET	Ethiopia	monnig@rocketmail.com
Wondu Demeke	Ministry of Education	Ethiopia	wondud2006@yahoo.com
Wondwossen Kiflu	ECBP – Ministry of Education	Ethiopia	wkiflu1962@yahoo.com
Wondwosen Tamrat	Private Higher Education Institution Association (PHEIA)	Ethiopia	smc@ethionet.et
Workineh Wubshet	Dire Dawa TVET College	Ethiopia	
Workneh G/ Selassie	Axum Business Service College	Ethiopia	workne2003@yahoo.com.
Yusuf Bachu	Uganda Association of Private Vocational Institutions	Uganda	yusufbachu2002@yahoo.co.uk

Acronyms

ADB	Asian Development Bank	MASAF	Malawi Social Action Fund
AIM	Asian Institute of Management (Philippines)	MCCI	Malawi Confederation of Chambers of Commerce and Industry
BIBB	Bundesinstitut für Berufsbildung (Federal Institute for Vocational Education and Training, Germany)	MIST	Marikina Institute of Science and Technology (Philippines)
BOTA	Botswana Training Authority	MITA	Malawi Industrial Training Association
BRIDEC	Brigades Development Centre (Botswana)	MK, MWK	Malawian Kwacha (approximately: 1 USD = 140 MWK; 1 EUR = 180 MWK)
BTVET	Business, technical and vocational education and training (Uganda)	MoA	Memorandum of agreement
CBET	Competence-based education and training	MoE	Ministry of Education (Ethiopia)
CBO	Community-based organisation	MoES	Ministry of Education and Sports (Uganda)
CBT	Competence-based training	MOOE	Maintenance and other operating expenses (Philippines)
CEO	Chief executive officer	MoU	Memorandum of understanding
CO	Capital outlay (Philippines)	MVTT	Ministry of Vocational and Technical Training (Sri Lanka)
CoT	Computer technology	NBCC	National Brigades Coordinating Committee (Botswana)
CY	Calendar year	NCC	National Crafts Certificate (Botswana)
DANIDA	Danish International Development Agency	NGO	Non-governmental organisation
DED	Deutscher Entwicklungsdienst (German Development Service)	NITE	National Institute of Technical Education (Sri Lanka)
DepEd	Department of Education (Philippines)	NQF	National Qualifications Framework
DIT	Directorate of Industrial Training (Uganda)	NVQ	National vocational qualifications (United Kingdom, Sri Lanka)
DIT	Department of Information Technology (Philippines)	NZ	New Zealand
DTET	Department of Technical Education and Training (Sri Lanka)	ODA	Official development assistance
DTS	Dual training system (Philippines)	OJTP	On-the-job-training programme (Malawi)
DVET	Department for Vocational Education and Training (Botswana)	PPP	Public-private partnership
EC	Ethiopian Calendar	PS	Personnel salary (Philippines)
ECBP	Engineering Capacity Building Program (Ethiopia)	PSTP	Private sector training programme (Malawi)
ECC	Ethiopian Chamber of Commerce	PTP	Private training provider
EEF	Ethiopian Employers Federation	REVO	Rehabilitation and Modernisation of TVET Institutions (Sri Lanka)
EFTSs	Equivalent full-time students	RM, MYR	Malaysian Ringgit (approximately: 1 USD = 3.5 MYR; 1 EUR = 4.59 MYR)
EMIA	Ethiopian Manufacturing Industries Association	RNPE	Revised National Policy on Education (Botswana)
EQF	European Qualifications Framework	ROI	Rate of return on investment
ESA	Education Standard Agency (Uganda)	SAC	Sector Advisory Committee (Malawi)
ETB	Ethiopian Birr (approximately: 1 USD = 8.9 ETB; 1 EUR = 11.5 ETB)	SCDP	Secondary Centres Development Project (Malawi)
ETQF	Ethiopian TVET Qualifications Framework	SDF	Skills Development Fund (Singapore, Malaysia)
EUR	Euro (approximately: 1 EUR = 11.5 ETB; 1 EUR = 1.3 USD)	SES	Senior Experten Service (Senior Experts Service, Germany)
GCE AL	General certificate of education advanced level (Sri Lanka)	SF	Special funding (Philippines)
GCE OL	General certificate of education ordinary level (Sri Lanka)	SGHs	Student guided hours
GDC	German Development Cooperation	SME	Small and medium enterprise
GNP	Gross national product	SNPL	Study Now, Pay Later scheme (Philippines)
GoE	Government of Ethiopia	SSE	Small-scale enterprise
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH (German Technical Cooperation)	TCC	Technical colleges (Sri Lanka)
HECS	Higher Education Contribution Scheme (Australia)	TDT	Technology Development & Training (Guarantee) Limited (Sri Lanka)
HRDF	Human Resources Development Fund (Singapore, Malaysia)	TESDA	Technical Education and Skills Development Authority (Philippines)
HRD	Human resources development	TEVET	Technical, entrepreneurial and vocational education and training (Malawi)
ICE	Information, education and communication (Malawi)	TEVETA	Technical, Entrepreneurial and Vocational Education and Training Authority (Malawi)
ICIA	Instituto de Capacitación de la Industria Azucarera (Training Institute of the Sugar Industry, Mexico)	TNA	Training needs analysis
ICIC	Instituto de Capacitación de la Industria de la Construcción (Training Institute for the Construction Industry, Mexico)	TQF	TVET Qualifications Framework
ICT	Information and communication technology	TVEC	Tertiary and Vocational Education Commission (Sri Lanka)
IGA	Income-generating activity	TVET	Technical and vocational education and training
ILO	International Labour Organisation/International Labour Office	UGAPRIVI	Uganda Association of Private Vocational Institutions
INBAS	Institut für berufliche Bildung, Arbeitsmarkt- und Sozialpolitik (Institute for Vocational Training, Labour Market and Social Policy, Germany)	UK	United Kingdom of Great Britain and Northern Ireland
InWEnt	Internationale Weiterbildung und Entwicklung (Capacity Building International, Germany)	UNEB	Uganda National Examination Board
JC	Junior Certificate (Botswana)	UNESCO	United Nations Educational, Scientific and Cultural Organization
JICA	Japan International Cooperation Agency	UNHCR	United Nations High Commissioner for Refugees
JZGMSAT	Jacobo Z. Gonzales Memorial School of Arts and Trades (Philippines)	UNICEF	United Nations Children's Fund
KfW	Kreditanstalt für Wiederaufbau	UPPET	Universal post primary education and training
KOICA	Korea International Cooperation Agency	USA	United States of America
LKR	Sri Lankan Rupee (approximately: 1 USD = 109 LKR; 1 EUR = 141 LKR)	USD (\$)	United States Dollar (approximately: 1 USD = 8.9 ETB; 1 USD = 0.77 EUR)
LTC	Lilongwe Technical College (Malawi)	UVQF	Ugandan Vocational Qualifications Framework
M&E	Monitoring and evaluation	VAT	Value added tax
		VET	Vocational education and training
		VMV	Vision, mission, values
		VTA	Vocational Training Authority (Sri Lanka)



Deutsche Gesellschaft für Technische
Zusammenarbeit (GTZ) GmbH

- German Technical Cooperation -

Deutsche Gesellschaft für Technische
Zusammenarbeit (GTZ) GmbH

Postfach 5180

65726 Eschborn

T +49 6196 79-0

F +49 6196 79-1115

E info@gtz.de

I www.gtz.de