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Strengthening Private Sector Participation in Philipppine Technical and Vocational Education and Training

Strategic Report

Isa Baud

R

Acknowledgements

The studies carried out for UNIDO and TESDA under the VTP II Project in the Philippines during 1995 - 96, have benefitted from the help of many people.

The UNIDO backstopping officers in Vienna provided ever-ready advice, and the members of the UNIDO office in Manila provided support during and between the missions of the University of Amsterdam Consortium team.

The combined international and national team for the studies have greatly enjoyed working with TESDA staff members under the excellent guidance of Ms. S. de la Rama. Their enthousiasm and whole-hearted support to all members of the teams and members of the Expert Panel has greatly impressed us.
The team has also benefitted greatly from the knowledge and guidance of the Director-General, Mr.J. Lacson, and the DDGs Ms.M.Hernandez and Ms.Guiang during the course of the study, and many thanks go to them.

On behalf of all the international team members in the UvA Consortium, I would like to acknowledge the pleasure with which we have worked together with the national consultants and survey teams during the hectic course of the three surveys carried out, and my admiration for the competence and energy with which the interviews were carried out and analyzed afterwards.
The excellent discussions with the members of the Expert Panel under the clear guidance of Dr. R. Diaz have greatly contributed to the practicality of the recommendations made.

Finally, as head of the UvA Consortium, I would like to thank my fellow team members for all their contributions, above and beyond the call of duty, to the success of this study. It has been a great pleasure to work with you.

Isa Baud
25 - 06 - 96

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List of Abbreviations and Figures

BLE	Burerau of Local Employment
BTVE	Bureau of Technical and Vocational Education
CCI	Chamber of Commerce and Industry
CHED	Department of Higher Education
DECS	Department of Education, Culture and Sports
DOLE	Department of Labour and Employment
DOST	Department of Science and Technology
DTI	Department of Trade and Industry
ECOP	Employers' Confederation of the Philippines
EDCOM	Congressional Commission on Education
GAA	General Appropriations Agreement
GATT-UR	General Agreement on Tariffs and Trade - Uruguay Round
GTZ	German Technical Assistance
HRD	Human Resource Development
IA	Industry Association
IB	Industry Board
ILO	International Labour Organization
LGU	Local Government Unit
LMI	Labour market information
NCR	National Capital Region
NGO	Non-governmental organisation
NMYC	National Manpower and Youth Council
ODA	Overseas Development Assistance
OJT	On-the-job training
PAPTI	Philippine Association of Private Training Institutions
PCCI	Philippine Chamber of Commerce and Industry
PESO	Public Employment Office
SAT	School of Arts and Trades
SSRs	Staff:Student ratios
SUC	State University and College
TAC	Training Assistance Contract
TCS	Training Contract Scheme
TEI	Technical Education Institute
TI	Training Institution
TVET	Technical and Vocational Education and Training
TESDA	Technical Education and Skills Development Authority
VTP II	Vocational Training Project II (World Bank)

Figure 1: Increasing Private Sector Participation in TVET: A new Partnership

EXECUTIVE SUMMARY: INCREASING PRIVATE SECTOR PARTICIPATION IN TECHNICAL EDUCATION & VOCATIONAL TRAINING

1. The surveys show no strong case for the wholesale transfer of public sector training facilities to the private sector. There is more evidence for adopting strategies at local and national levels which greatly increase the involvement of the private sector in planning and delivery of technical and vocational training, pointing to a new partnership between public and private sectors in planning and delivery of TVET.

2. There are six areas where action should be taken to implement this partnership and increase private sector participation in TVET. They are:

   i. strategic planning and institutional governance
   ii. finance and cost-sharing
   iii. improving training provision
   iv. monitoring & evaluation
   v. labor market information
   vi. training for industrial competitiveness.

   Each is considered in turn. Together they form an action plan for each of the main partners (Figure One).

A. STRATEGIC PLANNING AND INSTITUTIONAL GOVERNANCE

3. The TESDA Law of 1994 and the Dual Training Act of 1994 have both contributed to a new governing structure for TVET. The recommendations in this section focus on TESDA's new role in planning for public and private TVET, in partnership with industry, private and public sector training providers, and intermediate bodies as envisaged in the legislation.

4. At the heart of these changes are the twin processes of rationalisation and devolution. Moving the responsibility for TVET closer to the point of delivery should enable training provision to be both more relevant and efficient. Local needs can most readily be identified and delivered locally, and opportunities for economies of operation can best be recognised locally. Our recommendations are that industry, through industrial firms and intermediate bodies, should be centrally involved at a local level to stimulate both responsiveness and efficiency.

5. Filipino industry already makes a considerable contribution to the provision of the nation's TVET. Many industries have invested in training facilities; many more support training through on-the-job-training, donations and skills definitions. We believe that this represents a sound base on which to build new TVET partnerships.

6. Intermediate organisations, including industry associations, NGOs and professional bodies, provide valued links between industry sectors and training providers. A subsidiary report from this project outlines the processes whereby sector-specific centers might be selected.

Recommendations for Increasing Private Sector Participation in TVET / 2

FINANCE	* tender for capacity-building govt. loans * co-management of govt. TIs through Boards of Trustees	* fund-raising for sector-specific training	* scholarships for pre-entry * training loans for employees	* tender for govt. loans for capacity building * training contracts with TESDA * co-management of govt. TIs	* local financial management through Boards of Trustees * incentives for income generation * incentives for efficiency gains	* TVET funding through TESDA * monitoring for efficiency & probity * national system of scholarships & loans * training loans for firms & private TIs * DOST/DTI funds (inc. GATT) for training responses to new technologies in firms & TIs
LABOR MARKET INFORMATION	* provide information to Boards of Trustees * use LMI for HRD planning * information & visits for trainees on careers, job requirements & work ethics	* monitor & publish industry trends & emerging needs * facilitate visits to firms & other information for potential trainees	* LMI as guidance on job opportunities, career routes, training requirements & industrial employment/values *	* collect/use local LMI for planning * invest in own capacity to collect/use LMI * disseminate information to firms on trainee throughput & other services	* collect/use local LMI for planning * invest in own capacity to collect/use LMI * disseminate information to firms on trainee throughput & other services	* national LMI collected/published through' TESDA * provide training in LMI techniques & systems * reinforce TESDA capabilities as a 'learning organisation'
TRAINING FOR INDUSTRIAL COMPETITIVE-NESS	* capability building for new technologies & production systems, including common facilities centers * extend firm-based training * review skills definitions in response to innovation * SMEs work through local networks & shared facilities centers	* inform industries & TIs on new technologies, production systems & quality control * specify curriculum upgrading NEEDS * lobby govt. for support for emerging technologies/systems	* access to skills upgrading & laddersation	* liaise with industry on curriculum upgrading * offer 'new skills' bursaries * upgrade instructors through OJT * joint programs with firm-based centers	* upgrade instructors through OJT * joint programs with firm-based centers	* TESDA work with DTI/DOST to upgrade training in line with new technologies * assist development of sector-specific advanced training centers * DOST/DTI to pick & publicise 'new technology winners' through TESDA * inform industries & TIs on new technologies, production systems & quality control

INCREASING PRIVATE SECTOR PARTICIPATION IN TVET: A NEW PARTNERSHIP

Recommendations from University of Amsterdam Consortium/UNIDO VTP II Sector Survey

	FIRMS	INTERMEDIATE BODIES	TRAINEES	PRIVATE TRAINING INSTITUTIONS	PUBLIC TRAINING INSTITUTIONS	GOVERNMENT
STRATEGIC PLANNING & GOVERNANCE	* industry-led Boards of Trustees for govt. TIs * defining training needs	* sector-wide TVET planning with govt	* take-up & demand * local & national LMI as planning tools	* membership of Boards of Trustees * helping to define training needs	* governed by Boards of Trustees * helping to define training needs	* national TVET planning by TESDA with industry assocs. & firms * setting minimum standards for programs & instructors * rationalise & expand TVET scholarship & loans systems
TRAINING PROVISION: - schools - dual systems/ apprenticeships - firm-based training	* contribute to curriculum design * contribute to national skills definitions * membership of industry-led Boards of Trustees * provide high quality OJT, Dual Training & apprenticeships with training element * firm-based capacity-building training provision with govt. help	* skills definitions & certification * Board of Trustees membership * Industry Board membership * articulate collective sector needs * promote shared facilities for SMEs	* entitlement to: - access to training through scholarships - apprenticeships with training element - choice of training through relevant, accurate information - OJT as training component - equality of access	* build in more OJT * more Dual Training * more integration with industry * instructors with industry experience & qualifications	* more specialisation * build in more OJT * more Dual Training * more integration with industry * instructors with industry experience & qualifications	* amend Dual Training & apprenticeship legislation & rules * phased withdrawal from direct provision * build National Skills Certification linked to school certificates & unit-based competences * promote more Dual Training * targeted access to selected programs through scholarships & loans * upgrade TESDA planning capabilities
MONITORING & EVALUATION	* monitor performance of TIs through Boards of Trustees * benchmarking nationally & internationally	* monitor performance of TI & firms using Boards of Trustees * develop Dual Training manual	* enrolment, wastage & success rate monitored * trainee satisfaction surveys * destination surveys	* performance surveys * develop Dual Training manual * program monitoring by Boards of Trustees	* performance surveys * financial & program monitoring by Boards & TESDA * develop Dual Training manual	* regulations for national monitoring system * monitoring minimum standards for programs & instructors * financial & planning monitoring in TIs * publish Dual Training manual * monitoring OJT, Dual System & training element of apprenticeships * upgrade TESDA monitoring capabilities * commission evaluations

7. We have examined the barriers to taking further TESDA's current policy of devolution. They are substantial, but not insurmountable. We believe that the devolution principle be extended to government training institutions, by means of a phased strategy for government institutions take on more financial autonomy under the aegis of the Boards of Trustees. This should go hand in hand with new responsibilities for institutional managers.

8. The government's role in this revised planning and governance structure is more sharply focused on macro-planning and quality control for the TVET sector. An integrated and effective TVET system demands that the activities of all contributors, firms, public and private training institutions are carefully coordinated in line with national priorities.

9. **Recommendations**

Industry should be invited to become more centrally involved in TVET planning at local levels, by taking the lead in new local BOARDS OF TRUSTEES. These would take responsibility for TVET planning and analyses of training needs at the local level, and in particular for the performance of government training institutions. They should comprise representatives of local industry and business along with TESDA regional officers, local government representatives and representatives of the private training sector. Board members would normally be appointed for single large institutions, but areas served by several small institutions should have a single Board. They should be appointed by TESDA for a fixed term, possibly three years, and their performance should be monitored by TESDA as a part of its sectoral monitoring responsibilities.

The tasks of the Boards of Trustees should be to:

* review the annual income and expenditure proposals of institutional managers in the form of a business plan, and when satisfied as to their feasibility submit them to TESDA for formal approval;
* receive regular reports from the institution's chief executive on the extent to which the organisational and financial objectives of the business plan are being achieved;
* review the extent to which the institution collects and uses information about its local labor market in order to update and modify the range of services it offers to its customers; and
* monitor the institution's personnel and HRD policies and report to the chief executive and TESDA where these are thought to be not in keeping with best private sector practice.

Intermediate bodies have a central planning and management role in the development of sector-specific training centers, working with TESDA, individual firms and training providers to identify and develop appropriate specialised provision for the sector.

Private training institutions should participate with firms in the proposed Training Boards of Trustees, with whom they should work in defining local training needs.

Government training institutions should be freed from the restrictive regulatory framework which our evidence suggests inhibits their ability to improve either their efficiency or their effectiveness. They should be governed by industry-led Boards of Trustees, as indicated above.

Government. TESDA, working with firms, training institutions and intermediate bodies, should provide the overall regulatory framework under which the Boards of Trustees would operate. It should set minimum standards, including those for training programs and instructors in both public and private sectors, and rationalise the currently fragmented system of support for trainees and industry, including scholarships, contracts and loans. We recommend that the planning function at TESDA is reinforced in line with later recommendations concerning labor market information and monitoring/evaluation, so that it can provide a regular information and planning service to training providers, employers and other government agencies.

B. TRAINING PROVISION

10. The main findings on the range of training provisions - from institutions, the dual system/apprenticeship, and firm-based training - for manufacturing industry. These indicate that public institutions have a wider range of training courses than do private ones. In terms of inputs, the teachers/instructors in the 4 sub-sectors covered largely have second class skills certificates. Not many institutions have new technology equipment (except electronics programmes). The course programmes are mainly regular pre-technician and technician level, and students are high school graduates. There is little diversification in target groups or product range. Dropout rates are generally at acceptable levels, and instructor turnover is usually low.

11. There is high participation from industry in Board representation of training institutions, curriculum planning and placement for OJT, sponsorship of trainees by industry, and donations of equipment. The use of trade testing and skills standards is limited; certification is related to institutions. The dual training institutions are a new, specialized and highly qualified group, with more diversified product range, better equipped and more integrated industry-institutions relationships, catering mainly for occupations with a high knowledge content. They receive much outside aid. The Dual Training System is very promising even if its general replicability is not yet assured.

12. The apprenticeship system functions more as 'employment' than as training, and is limited in its effectiveness by length of time and trades covered in the legislation. The legislation relating to apprenticeship needs radical change, although the system is still required, especially in craft occupations. Registration of dual training students and apprentices, and monitoring and evaluation of the system is weak.

13. Large firms, especially in electronics, are more training focused than small family firms, recruiting from public and private TVET institutions. Training for employees is done largely in-house; especially on instalment of new machinery. One third of firms have in-house HRD units, HRD plans and budgets and positions for training. Almost half the firms take apprentices and students for OJT. Participation in the training contract scheme, in developing curricula at local training institutions, and knowledge concerning incentive schemes for training is significantly lower.

14. **Recommendations**

Industry should contribute to curriculum planning at national and local level, to national skills definitions with TESDA. Firms should contribute to managing training institutions through membership on their Boards of Trustees, and to the Dual Training system through expansion of capacity to provide high-quality training linked to OJT, dual training and apprenticeship programmes.

Intermediate organisations should contribute to training provision through skills definition and certification; they should be members of training institution Boards, and clearly express the collective need for training to outside training institutions.

Potential trainees should have improved access to training through scholarships. They should also be able to make more informed choices on training programmes through relevant and accurate information.

Current trainees are entitled to apprenticeships with a clear training element, and OJT as training component.

Private and public training institutions should build in more OJT and dual training, more integration with industry, and supply instructors with industry experience and higher qualifications.

Government should improve accreditation and link school certificates to National Skill Certification program, making trade tests a compulsory component of TVET qualifications. This should be based on unit-based competencies. In regard to the dual training system and apprenticeship, the government should

consolidate and clarify primary law and regulations. The regulations on the Dual System should be adjusted to permit variable proportion of in-school and in-firm training and variable durations.

TESDA should have a phased withdrawal from direct training; and develop a system of grants or contracts between itself and private sector training providers to respond more efficiently to emerging industry needs. TESDA should provide targeted access to programmes through scholarships and loans.

C. MONITORING, EVALUATION AND RESEARCH

15. TESDA has the authority but has not yet fully operationalized the coordination and monitoring for the National Middle Level Manpower Skills Development Programme and incentive schemes aimed at strengthening the TVET sector. Industries contribute to monitoring the quality of training through membership of TI Boards, and benchmarking among themselves.

16. **Recommendations**

Industry firms and intermediate organisations should monitor the performance of TIs through Board membership, and benchmark firm training nationally and internationally.

Private and public training institutions should develop a Dual Training manual for newly starting TIs, and carry out financial and programme monitoring through their Boards (and with TESDA).

A capacity building program in **TESDA**, including the pilot monitoring program being built up, and focusing on less well-known areas such as quality of training in apprenticeship, dual training and OJT, improving labour market information systems (especially on enrolment, wastage and success rates, satisfaction surveys, and destination studies to monitoring 'trainee evaluation').

TESDA should develop and monitor adherence to minimum standards for programmes and instructors.

D. FINANCE AND COST-SHARING

17. The evidence of this project has indicated that it is possible to improve the flow of funds to the public and private TVET systems and to utilise those funds more efficiently. We make recommendations for enhancing the effectiveness of the TVET systems by implementing financial and non-financial strategies designed to improve the responsiveness of TVET providers to labor market needs. They are directed at three aspects of institutional and enterprise based TVET - cost recovery strategies; internal efficiency strategies and externally-focused effectiveness strategies.

18. Our research has pointed to the considerable investment already being made by many enterprises in training. Our recommendations are designed to extend and focus that involvement, both by reinforcing them through targeted government support and by encouraging their adoption more widely across the private and public sector. We have considered carefully and rejected proposals for the introduction of tax-driven systems to promote training and other forms of employee welfare. Our evidence indicates that levy-grants and other tax-based funding mechanisms are extremely unpopular with employers, so that their introduction would be strongly resisted. It would be indeed unfortunate if measures imposed on industry dissipated the undoubted goodwill which we have identified amongst employers to support TVET.

19. We seek to make more widely available the facilities and human resources being deployed by the private sector for training in firms and private institutions, and to utilise private sector expertise in the governance of government training facilities through the Boards of Trustees.

20. The financial contributions of intermediate bodies are likely to focus on fund-raising for the provision of sector-specific training. This might involve the upgrading of public or private training facilities, and requires a partnership between firms, intermediate bodies, current providers and the government.

21. Government training institutions are constrained by the existing restrictive financial regulatory framework, as indicated above.

22. The recruitment of good quality trainees and students into TVET is currently fraught with many problems, including financial disincentives. The existing schemes for trainee support tend to benefit secondary school and higher education students rather than TVET trainees. We believe that a distinct and attractive system for student support should be created out of the current fragmented structure of grants and vouchers, and that this is coordinated through TESDA.

23. There is a vital role for central government in managing the reformed financial system we propose. Careful monitoring, for efficiency as well as probity, is essential, and TESDA will need to reinforce its capabilities to undertake that work, in conjunction with the Commission for Audit. The training loans and scholarships need careful planning, and this argues for substantial upgrading of the financial arm of TESDA and the establishment of a new organisational component in TESDA.

24. **Recommendations**

Industry. To encourage investments which build upon the existing facilities, we propose that carefully targeted government loans be made available for selected capacity-building developments in firms and in private training institutions. Such investment would be on a matched cost basis and would represent a very efficient use of resources. We recommend that these resources are provided by the government, through TESDA. They should be generated by efficiency savings within the government training sector.
The loans should not be available for recurrent costs, except for the special cases of innovative programs and in these cases for a fixed pilot period. However, tax credits should be available for recurrent costs made in opening firms' training facilities to others.

Strict conditions should be attached to the loans. These should include the requirement that (capital) facilities developed with the help of the loans should be available to trainees other than those employed by the firm receiving the grant, or, in the case of a private training institution, to trainees from other institutions (public and private). TESDA should prepare the codes governing joint use of loan-funded facilities. Loans should not normally be available to any one training provider for more than two consecutive years, and the repayment conditions should be clearly specified. TESDA might wish to relate repayment to trainee success, whereby only a proportion of the loan is repayable should specified success levels be achieved.

Trainees. Scholarships should be available for deserving students entering pre-employment training, while loans should be made available to trainees in employment, on the principle that the beneficiaries should eventually pay for the benefits acquired through training.

Private training institutions should, like firms, have the opportunity to tender for government loans to build training capacity. The conditions indicated above should also apply to training institutions. We also recommend that a new system of training contracts be developed by TESDA, whereby private training institutions contract with TESDA to deliver a given volume of training in specified areas and with specified groups of trainees. Repayment would be required if the training provider failed to deliver the contract, measured by volume and quality (in terms of success rates) as per the contract.

Government training institutions, under the tutelage of the Boards, would operate to a one-line budget allocation from TESDA, based on the approval by TESDA of a business plan specifying the numbers of trainees, range of courses, anticipated success rates, and income generating policies, along with strategies

for cost reduction and improved efficiency. Their dependence on public funds would be reduced by insistence of more income generation and on efficiency gains. Greater autonomy based on increased efficiency should also lead to cost savings. Ways must be sought to provide access to existing facilities and equipment on industrial premises, including on-the-job training and Dual Training.

TESDA must also work closely with other government departments, and particularly DOST and DTI, in ensuring that wherever resources for technological upgrading and improved competitiveness are allocated, so that the TVET components of relevant development projects is not overlooked and is targeted in line with other investment strategies for TVET. A specific task for TESDA arises from the very wide range of unit costs and staff:student ratios (SSRs) across the TVET sector. The reasons why these vary so widely needs to be better understood. We recommend that TESDA should undertake or commission a small scale investigation of selected "matched pairs" of institutions. Institutions of broadly similar sizes which carry out similar training activities but at very different unit costs/ SSRs should be investigated to:

- identify the main reasons for the differences; and
- point to good practice strategies which enable the lower cost institutions operate more efficiently than its 'matched pair' institution.

E. LABOUR MARKET INFORMATION

25. The LMI system is largely oriented to the public sector in terms both of its contents and products and of its dissemination. Industrial training users of LMI (firms, training institutions, trainees and job-seekers) hardly find it relevant or useful. Much LMI is not recognised as such (for example a readily available list of local or sub-sector training facilities) and is not available. However TESDA receives regular information from training institutions which is used for planning purposes.

26. No government-organised career guidance for trainees is available or accessible apart from a small effort by DOLE. Trainees are not properly informed concerning the world of work and particular career and job prospects; they rely predominantly on informal methods to make their choice of programmes and institutions.

27. **Recommendations**

Firms should (1) work with local or sub-sectoral training institutions to develop the LMI system which they require; (2) provide employment information and plans to Boards of Trustees and the training sector in general; also to potential and current trainees (e.g. through factory visits, work experience, managers taking classes); (3) use LMI for HRD planning purposes.

Intermediate organisations should monitor and publish industry trends and emerging needs for knowledge and skill.

Trainees should learn to use LMI as guidance on industrial employment and values, training, education and career routes, job opportunities and their associated training requirements.

Private and public training institutions should (1) collect and use local LMI for planning and invest in their own capacity to do so; (2) work with firms on developing systematic LMI to suit local or sub-sectoral needs; (3) provide information to intermediate organisations and firms on enrolment and output.

Government through DOLE and TESDA may wish (1) to develop the structure and scope of LMI so that it is comprehensive, understandable and useful to all users; (2) to institute training in the collection and analysis of LMI and (especially) its dissemination by various media and its application for planning and information purposes; (3) to promote and improve the collection, analysis and application of LMI on a national basis.

F. TRAINING FOR INDUSTRIAL COMPETITIVENESS

28. Higher technology firms are generally larger, more export-oriented and exhibit higher levels of training and skills development than lower technology. However there are signs of increased attention to training among low technology firms who are planning to upgrade technology.

29. There is little evidence in firms of any size that attention is being given to job redesign and competence definition in parallel with technology and production system development.

30. Both the awareness of government training schemes as well as the use of such schemes is lowest among smaller firms.

31. **Recommendations**

Firms should (1) build capability for training for new technology and production systems, including common facilities centres; (2) extend firm-based training into new areas; (3) support redevelopment of national job design and competence definitions; (4) contribute to the technology and knowledge base of training institutions. In these areas smaller firms should work through local networks, intermediate organisations and Boards of Trustees.

Intermediate organisations should (1) keep firms and training institutions informed on new technology, production systems, process and product quality management, etc.; (2) specify new curriculum requirements to TESDA and training institutions; (3) contribute to formation of government support policies for emerging technologies and systems.

Trainees to have access to skill and knowledge acquisition and continuous development in line with new technology and production systems, from their years of basic education onwards.

Private training institutions should (1) maintain close contact with industry on curriculum upgrading with emphasis on the necessary lead time; (2) offer 'new skills' bursaries in collaboration with industry; (3) keep instructors up to date through courses and attachments to industry; (4) offer joint programmes with firm-based or sub-sector training centres.

Public training institutions should (1) maintain close contact with industry on curriculum upgrading with emphasis on the necessary lead time; (2) keep instructors up to date through courses and attachments to industry; (3) offer joint programmes with firm-based or sub-sector training centres.

Government may wish through TESDA, DTI and DOST to fund research and development of training responses to new technologies and production systems and contribute to the implementation of this training in firms and training institutions. TESDA should work with DTI and DOST to upgrade training in line with new technologies, in particular through the development of advanced training centres (sector-specific or generic).

SECTION 1. BACKGROUND AND JUSTIFICATION: THE CHANGING SCENE IN THE PHILIPPINES

1.1 Introduction

1. The focus of this study has been to consider ways in which private sector participation in vocational training and technical education can be increased. It is felt that the roles of the state and the private sector in catering for industrial human resource development are changing fundamentally, such that the private sector should be involved more fully in shaping the human resource development agenda and in sharing its costs.

2. The study is part of the Philippines Vocational Training Project II financed by the World Bank. The VTP II project is designed to upgrade Philippine TVET in its major aspects, and improve its links with the employers who are its main clients.

3. The original intention of what was called 'the sector study' was to cover all vocational training and technical education provision, but in the course of the project formulation with TESDA, this was divided into two areas; TVET directed towards enterprises employing more than ten people and entrepreneurship development programmes in rural areas through LGUs. With UNIDO as main subcontractor to TESDA for the study covering the first area, this was narrowed to a focus on manufacturing industry-related training in three important industry sub-sectors (garments, electronics, automotive and metals engineering).

4. There are several good reasons for looking at increased private sector participation in TVET at this time. First, the Philippine economy is growing again at fairly steady rates of up to 5% annually[1], which means that skilled labour will be required in greater numbers in the near future. It is important to the Philippines that economic growth remain steady, as the growth of the population still remains high at 2.3%, and the growth of the labour force was expected to be about 850,000 from 1990 onwards, which would require employment growth of nearly 4% only to absorb the openly unemployed (ILO,1990). Open unemployment was around 10% in 1990, and one-third of the labour force was underemployed.

5. Secondly, strong growth is taking place in the South-East Asian region, which has implications for the position of the Philippines in the regional division of labour. The Philippines will, for example, find it increasingly difficult to compete with China and Indonesia in attracting labour-intensive industries because of its relatively higher wage levels in comparison with those countries.

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[1]. The growth rates are average annual growth rates (Orbeta Jr., 1995), based on the Philippine Statistical Yearbook, various issues, and the most recent figures from the National Statistical Office (personal communication).

6. On the other hand, the labour market shortages which are increasing in other parts of the region may lead to medium-level skills industries relocating to the Philippines. Both trends mean that increasing skilled manpower in the Philippines is rapidly becoming more important as an element in building up the economy towards newly industrializing country status, which is the expressed aim of the current Medium-Term Plan 1993 - 1998.

7. Thirdly, economic growth and the skilled employment generated can contribute to poverty reduction in an indirect manner. Poverty in the Philippines has been a function of a highly inequitable distribution of income and assets (higher than comparable countries in the region (World Bank, 1995)), and a reflection of the import substitution development strategies followed until the structural reforms of the 1980s, which discriminated against labour. The poor have also had limited access to quality basic education, which has limited their productivity afterwards. However, the depth of poverty is relatively small, with the average poor person having an income equivalent to 83% of the poverty line. This finding suggests that, at least in urban areas, improving someone's skills and productivity may well have the potential to pull them above the poverty line.

8. Fourthly, the establishment of TESDA as central government agency, combining the activities of previously three separate government departments or agencies, means that the integration and future rationalisation of TVET provision has received a very beneficial boost.

1.2 Industrial policies

9. The Philippines have followed an import substitution model up to the 1980s. Although export promotion was initiated in the 1970s through establishment of export processing zones, most trade and investment policies still favoured domestic industries until the late 1980s (Orbeta Jr., 1995). Since then, a series of trade liberalization programmes have been introduced, although there have been postponement periods as a result of current account problems.

10. The import substitution model has been seen as a major factor in the lack of growth in the Philippines (Medalla et al, 1994). The industrial policies followed were characterized by high tariff barriers and fiscal incentives which strongly protected domestic industry. Trade liberalization and restructuring of incentives have been stepped up after 1986, and may further accelerate with the recent accession to the GATT-Uruguay round of agreements.

11. The current structural adjustment programme runs from 1991 through 1995. The programme has reduced the maximum tariff rate to 50 percent, and reduced the number of tariff tiers to 4. The largest reduction in average tariffs is in manufacturing, which declines from 20% to 14% in 1995 (a 27% drop) (ILO, 1995). A recently approved Executive Order (204) further reduces tariffs beyond the GATT

commitments in the textile industry, in exchange for which the Philippines obtained tariff concessions from its trading partners. In industrial products, Japan, the US, and the European Union have respectively agreed to reduce tariffs by 56%, 35%, and 34% (ILO,1995).

12. In 1991 the Foreign Investment Act granted 100% foreign ownership to export-oriented enterprises and reduced the qualifying output level to 60%. The foreign exchange market was liberalized in 1992 by increasing retention of export receipts by commodity up to 40%, increasing access of exporters to foreign currency deposit systems, and liberalizing non-trade foreign exchange regulations. This was followed in 1993 by removal of mandatory surrender requirements for exporters. Since 1994 foreign banks have allowed to establish branches in the country and buy into existing local banks.

13. The government has also privatized government-owned and controlled large corporations in several sectors, including oil, shipbuilding, and mining. It has also dismantled barriers to entry in long-protected industries such as telecommunications, transport, and cement (Orbeta Jr., 1995). Finally, the government has reduced the costs of building infrastructural facilities for industry growth, through its programme of privately sponsored industrial estates.

1.3 Effects of the GATT-UR agreements

14. The recent GATT-UR agreements ratified by the Philippine government are expected to have a overall positive effect on output and employment (ILO, 1995)[2]. Projections from a simulation model indicate that the tariff changes have very little effect on sectoral output and employment. The effects from expansion of volume of world trade are expected to be much greater. All but two sectors register significant output increases. In the manufacturing sector, the most substantial increases are in garments (more than 590%), textile knitting (214%) and semi-conductors (114%) (ILO,1995).

15. In the projection, the majority of the fifty sub-sectors registered substantial increases in employment. In the manufacturing industry, the main growth sector was garments (> 32,000)[3]. Of the seventeen sub-sectors which registered negative employment growth, the majority suffered from factor substitution, as output grew. In manufacturing, they include paper products, metal products and non-electrical

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[2]. A recent ILO Technical Paper discusses three types of changes and realignments that can be expected in the world economy which can affect the Philippine economy from 1995 - 2005. These are: (a) changes in the tariff structure of the economy as a result of Philippine commitments to GATT-UR; (b) the expected expansion of volume of world trade as countries adjust their respective trade protection structures: and (c) expected changes in world export and import prices as a result of the realignment of trade and non-trade barriers (ILO, 1995).

[3]. Other sectors with large growth in employment include: other commercial crops(>23,000), marine fishing (9,000), transport and commercial services (>17,000) (ILO, 1995).

machineries, and construction[4]. The major shift in manufacturing employment is from import-oriented light manufacturing towards export-oriented light manufacturing (ILO,1995).

16. Although there is displacement in some sectors, the overall employment effect is positive. The expected net increase in employment is 115,000 average annually, over a ten-year period.

1.4 Structure of manufacturing sector

17. In 1993, the manufacturing sector consisted of 11,000 establishments[5] employing almost a million people. Major sectors of employment are the garment industry with 161,609 people employed in 1722 firms, manufacture of electrical machinery and appliances with 98,645 people employed in 265 firms, and food manufacturing with 93,500 people employed in 1924 firms (National Statistics Office, 1993).

18. Average size of firm by employment varies among the industry groups as follows: garments 94 people, electrical machinery and appliances 372 people, and food manufacturing 49 people. The other two sectors covered in the study are machinery manufacturing except electrical, with 19,873 people employed in firms whose average size of employment was 41, and the manufacturing of transport equipment, with 23,920 people employed in firms of an average employment size of 93.

1.5 Employment trends

19. The 1993 labour force comprises almost 65% of the working age population, and totalled around 23 million people. Sixty-three percent were men and 37% women in both rural and urban areas. In urban areas, however, the rate of employment was somewhat lower than in rural areas. Almost half of all employment is still found in agriculture. Slightly more than twenty percent of the labour force are employed in industry as a whole, and half of that are in manufacturing. The tertiary sector absorbs the remaining third of the employed labour force.

20. Employment trends over the past fifteen years have shown a pattern in which industrial employment has remained quite stagnant in the eighties, despite the growth of industrial production to a share of 35% in gross domestic product in 1994 (Orbeta,1995). The tertiary sector was relatively stable at around 40%, and its contribution to employment has increased steadily up to 34% in 1994.

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4. The paper products sector employs almost 2% of manufacturing employment; the metal products slightly more than 3%, and the non-electrical machines sector 2%. This implies that less than 10% of manufacturing employment will be affected.

5 Establishments with on average ten or more employees are covered by the National Statistical Office.

1.6 Changes in the TVET Sector

21. The TVET sector has undergone major changes in the 1990s. The National Committee on Education (EDCOM) which analyzed the Philippine education system in its entirety, proposed the amalgamation of three sections of government involved in TVET in the Technical Education Skills Development Authority (TESDA) in order to strengthen and streamline its functioning. The sections came from DECS (the BVTE) and the NMYC (DOLE); bringing them together has reduced the previous competition between them. The Bureau of Apprenticeship from within DOLE was the third section included. Not all TVET comes under TESDA; a number of educational institutions, such as the state universities and colleges (SUCs) also providing TVET still come under CHED.

22. The World Bank has provided two loans to the Philippines TVET sector through NMYC and now TESDA, the first of which was designed to increase the outreach of the then NMYC to the whole of the Philippines and the second designed to improve relationships with the private sector through a number of new linkages. These include the Training Contract Scheme to develop linkages with firms, the Technical Advisory Committees to have industry representation in training institutions, and the Productivity Scheme to increase firms' training focus.

23. These trends combined suggest that the Philippines has the opportunity to make the leap to newly industrializing country status indicated in its Medium Term Plan, provided it makes use of the potential provided by the recent changes in training provision and economic policies.

SECTION 2. SCOPE OF THE STUDY: INCREASING PARTICIPATION BY THE PRIVATE SECTOR IN PHILIPPINE TECHNICAL EDUCATION AND VOCATIONAL TRAINING

2.1 The main question

24. The main question of this study focuses on increased participation of the private sector in the technical education and vocational training system in order to increase industrial competitiveness. The basic assumption is that through such private sector involvement in setting the HRD agenda and sharing the costs, the match between supply of trained manpower and demand from employers for the same will be improved.

25. The original phrasing of the main question was the 'transfer' of responsibility for HRD to the private sector; however, there was no evidence to suggest that such a wholesale shift would be feasible or welcome to any of the main actors in the Philippines. In addition, 85% of all existing vocational training is already provided through private training institutions, not including the training provided by firms themselves. Therefore, the question was rephrased to 'increased participation' of the private sector - both training institutions and private sector firms. Participation, as indicated above, includes both qualitative aspects - such as more say in setting the training agenda and developing new training strategies - as well as increase in numbers and coverage.

26. There have been two main approaches to such a question taken. The classical one is that of manpower planning, which was the dominant framework for many years, but which has been discredited in its form of planning down to exact numbers of people required by occupation for each industry sub-sector (Lauglo, 1993). The opposite free market approach has been heavily espoused by the World Bank in recent years, notably in its policy paper on Vocational and Technical Education and Training (1991).

27. Recently, a third approach seems to be emerging from the literature, which differentiates between different labour market segments, with their own characteristics and requirements (Lauglo, 1993). This seems to be a useful approach because it has the potential to take into account not only the requirements of occupations in the various labour market segments, but can also be extended further to differentiate between the extent to which firms of different sizes and market niches can participate in vocational training. This can be most useful to policy planners with a variety of target groups, and to the Philippines in particular, with its large regional differences with which policy makers have to contend.

28. In order to come to grips with it, the main question needs to be unravelled in its component parts of 'main actors' and 'aspects of participation', so that in the end, alternative scenarios can be analyzed and practical proposals put forward.

29. There are several major actors in the area of vocational training systems: the government, training institutions of various types, the employers who absorb the people who have gone through the system, the intermediate organisations of industry and professional associations (setting standards) and labour associations protecting employees' rights, and the trainees themselves (including potential, current, and past trainees). The systems analysis model indicates the relationships between the different groups involved in the Philippines (Figure 1 - the Systems Analysis Model).

30. Secondly, the aspects through which the major actors participate and the ways in which they are linked together need to be known. Only then can the question be posed which aspects can be shifted, and what options for change are the most likely to succeed. These areas are as follows:

* **governance, policy and the legislative framework**
* **finance and cost-sharing**
* **managing and delivering training provision**
* **quality assurance and standard setting**
* **monitoring provision and evaluation of outcomes**
* **use of training by firms to improve industrial competitiveness**

2.2 Raising the specific issues

31. The study raised specific issues from the viewpoints of the major actors. For employers, their demand for qualifications at various occupational levels, expressed through their hiring and training practices is a first question. Secondly, the relative contribution by private and public sector training and training provided by firms is a second specific issue. The incentives and impediments to training by employers and what intermediate organisations can do to smooth the process is a third issue. A fourth question is how technological innovation and new forms of work organisation influence TVET demand from firms. A final question is the areas in which employers are willing to contribute to the training system in cooperation with government and other actors.

32. For training institutions, a major issue was the devolution process going on within the government, and the consequences for existing public and private training institutions in terms of diversification of products and funding/revenues. A second question concerns the role of external support in the current TVET reform strategy. A third question concerns the results of recent attempts to increase linkages between skill development and industry utilization. Finally, the new initiatives coming under various forms of 'dual system' are analyzed.

33. Among the trainees, a first issue concerned the social factors determining people's choice of training. A second question concerned the efficiency and effectiveness of the labour market information system in giving the right signals to people choosing training and/or looking for jobs. A third question concerns the relationship between skill type, training institution and the particular labour market segment to which it gives access. A fourth question concerns skills, training provision and the degree of job mobility which it provides.

34. The level of investment in training provision by each is an issue for all actors. The flow of funds and how they can be shifted to increase private sector participation, such that its implementation is also supported by private industry is a final specific issue to be explored.

2.3 Research methodology

35. The research approach was designed to elicit activities and views of the various actors in the TVET system, and to develop strategies for the future in consultation with them. A variety of methods were used: (a) background studies provided by TESDA, (b) field surveys in four regions in order to obtain a well-founded overview of the situation in the field, (c) a study tour of selected Latin American countries, to compare the results of the longer privatisation process in the TVET sector there, and (d) consultations with a Philippine Expert Panel in order to test conclusions and develop strategies for implementation.

36. The background studies concerned four areas: (a) technical teacher and trainer education and training, (b) financing of TVET, (c) the role of private TVET institutions, and (d) TVET in the public and private formal sector. They have been based on primary and secondary data, and a number of key interviews.

37. The field surveys were set up so as to elicit the activities and views of firms, training institutions, potential and current 'trainees', and graduates in relation to each other. In order to achieve real 'triangulation', a selection was made of industry sub-sectors important to Philippines development, the training provision related to them, and the people involved in undergoing such training.

38. The following choices and operational definitions were used in the field surveys. Technical vocational education and training was defined as including "formal and non-formal structured skills transfer, up to and including technician level". Potential trainees were defined as secondary school leavers and employees of firms; current trainees include all those who are enroled in the recognized types of training programmes, and past trainees include graduates and non-completers, limited to those who have found work in enterprises afterwards. Enterprises have been defined as "firms with ten or more employees", following the NSO sample framework used.

39. The survey excluded, therefore, micro-enterprises and the basic livelihoods training and income-generating activities in rural areas. This has been done because both the

characteristics and requirements of these enterprises and the training programmes provided are so different from those in the larger, more formally established industry sub-sectors and TVET institutions that one survey could not capture the full range.

40. A second choice was to limit the field surveys to four regions in order to keep it manageable within the short time span allotted. The choice of regions covered the more industrialized regions with a range of training institutions (NCR, Calabarzon, and Region VII - Cebu), as well as Region XI - Davao, which is seen as the region very likely to evolve as an important industrial zone in the coming decade.

41. The methods of field research combined several techniques. Extensive surveys among the main actors concerned with TVET have been carried out: (1) among firms, (2) among training institutions, and (3) among people in the labour market as users and participants in TVET. This was followed up by case studies in firms, training institutions using a form of 'dual' system, and structured interviews on HRD activities with intermediate organisations (such as industry associations, CCIs, and professional organisations).

42. The firm survey was carried out among a sample of firms from the sub-sectors selected in the four regions covered; and keeping the proportions of small, medium and large firms consistent with the sub-sectoral situation as far as possible. A 1% sample from the NSO survey of firms was drawn, with an 80% response rate (N=142). The major industry sectors in the Philippines included are garments, electronics, automotive, and light metal engineering (the latter two are sometimes pulled together as they come under the same three-digit PSIC code).

43. The survey among training institutions has included those providing training up to and including technician level, providing training in one or more of the industry sub-sectors selected, and in the regions selected for the study. Both public and private institutions were selected; the private ones were drawn from those registered with PAPTI and TESDA (N=74). The focus on manufacturing training has led to more inclusion of public sector institutions than is the case overall, as private sector provision is somewhat skewed toward business and information-related training.

44. The labour market survey has included potential trainees (still at school), current trainees, and graduates of TVET institutions now in employment. Current trainees were drawn from training institutions also included in the survey, and graduates from firms in the firm survey. Potential trainees were drawn from secondary schools also providing technical education.

45. The field surveys were carried out by two Philippine teams with strong experience in such fieldwork. The marketing agency carrying out the survey among trainees and training institutions was introduced through TESDA and a national expert in TVET helped train the interviewers. The national agency carrying out the firm survey regularly carries out such surveys throughout the Philippines, and therefore had both the means for well-based sampling and interviewers thoroughly familiar with the subject matter, as well as providing statistical analysis of the results.

46. The countries selected in Latin America for the study tour were Chile, Uruguay, Brazil, Colombia and Costa Rica; these countries show a wide range of private sector participation with greater or lesser participation of government and providing interesting comparisons for the Philippines. In Chile, the private sector plays the leading role, and the government a secondary one. Uruguay is the exact opposite, with the government still functioning as the leading TVET agency. Brazil, Colombia, and Costa Rica all have combinations of pubic and private sector combinations.

47. The Philippine Expert Panel included representatives from each group of major actors, and a Chairman who has long been involved in the national debate on TVET. Case studies on firms and training institutions carrying out new initiatives combining public-private linkages were prepared by the national consultants and members of the Expert Panel. In preparing the results of the surveys and recommendations for the future, systematic consultations were held with the Expert Panel.

48. The results of these activities have been laid down in a series of reports. Four Background Papers have been prepared by various people;

* The Role of Intermediate Organisations
* The Documentary Review of the Legal Framework within which Enterprises operate in the Philippines with reference to HRD and Training
* Report on the 1-23 March 1996 Latin America Study Mission
* The Role of Labour Market Information Systems in the Philippines.

Five Specialist Reports have been prepared:

* Funding, Financial Analysis and Cost Effectiveness in the Philippine TVET Sector
* Firms: Characteristics, Technological Development and Use and Provision of HRD
* The Emerging Training Market in the Philippines
* Experience and views of Industrial Trainees in the Philippines
* Public-Private Training systems: Dual Training and the Apprenticeship System

In addition, a number of case studies of firms and training institutions have been prepared separately.

These nine reports, the case studies and consultations with the Expert Panel form the basis for this Strategic Report, which synthesizes the results, provides recommendations on the major issues identified and follows them up with plans of action for the leading actors concerned[6].

49. Section 3 provides the evidence from the surveys and case studies among training institutions, firms and people going through the TVET system, the funding and financial effectiveness of the TVET system, and the role of labour market information

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[6] Separately from this, but related, is the Opportunity Study designed to explore the feasibility of sector-specific training (centres).

systems. Section 4 analyzes the main issues drawn out from the background and specialist reports, focusing particularly on the necessity of extending and professionalising the linkages between pubic and private sector in TVET. Section 5 draws out the lessons to be learned from the experience of selected Latin American countries: Chile, Brazil, Paraguay, Venezuela, and Costa Rica. Section 6 provides conclusions and recommendations on the major issues identified, and provides plans of action for leading actors on specific issues.

SECTION 3: CURRENT SUPPLY OF AND DEMAND FOR TVET: THE EVIDENCE

3.1 Policy and legislative framework

50. The Philippine TVET sector has come under a more integrated legislative framework since 1994, when the Technical Education and Skills Development Act brought together two previously separate agencies (National Manpower and Youth Council (NMYC) and the Bureau for Technical and Vocational Education (BTVE), and the Apprenticeship Bureau of DOLE in one national authority TESDA.

51. TESDA's mandate is to focus on middle-level manpower. Coming as it does under the Department of Labour and Employment, this means that coordination with the Department of Higher Education is necessary to establish requirements for passing on to related tertiary education (such as in the engineering field).

52. TESDA is authorized to withdraw from direct implementation of training provision, which has been carried out until now through its regional and local training centres. It is rather to focus its attention on developing a comprehensive Development Plan for middle-level manpower with special attention given to public-private linkages including apprenticeship, dual training and other schemes (e.g. TACs, TCS). TESDA is to monitor and evaluate existing training provisions and take steps to make it more efficient and effective. It is to improve quality by setting and monitoring skills standards, trade testing and certification. Financially, TESDA will be able to help potential trainees through a Scholarship Fund, and public and private training institutions and firms to improve their capabilities through a TESDA Development Fund (in 1998).

53. The apprenticeship system exists in the Philippines officially, but has been widely misunderstood in its practice. The main idea of apprenticeship whereby a young person is taught a trade or profession by an experienced practitioner in exchange for his/her gradually more useful labour has been superseded by one of cheap labour and more accessible jobs. Restrictions on the extent of mutual exploitation were made through setting wage levels at 75% of the minimum wage and limiting the length of apprenticeship to six months. Currently a new Apprenticeship Bill is before Congress which attempts to reform a number of points essential in an apprenticeship scheme;

* the combination of firm-based and off-the-job training;
* the eligibility of employers to sponsor apprentices and their mutual contractual obligations;
* the capability of a firm to conduct on-the-job training programmes;
* the financial resources/incentives provided to firms for participating in training; and
* the standards to which participating firms and apprentices have to conform, and the monitoring system to be applied.

The draft bill still retains a number of unclear points and needs to be aligned with the TESDA Act and the Dual Training Act.

54. The Dual Training System Act of 1994 provides a delivery system of TVET that combines in-plant training and in-school training designed by an accredited training institution and training firm together. The extension of programme accreditation as well as training institution accreditation, and the possibility of three-year length of programmes are improvements compared to the Apprenticeship system. The Rules and Regulations of the Dual Training Act are extensive for both firms and training institutions which apply for accreditation; weaknesses still include the lack of checks on the quality of facilities, equipment and staff of the participating training providers, and the lack of monitoring on actual practice, a role for TESDA.

55. Necessary incentives to Dual Training institutions have consisted of foreign technical assistance (GTZ), duty-free import of new equipment, and financial support from TESDA for start-up costs. Firms are allowed modest incentives through a 50% deduction of training costs from taxable income. However, they have to bear training costs and to pay trainees' allowances as well (offset by the work of the trainee). The trainees receive a small portion of the 'daily allowance' provided by the firm, and thus must wait for employment placement to be the main reward.

3.2 Training provision

3.2.1 Training institutions

56. The survey evidence indicates the diversity of training provision in institutions. They vary greatly in size, facilities, range and nature of provisions, intensity of utilisation and staffing. Some institutions are solely TVET institutions; others deliver TVET courses as only part of a wider range of provisions including higher education.

57. Public sector institutions provide a wider range of programmes than private ones; the latter can concentrate on areas of greater demand from trainees and fewer requirements in equipment and facilities. Of the industry sectors covered, almost half the institutions provide training in metal trades, in two-thirds automotive and electronics training is given, and in 26% training in textiles and garments.
The programmes are almost equally at pre-technician as well as technician level, with programmes being provided in a regular standardized pattern. Capacity utilization is high; the majority of institutions are open 5-6 days per week for most of the year.

58. Three-quarters of those enroled are high school graduates; the remainder out-of-school youth. The institutions covered enroled slightly more than 200,000 students (20% women), of which TVET trainees formed 30%. 20% of the TVET trainees were in programmes relating to the industries focused on in the survey.

59. TVET staffing (1343) is around 25% of total teacher staffing, and one-third of management staffing (239) in the institutions covered. Almost 400 teachers/instructors are found in the relevant industry sectors training; most are poorly qualified. Only 30% of TVET staff have a trade certificate, and barely 2% have a first-class certificate. Most have didactic rather than skills qualifications.

60. There are strong regional differences. The largest, most varied and innovative provision is concentrated in the national capital region. The technological base of training institutions is weak, with outdated equipment and weak links with industry which have relevant equipment. Within the manufacturing industries in the survey, new technology equipment was lacking in all garments training institutions, whereas in institutions with programmes in automotive and metal trades half had new technology equipment, and in electronics 80% had such equipment.

61. Curriculum development is seen as the responsibility of the training institution by only half the institutions; almost 30% consider it to be the responsibility of the national government. Changes in courses and curricula have occurred in only 25% of the training institutions involved.

62. More than half the training institutions still focus exclusively on regular training, although there is a growing number of training institutions interested in dual training (27%). Only a small number of institutions provide consultancy services to outsiders; obviously not recognized or promoted as source of income. 'Production and repair' is mentioned by 60% of the institutions as another activity; unfortunately, institutions were not willing to indicate its contribution to their financial resources.

63. Links with industry was through an industry representative on the Board (30%) or through an Advisory Committee with industrial representation (30%). The Committees liaise with Industry Boards/Associations to provide OJT places; 30% of the institutions indicated this to be the main reason for them. About 40% of the training institutions were aware of the different government schemes to promote training-industry linkages; obviously, this level can be improved.

64. The graduates of industry specific courses covered was 7050 in 1994/95, of whom 30% were women. The drop-out rate was 9%, and somewhat higher for women than for men (the range of enrolment for women is narrower than that of men). The annual turnover of staff was less than 6%; in 60% of the institutions there was no change in instructor staff. Where there was movement, instructors had mainly left for private companies (this process is concentrated in private training institutions and NCR).

65. OJT components in training are substantial; 90% of the institutions provided OJT, and 22% of all graduates in the survey had undergone OJT. Another 40% of institutions had industry sponsorship of trainees and 35% of the institutions received donations by industry of equipment, tools and software.

3.2.2 Dual training/apprenticeship systems

66. Dual training initiatives are currently limited to a small number of institutions, perceived to provide a high quality of training and with effective placement of their graduates. There is intensive cooperation with industry firms in providing in-work training and developing curricula. Currently a fair amount of foreign technical assistance is provided to develop these programmes, and it is not clear whether they

can be fully self-sustaining financially. A major question is to what extent replication of dual training is possible in a wider range of training institutions interested in the initiatives, and with the linkages with firms necessary to carry it out.

67. Systematically collected information on use of apprenticeships and monitoring of its quality is almost totally lacking. What few figures are available indicate large swings in the number of registered apprentices, and no information on graduation of apprentices. The use of apprentices by firms seems to be widespread, but with little training content.

3.2.3 Firm-based training provision

68. Firm-based training provision is widespread, with half the firms in the electronics sector, and almost a third of the firms in engineering and clothing having HRD units for internal training. Almost similar numbers had HRD plans for employees. Provision for training for external people was also extensive; in the electronics sector half the firms had apprentices, in engineering 40% and in clothing a quarter of the firms. Half the firms in the electronics and engineering sector provided OJT, and a quarter of the firms in the clothing sector did so.

69. High technology firms are more likely to provide systematic training for employees than low technology firms, and have in-house HRD units, HRD plans and formal HRD budgets. Training of engineers and technicians is mainly done by in-house training in all industries; but with significant variations across high and low technology firms. In electronics, half the high tech firms used in-house training for engineers and technicians and among low tech firms only 10% did so for engineers. In engineering and clothing, high tech firms used in-house training more extensively than low tech ones for engineers and technicians. High technology firms spend around 3% of their payroll on HRD; whereas low technology firms spend less than 1%.

70. The participation in public sector schemes was more limited; about a quarter of the firms in electronics and engineering and only 10% in the clothing sector participated in the TESDA Contract Scheme. Assistance to training institutions was very limited; teaching assistance was provided by less than 10% of firms across all sectors, and financial and equipment assistance was given by only 5% of the firms across the different industry sectors.

3.3 Firms as users of external training

71. When recruiting new employees, firms draw on a variety of training institutions. In engineering, the main sources are Schools of Arts and Trades and Don Bosco. In electronics, private and public sources are drawn on in equal numbers. The clothing industry relies mainly on TESDA institutions and Schools of Arts and Trades. Small and medium-sized firms rely more heavily on SATs than on other sources; large firms more on Don Bosco, and TEIs as well as SATs and SUCs. There seems to be little bias against public sector training institutions as such. High technology firms (see next section) recruit more from Meralco, TEIs, SUCs and Don Bosco, putting more emphasis on formal skills and training at entry level.

72. In training employees at engineer and technician levels in the electronics sector, high technology firms make some use of foreign training centres (17%) but mainly use in-house sources; low technology firms make more use of foreign centres (28%) for engineers and extensive use of outside sources for technician training (private and foreign training centres). In engineering, the high technology firms use outside sources more extensively for engineer and technician training than low technology firms. In the clothing sector, only the high technology firms used outside sources of training for engineers and technicians, using mainly government and private vocational centres.

3.4 Firms: characteristics, new technology and training

73. The average size of firm in the industries covered was almost 740 people employed in electronics, 230 people employed in engineering, and 263 in clothing firms. Electronic firms were younger (9 yrs.) than engineering (22 yrs.) and clothing firms (28 yrs.) on average. Almost half the firms in each industry are experiencing employment growth, and between 20 - 30% are experiencing a decline. Size distribution of firms differs across industries, with slightly more than half the clothing firms of medium size, 30% small and 16% large. The electronics industry has a higher percentage of large firms (34%) and fewer small firms (15%). Engineering has almost 60% medium size firms, with small and large firms each around 20%.

74. The skill profile of the industries differs, with electronics having the highest skill intensity, particularly at the level of technicians (8.3% of the workforce versus 3.5% and 1.8% average in the other industries). The clothing industry has a higher proportion of skilled workers (75% versus around 55% in the other industries).

75. Technological change in the industries covered involves the adoption and adaptation of existing technology developed elsewhere. The percentage of firms in electronics carrying out advanced, high-value production and using sophisticated capital goods is around 35 percent; they can be called high-technology firms. In engineering, the technology profile used indicates 30% being high technology. In clothing the percentage using flexible manufacturing systems is almost 40%. The high technology firms are significantly larger (1400 versus 230), and more export-oriented and with foreign funding. Expansion rates between low and high technology firms are similar; however, low technology firms show a greater tendency to contract.

76. Skill intensity between low and high technology firms is significantly different at the level of technicians, and skilled workers, and not at the level of engineers. There is a high correlation between high technology and high training firms; more than 80% of high technology firms are also high training ones.

77. High technology firms have higher average levels of productivity than low technology ones in all three industries studied. Average training index scores also show striking differences between low and high technology firms by industry, with the greatest differences in engineering and electronics. Although multivariate analysis was not possible, these results suggest a close correlation between technology, productivity and use of HRD in firms.

3.5 Trainees: potential, current and graduates

78. Secondary data sources indicate that in 1992/93, 419,686 students/trainees enroled in a total of 811 formal technical institutions, of which 87% enroled in private institutions. Out of total of 232,575 graduates in 1992/93, 91% graduated from private institutions. Non-formal training programmes originating mainly from TESDA member agencies graduated 624,572 in 1992/93. Training programmes for industrial skills formed almost 40% of the total. Other training programmes were for specific occupational groups, such as government officials, special-interest organisations, and executives. Graduates from out-of-school youth and unemployed formed almost 20% each out of the total; most were trained in trade skills (70%) and half were at the basic level. There were slightly more women than men graduates (56% and 52%) in trade skills training programmes; however, women were concentrated in fewer and specific programmes with a commercial and specific industry focus.

3.5.1 Potential trainees

79. The surveys carried out for the study indicated that potential trainees (i.e. students in technical/vocational high schools) are young men and women in 16-19 age groups. Their mobility is high, with almost 45% following training in places away from their birth place. The mobility of their parents is also high, with almost 40% of working fathers and 25% of working mothers working away from the location where their children go to school. Regional differences in mobility exist; with NCR the highest mobility, and Region XI (Davao) the lowest.

80. The majority of fathers are farmers, manual or transport workers, although 11% of fathers and 14% of mothers are professionals. Very few parents have business backgrounds. Almost 30% of the fathers work in technical-related occupations at different levels.

81. Potential trainees mainly choose a technical-vocational high school because it offers better future prospects (60%). Only 4% chose it as a last alternative. The overwhelming majority still consider it the right choice in their last year. 74% consider public institutions better than private. However, regional variations in opinions on public versus private training exist; in Calabarzon public schools are preferred, whereas in NCR and Davao private institutions are preferred. After finishing high school, 42% want to continue in TVET programmes, 46% have other plans and the remainder do not know. Those considering future TVET programmes will obtain financial backing from their parents (83%); other funding prospects are seen as very slim.

3.5.2 Current Trainees

82. Current trainees are primarily young people between 16 -24, with 80% men and 20% women[7]. The current trainees show a higher mobility than the potential trainees, with more than 70% following secondary education away from their birth place. More than 60% of the working fathers and 56% of working mothers work elsewhere than where the children had their secondary education, again with regional differences noted before.

83. The family background of the current trainees is similar to that of potential trainees; with 44% working mothers and fathers in occupations of manual or transport worker (55%) or farmer (31%). Professional fathers and mothers are 14% and 19% respectively. There is a lower percentage of fathers in technical occupations than among potential trainees (18% versus 27%).

84. Before becoming trainees, 40% of the respondents had short working experiences. Half had worked for less than six months. 35% had experience working in a technical field. Only 21% had previous TVET training programmes experience, mainly in electronics and metals and engineering.

85. Trainees attending programmes at technician level are around 30%, with the majority of the remainder in basic programmes. Three quarters of the trainees are supported by parents, and 10% support themselves. 6% hold scholarships.

86. The vast majority are seeking a job after graduation (83%). 16% will pursue further training/education. Metals and engineering is the favourite choice of those going on, with electronics as second choice. Of those seeking a job, half will try walk-on applications, and 15% will try to get help from family and friends.

87. Current trainees are more certain that private institutions offer better quality training than public ones; half say so, and another 25% make a qualified preference. A slightly smaller percentage believe that private institutions also offer better prospects in the labour market, with some regional variations.

3.5.3 Working Graduates of TVET

88. The working graduates interviewed were 60% men and 40% women, with half in the age group 25 - 34 in firms drawn from the four industry sectors of the study[8]. They show a high level of mobility, with more than half having followed secondary education in a different province than that of their birth. Parents' working profiles are

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[7] This is due to the survey framework which drew trainees only from specific industry sub-sectors.

[8] The interviewees were drawn from the firms in the sample, and a different distribution of men and women was found among graduates wtih work than among current trainees.

similar to the previous two groups, although fewer mothers work outside the home (30%) and fewer fathers have jobs with technical backgrounds (15%).

89. The majority of the respondents had basic TVET training, 67% of them at private training institutions. Sources of financing differed from the previous two groups, with the family providing support in only half the cases, 22% self-supporting, and 16% with scholarships. Women were concentrated in textile and garments industry (56%), with only 13% in the other industries. Almost 80% of the respondents had followed only one TVET programme. Less than half said the programme had been relevant to their current job. a higher proportion of women said that their training had not been relevant (26% to 13% men). Automotive graduates found their training most relevant: electronics graduates least so.

90. Before the current job, 72% had worked in at least one other job, mainly as operators or technicians. There was high mobility, as 72% of the respondents had spent at most two years with their previous employer; only a third in the same town as the present job. Reasons ranged from dissatisfaction with wage levels (36%), to a concern about career advancement or job security (13%).

91. Almost half the present jobs are at operator or craftsperson level, with 22% at technician level, and 18% at foreman/supervisor level. There are fewer women technicians but more craftswomen. Women stay longer with their employers than men, and are lower paid. Given the fact that their labour mobility is lower, and thus they are more experienced in their jobs than men generally, lower payments cannot assumed to be due to less productivity.

92. Employers had provided in-house training for half the respondents, while 28% had received external training. One third of the latter had been given higher level training. Employers prefer private training institutions; 91% of those with external training had been privately trained. In-house training is mainly in the form of OJT of less than three months (almost 80%). Graduates prefer private training institutions to public ones (44%), although over one third have no opinion. Those in electronics and automotive industries are more certain than those in other industries.

3.6 Promotion of training through intermediate organisations

93. Industry associations represent industry views to government and provide their members with information on trade, taxation, etc. They represent around sixty firms on average, with employment ranging from 18,000 to 135,000. Of the associations interviewed, the electronics association has an active personnel and engineering committee, and a technician training council.

94. Training is organized regularly by the electronics and engineering associations; both for technicians as well as in areas of quality and production control. There is little cooperation between the associations and other intermediate organisations such as PCCI and ECOP on HRD matters. No information is collected or available about training costs from the associations. the only training carried out abroad is at senior management level.

95. The associations criticized government for lack of consistency in its training policies and inadequate information concerning policy and programmes. Coordination between various government departments would be appreciated.

96. In general, it seems that there is scope for industry members of the associations, with the exception of electronics, to improve their own understanding of HRD, their ability to analyze and define their collective requirements, and to express then in a "bankable" manner through their associations.

3.7 Financing TVET

97. Total government expenditure on TVET is calculated at P2,038 million, or just under 4% of government expenditure on education and training. Financial expenditure by private training institutions cannot be traced at the national level, due to lack of a reliable information base. Overseas ODA for TVET is estimated at P 1174 million, or 62% of total ODA on education and training.

98. Funding schemes in the Philippines include Government Assistance to Students and Teachers in Private Education (GASTPE), with funding support through grants, loans and vouchers for TVET students, and a College Faculty Development Fund for in-service training of teaching staff in private institutions. The GASTPE funding is currently used primarily by private high school and university students; its existence should be more widely propagated among TVET students.

99. The World Bank VTP II Project provides a number of mechanisms for assisting training provision from 1992 -1997. The Training Contract Scheme provides grants for trainer development to approved Ibs, IAs and CCIs for a total of P 28 million. The Training Assistance Contracts to upgrade staff and training institution facilities also made available P 20 million in 1995.

100. The field surveys among training institutions provided financial data on 42 Tis (60% of the total). Forty-three percent of the private institutions provided data, as did 75% of the public ones. Instructors' salaries formed the largest proportion of most institutions' costs, on average almost half total recurrent expenditure. Student stipends and staff development on average made up around 5% of recurrent costs and course supplies average 9%. There is little apparent difference between the expenditure patterns of the public and private sectors.

101. Capital expenditure consists mainly of premises repair and equipment purchase. Annual repair bills vary between P 10,000 and P 100,000. Capital costs average just over P 100,000 per reporting institution.

102. Relating expenditure patterns to students trained as a measure of efficiency is complicated by variations in programme lengths, institution size, and combinations of TVET and non-TVET programmes within single institutions. Weighted unit costs by student according to programme length indicates that almost half the institutions have unit costs between P 1000 - 3000 per student and another 45% less than that; public

institutions have higher unit costs than private ones. When the smaller size of private institutions is taken into account, private institutions seem to be substantially more efficient than public ones, partly because of the latter's higher administrative costs.

103. Another measure of efficiency is staff-student ratios, although institutional comparisons are complicated by administrative staff also taking on teaching duties, and staff and student full-time equivalents need to be calculated. Weighted ratios indicate that 70% of institutions with ratios of less than 1:20 are private. Ratios between 1:20 and 1:40 were more evenly divided at 45% public and 55% private.

104. Student dropouts as efficiency measure indicate that both public and private institutions tend to have low dropout rates of less than 5%. Input/output ratios of students indicate no significant differences between public and private institutions (overall 13%), but substantial differences between programmes - an 18% wastage in textiles/garments compared to only 5% in metals.

105. Almost 70% of the institutions mentioned student fees as sources of income. 20% of the institutions raise funds through production activities, and another 20% refer to central government and foundations or trusts. The large number of both public and private institutions drawing on multiple sources of income (30% of public sector institutions have more than four sources of income) may make it relatively easy for public institutions to diversify and increase their sources of income.

106. The enterprise survey provided less financial data than the training institutions. Small to medium enterprises usually absorb training costs within the general budget, especially in providing on-the-job training by production staff. Almost 30% of the enterprises have a formal HRD unit, and 18% a specific HRD budget. Budget sizes ranged from 1% to (an exceptional) 30% of payroll.

107. Almost half the firms have a designated member of staff responsible for training, and 13% employ full-time additional trainers. Most of these firms employ fewer than five trainers. Eleven percent of the firms run their own training centre, with an average of just over 6 staff per centre. The average cost per trainer in the few firms indicating annual costs of the training centre, was estimated at P 39,000 per year (total centre costs ranged from P 10,000 to P 300,000).

108. Seventeen percent of the firms support OJT, averaging 5.5 staff supporting such activities per firm. Estimated costs of supporting OJT in small firms is P 10,500 per firm; in medium firms P 50,400 and in large firms P 49,650. This does not include stipends to trainees. Expenditures on external training range from P 5,000 to P 700,000.

109. Forty-two percent of the firms sampled can be identified as "training-focused firms" because of their systematic approaches to training, using 12 indicators of training involvement. These training-focused firms have significantly different opinions on training, their own investments in training and government role in training. They are more willing to contribute towards the cost of sector-specific training centres, but are less willing than other firms to support levy grants, tax incentives and rebate schemes.

They are more willing to pay for labour market information, but much less willing than other firms to provide financial support for government training institutions.

3.8 Labour market information systems

110. Decision-making in the labour market requires accessible and reliable labour market information (LMI). The enquiry carried out during the course of this study in the Philippines indicated virtually no published studies on this subject. Therefore, a first attempt was made to find out the extent of provision of LMI, and its use by the main actors surveyed in this study.

111. The two largest producers of LMI are the Department of Labour and Employment (DOLE) and the National Statistics Office (NSO). Within DOLE, there are nine bodies which collect various types of labour market information (see Background Report 4 for a full description). These include information on occupational wages, employment hours and earnings, survey of establishments concerning employment aspects, labour turnover, labour relations in top corporations, productivity gain sharing schemes, profitability and solvency of different industries in the Philippines, productivity assessment, strikes, work injuries/illness in industrial establishments, regional surveys on employment situation of women and children, and overseas workers. The NSO has labour force surveys at frequent intervals, family income and expenditure surveys, employment and compensation of local and national government, and monitoring of out-of-school youth.

112. The Bureau of Local Employment (BLE, belonging to DOLE) has among other functions the provision of employment information and assistance to DOLE clients and constituents of LGUs through the Public Employment Office (PESO). This is a multi-service facility which has makes available all the employment programmes and services of DOLE. The BLE has 15 regional offices, and below that almost 1500 PESOs, classified as provincial/municipal or NGO-based.

113. The PESOs offer employment referral services, recruitment assistance for employers, and employment information and guidance services. With regard to employment, five programme areas are covered: regular employment, TULAY 2000 - a programme for disabled people, a special programme for student employment, the work appreciation programme mainly for out-of-school youth, and a programme for returning Filipino migrant workers. About two-thirds of the PESOs are operational, and their placement seems to follow administrative structure, rather than the needs of the labour market. Their efficiency also varies by region; comparing the percentage of PESO offices to the total and the percentage of job assistance given. However, on average, an operating PESO helps around four hundred people per year.

114. The extent to which major groups use LMI was traced through the surveys in the study; potential and current trainees mainly use family and friends, and only 12% asked teachers. Career advisory services are unknown to these groups of respondents. In looking for a job, 26% of the trainees would have confidence in a formal means of job search.

A small number of TVET training institutions (9) was interviewed concerning their use of LMI. They provide information on their programmes, but receive no regular published information from government on existing national provisions on offer. They cannot have an overview of locally available provisions unless they make the effort. Placement efforts for students are made indirectly through OJT.
A TESDA survey of 1541 firms in 1995 (with a third in manufacturing),indicated that industries mostly hire skilled workers through recommendation, with walk-in applicants the second in importance. Industrial firms do not yet have confidence in the PESO system.

SECTION 4 ANALYSIS OF THE MAIN ISSUES:AREAS OF PRIVATE SECTOR PARTICIPATION IN PHILIPPINE TVET; EXTENSION AND PROFESSIONALISM

4.1 Increasing training focus by firms for industrial competitiveness

115. Large firms generally have a more systematic training focus than medium-size and small firms. They make more use of external training and know more about sources of training and training schemes. However, they do not as yet work together very systematically within their industry associations and employers organisations on developing HRD initiatives at the industry sector level.

116. Medium and small firms are less training focused and have less knowledge concerning external sources of training. In consequence, outside assistance is needed to help them develop their own analysis of training needs, provide information on available sources and costs of external training and help them to collectively organize it. The industry associations need not be the best channel to carry this out, as their members are usually the larger firms within any particular industry sector. Local level networks of firms, CCIs and training institutions may be more appropriate channels for this group of firms.

117. The electronics industry in general is much more focused on training than the other sectors (with the clothing sector lagging behind). This may be due to the first signs of skills shortages at the engineer and technician level emerging in this industry and/or its higher level of technological development; the result is that the electronics industry association is the one with a committee on HRD and more links to training institutions than in the other industries. By monitoring the developments in this industrial sector, representatives from other industries can learn about strategies for increasing the training focus of firms in their own sectors.

118. Positive signs of industrial development in each industrial sector can be identified. A substantial minority of firms in the three sectors are 'high technology' with both technological development and expansion. The numbers of low technology firms which are contracting suggests that technological upgrading and concomitant training is a very necessary condition for further industrial growth and greater labour productivity.

4.2. Managing and delivering training provision

119. The survey has revealed that TVET training provision in schools and colleges is largely:

* inward-looking rather than market-oriented;
* concentrates on a restricted range of regular training provision to its traditional constituency rather than reaching out to new target groups;
* is generally staffed by 'unlicensed trainers' without full skill test certificates;
* works with outdated equipment not meeting current standards of new technology and work organisation in firms; and
* shows a heavy concentration in the National Capital Region (NCR), even though the focus of industrial development may be shifting elsewhere.

120. Major issues are whether training provision can be made more dynamic and more responsive to industry needs. Within training institutions, it is necessary to increase capacity utilization in cost-effective centres on the one hand, and engineer ways of closing or merging centres which cannot meet the new criteria for accreditation which should be developed.

121. Between training institutions, resources need to be shared between vocational schools and vocational training centres in order to enhance capacity utilization and provide a higher return on investments in TVET. This can include joint workshops and use of new technology equipment. A more detailed inventory of TVET provision should be made on which to base partnerships between schools and training centres, both public and private, to share resources on a lease or user subscription basis.

122. New training competencies required for instructor upgrading, curriculum development as well as the management of TVET centres need to be identified. The quality and qualifications of teachers/instructors in training institutions need to be improved in tune with industry requirements, and trainers with industry experience need to be drawn into training institutions more widely.

123. A strategy has to be developed for improving the equipment used in TVET, taking into consideration both conventional and new technological requirements. This can be done in conjunction with industry-based provisions, particularly where machinery which is too advanced or specific for training institutions themselves to acquire.

124. Industry representatives need to be drawn into the management and implementation of training; by involvement in curriculum development, the provision of OJT linked integrally to training programmes and in strategic planning. This points towards the further development of cost-effective dual training, used flexibly in line with regional differences.

125. Dual training, however, poses a number of problems which need to be resolved before it can be extended more widely in the Philippines. One of its strengths is its reputation, with participating firms and trainees recognising it as at least potentially

beneficial. It seems capable of providing much needed high-class knowledge and skill for manufacturing industry and services, and correspondingly high-class employment for successful trainees, but the costs remain prohibitively high. The pressure is on training institutions to deliver high-class, work related training at costs significantly less than required for dual training as currently practised.

126. The principal weakness in the Philippine TVET system is the absence of adequate control, monitoring and advisory resources. Without such resources even the more promising developments within the system may degenerate. The authorised non-compliance by firms with the rules for accreditation puts the quality of the system at risk, as does the low entry level for trainees. This level must be raised as soon as possible. Similarly the quality of firms' training provision must be assured and integrated more completely with off-the-job training. The rigid application of the 60/40% rule (for in-plant and in-school training) should be revised to permit variations which accord with course level and content, and at least a short period of in-plant familiarisation (without much training content) should be included at an early stage of the first-year in-school phase. Monitoring to ensure correct and effective in-plant training and working experience should be combined with advice and training in the design and operation of in-plant training.

127. The essence of the dual system is that enterprises collaborate with training providers in programme design. It is in their interests that they do so fully and knowledgeably, giving as long notice as they can of investment plans and changing technology, changing job design, and so on. They may invite TESDA to design or promote training in the personal and interpersonal skills (logical fault analysis, teamwork, communication, supervision) which are coming to acquire much greater prominence as modern manufacturing technology is introduced; and perhaps in techniques and disciplines which are successful in Japan (5S, kaizen). But all such developments depend on the knowledge and attitudes of management, fields where TESDA's role is one of information and persuasion.

128. Firm-based training provision is extensive among high technology and larger firms. It needs to be extended among small firms and low technology firms, who will probably need help from outside to do so. Such training needs to be further developed among small firms where employers often do not yet recognize the benefits they may derive in quality and standardization of their products when employees are trained.

129. Firm-based training for non-employees usually takes the form of OJT and apprenticeships. The existing training provided by firms needs to be linked more integrally to the training programmes provided off-the-job. In this respect, links with public sector schemes and local training institutions need to be promoted.

130. The extensive use of in-house training when introducing new technology for engineers and technicians is notable. Low technology firms tend to make more use of outside sources for training than high technology ones; therefore, it may make sense to direct training programmes at the level of technology adoption and adaptation that low technology firms are introducing.

4.3 Attracting and supporting trainees

131. Contrary to popular belief, TVET is chosen positively by most of its trainees in the belief it improves their job prospects. As the number of technical/vocational high schools is quite small, it might well be useful to analyze the effectiveness and relevance of this part of the secondary school system, in terms of its preparation for technician training.

132. TVET trainees and graduates generally are satisfied with the TVET training they have received. As trainees progress through the TVET system, they become increasingly convinced that private training institutions are better than public ones. Employer-provided training is generally considered more relevant than their pre-employment training, so that support and expansion of such training, under specified conditions, would support trainees' efforts in the labour market.

133. The vast majority of pre-employment trainees have financed their own TVET programmes. Only a tiny proportion have received scholarships and other external support. TVET trainees are in a worse position than students in tertiary education - a situation which needs to be remedied in line with national priorities. After employment, employers are the major funders of TVET.

134. Respondents and their parents are highly mobile when seeking training and employment. Turnover rates were also high among qualified industrial workers, making it difficult for employers to invest or increase their investment in training. As the main reason for leaving an employer is low wages, this suggests that wide wage differentials in the manufacturing industry make some industries more training-focused than others.

135. Women participate effectively in TVET programmes, particularly in some industry sub-sectors. They stay longer with employers than men, but are employed in lower-paid jobs and are less satisfied with them than men. An in-depth study seeking ways of ensuring equality of access to TVET and of employment afterwards for women could be of value.

4.4 Monitoring provision and evaluation of outcomes

136. The number of skills standards developed by TESDA is limited, as is the number of centres able to conduct first class tests. Trade testing is increasingly being used by employment agencies for screening for employment abroad, but schools and companies still make limited use of trade testing. Although industry is involved in developing standards, there are as yet no professional groups licensing middle-level manpower; therefore, certificates are institution-based rather than profession-based. In 1995, almost 50,000 people were tested, of whom half were certified. In the survey, half the training institutions used TESDA trade testing centres, and half other centres.

137. The dual systems of training and apprenticeships are not monitored in either a quantitative or qualitative sense by TESDA. Monitoring training provision and evaluating its outcome is one of the central roles in TESDA's mandate and should therefore be taken firmly in hand. Industry representatives should play an integral role in such activities. At the level of training institutions, industry and industry association representatives can monitor performance as Board members. Guidelines for setting up dual systems of training need to be developed for training centres starting such systems.

138. The extent to which training is effective needs to be monitored more closely through measures of enrolment, wastage and placement success. Some of this is done but it needs to be extended to monitoring of private sector training. Performance surveys of training institutions also need to be provided to employers, in order for them to make more informed choices for training to be sponsored for their employees.

139. Regulations for a national monitoring system need to be developed by TESDA, making use of committees on which industry is represented. If training institutions are to become more autonomous, monitoring of financial and programme planning becomes all the more important.

4.5 Finance and cost-sharing

140. The evidence from this project does not indicate that TVET is 'underfunded'; but it does suggest that available funds can be more efficiently and effectively used, and that additional funding can be generated. This section points to possible strategies for achieving this. The effectiveness of the system depends on both financial and non-financial strategies designed to improve the responsiveness of TVET providers to demand from employers and trainees. Three aspects are considered here:

* funding strategies to improve the flow of funds to TVET and more purposeful targeting;
* internal efficiency strategies within training institutions; and
* externally-focused effectiveness strategies.

141. In terms of funding strategies, the main areas of improvement lie in greater cost recovery and income generation by training institutions, and better targeting of existing funds. The wide range of fees charged indicate that there is little relationship between costs, prices charged, and customers' ability to pay. Training institutions need to review their costs and adjust their fee structures accordingly. Public sector institutions should be encouraged by permitting them to retain the income thus generated.

142. Income generation can be improved by both public and private sector institutions, through customized training and consultancy to enterprises and intermediate organisations. It also provides hands-on staff development and increases links with firms. Production facilities can provide hands-on experience for trainees as well as income from product sales. However, the danger that it can conflict with training itself needs to be recognized and avoided. Leasing of facilities and premises to firms and intermediate organisations can also generate income.

143. Funding schemes have paid little attention to quality and eligibility criteria. Government funding regimes show large yearly fluctuations in allocations, and are allocated on inefficient 'first come first served' principles (as with GASTPE and ICBP). Greater stability in funding and the application of stricter criteria for eligibility need to be complemented by better application and targeting of existing schemes to support training. Targeted grant-aid, in the form of vouchers, is more effective than student loans or tax incentives for employers.

144. The TVET sector needs a reserved portion of the GASTPE funds, in the form of voucher schemes incorporating elements of the high schools' Educational Contracting Scheme. TVET students should be eligible for vouchers which can be used to pay all the tuition fees at any private training institution for a study programme which meets criteria of national significance (as specified by TESDA) and for which places are not locally available at a public training institution. In addition, pre-employment trainees should be eligible for means-tested scholarships, in-employment trainees for loans/vouchers (when employers do not pay). Tax credits and low interest loans should be available to employers who open their training facilities to trainees other than their own employees (when meeting the criteria set by TESDA).

145. The operation of the Skills Development Fund is not yet finalised. An overall levy on employers may not be the most effective measure, as it is likely to be strongly resisted by employers. The application of a selective levy, falling on employers over a specified size who do not satisfy the criteria indicated above for the receipt of tax credits, could be more efficient and effective.

146. Training is needed to prepare firms for the introduction of new technologies. The finance to support new technologies is available through the GATT initiative in the 1996 GAA, administered by DTI and DOST; this might be extended to include training for new technologies.

147. The wide range of ratios of trainers to trainees and of related costs suggests that improved internal efficiency in training institutions can be achieved by improving trainer productivity, in both public and private sector institutions. In order to do this effectively, further studies of matched pairs of institutions with differences in ratios and costs can be used to identify and disseminate best practice. For firms, this is more difficult, as training is usually bound up integrally with other firm characteristics.

148. The costs of equipment and facilities is high in TVET, and all institutions do not need state-of-the-art provision. Access to industrial premises with such facilities can be increased, in joint ventures with training-focused firms. OJT is a good means of doing so, but the training thus provided should be better integrated with the off-job training by the institution. Although the dual training system is designed to do this, its current high costs suggest that widespread application of fully integrated training is unlikely. Improving links of training institutions with industry through more integrated OJT is an efficient intermediate method.

149. The private sector can improve the effectiveness of TVET training provision through:
* opening up in-plant training facilities to other than employees; and
* integrating OJT more in a total learning programme.

Tax credits can enhance this process, as can vouchers for improving the quality and availability of instructors and trainers. Chambers of Commerce and industry associations have special responsibilities for helping their members increase proficiency and efficiency in providing training.

150. Government training institutions are subject to a restrictive regulatory framework, which makes it difficult for them to improve effectiveness, both in cost recovery and generating income. Rather than transfer responsibility to the private sector totally, a devolution of financial responsibility to the institutions themselves is possible - only one step further than the devolution to local government already under way.

151. To be effective, institutional autonomy should include the following aspects:
* retaining all income from income-generating activities;
* surveying local labour markets regularly through LMI systems, to ensure that training meets customers needs;
* adopting HRD policies, including staff appraisal and performance review, productivity awards, and where necessary, retrenchment-with-compensation policies; freeing training institutions from government regulations in pay levels, benefits, and conditions of service; and
* funding through a one-line budget allocation from TESDA, on approval of a business plan, specifying inputs, expected outputs, and efficiency improvement plans.

152. Boards of Trustees, established for groups of institutions (and large individual TIs) should be given responsibility for the rationalisation of local training provision. They should comprise industry representatives along with TESDA officers. Approval and monitoring of institutional performances, should thereafter be a prime task of TESDA's regional and provincial offices.

4.6 Governance, policy and the legislative framework: government and the private sector

153. The Philippine TVET sector is now benefitting from the major, far-reaching reforms arising out of the work of the Congressional Commission on Education (EDCOM) in the early 1990s. At the heart of these changes are twin processes of rationalisation and devolution. The former involves TESDA's withdrawal from direct delivery of TVET and the sharper focus of TESDA's activities on planning and monitoring. The second involves the proposed transfer of responsibilities for TVET from central to local government - part of a national devolutionary thrust. The location of responsibilities, including institutional governance, closer to the point of delivery should enable training provision to be both more relevant and more efficient. It is at local levels that local needs can most readily be identified and delivered, and that opportunities for economies of operation can best be recognised.

154. The regulatory framework shaping private training provision, whether in firms of training institutions, is minimal. They are able to shape training free from government interventions. Private institutions have the freedom to participate or not in accredited programs, pilot schemes such as Dual Training and government grant aided projects, such as the Training Assistance Scheme.

155. In sharp contrast, government training provision takes place within a constrictive regulatory framework standardised across the public sector. Institutions (and the TESDA regional and provincial administrations) operate to a set of tight, centrally imposed rules and regulations which stifle innovation and drive up costs. The intentions are to enforce probity and equity, but the consequences are inefficiency and stagnation. There is abundant evidence of a TVET system constrained by a centrally managed strategic planning regime, in which the vision of a national, integrated TVET system is obscured by the emphasis on detailed regulation. A particularly disturbing feature of the present system is the widespread acceptance that the juggernaut of government regulation is so immovable that the wholesale transfer of public assets to the private sector is the only practicable means of escaping from the existing strictures.

156. This project found no support for the view that a centrally planned, centrally directed TVET system can be delivered effectively in a country as large and as diverse as the Philippines. The high costs of TVET in relation to other forms of educational provision have led some to propose government withdrawal altogether and the transfer lock, stock and barrel of the TVET system to the private sector. No evidence was found that this process would be welcomed by industry; rather, respondents answers suggested that a wider range of responsibilities than are envisaged through current legislation should be shared with the private sector (both training institutions and firms) and devolved to local levels.

4.6.1 Devolution

157. The variety of TVET in the Philippines is a source of strength, in meeting a very wide range of demand, from pre-employment through to in-employment training. Weaknesses include wasteful duplication and inadequate regional planning. The analysis and recommendations have focused on identifying governance and planning structures which can build on these strengths while providing the necessary vehicles for efficient rationalisation of provision.

158. The policy of devolution presents real opportunities for the development of a more integrated and more responsive TVET sector, if it is taken further than planned currently. Devolution of TVET to local government might lead to a more responsive local service, but it is fraught with many difficulties. There are important differences between primary and high school education and TVET, which make devolution to local government feasible in the former and not the latter case. Employers rather than local communities are the main clients of TVET. TVET rarely serves a purely local market, and the planning and governance of TVET provision by LGUs has elsewhere led to wasteful duplication of facilities and undue political interference in the organisation and delivery of TVET.

159. Government training institutions do not have as yet have the maturity and the managerial capabilities to take on the burden of complete financial or legal autonomy. They need support from TESDA and local industry if they are to develop them. TESDA and local industry should work in partnership with local training institutions to prepare them to take on a wider range of responsibilities and to ensure that in doing so they meet more effectively than currently the needs of their main client groups - local business and industry and their students/trainees.

160. An obvious alternative to local government governance of TVET is the transfer of responsibility to local industry, TVET's main customer. Just as TESDA is governed by an industry-led Board, public sector training institutions should be responsible to industry-led Boards. There are clear advantages in extending the responsibilities of such Boards to include aspects of publicly-funded private TVET.

4.6.2 Strategic planning

161. Devolution will enable TESDA to focus on its crucial role of planning strategically for the TVET sector. TESDA is the only authority in a position to steer the TVET sector to face the challenges of new technologies, international trade liberalisation, demographic change and poverty alleviation. TESDA needs strengthening if it is to effectively take up its responsibilities in the following areas:

* monitoring and evaluation (being done)
* financial appraisal and costing
* labour market information collection and analysis
* industrial liaison capabilities to work with industries and their associations in planning sector specific training; and
* trainee support and guidance.

4.7 Labour market information systems

162. The LMI produced by government covers an interesting and wide range of issues, and is meant to provide an empirical basis for formulation of policies and is thus designed for the consumption of policy makers. It is mainly public-sector oriented and is not meant (in structure, form and dissemination) to serve the private sector of training institutions and industrial firms.
The establishment of PESOs, from which both job seekers and employers can benefit, is a good step toward more private sector relevant LMI. However, its role is still limited.

163. Training institutions supply LMI, but receive little systematic feedback in return. Placement is through informal channels of OJT.
Trainees resort to informal means to choose types of programme and training institutions to enrol in, and when looking for jobs afterwards again make little use of formal means.
Firms work through recommendations for skilled workers, and walk-in applications. They lack confidence in employment placement services, and are also in fear of 'poaching' from other firms for technically skilled personnel.

SECTION 5. LESSONS FROM LATIN AMERICAN COUNTRIES

5.1 Governance, policy and legislative framework

164. In Latin America, wide differences exist in the way that private training and industry sectors participate in the TVET system. Uruguay has a national authority run by the government, and greater industry influence is being resisted by the trade unions of TVET teachers. Colombia's national agency is government-managed, but has a combined public-private representation on the Board, and a system of regional and local training centres where enterprises are mandated to send their workers. Costa Rica has a national authority (INA) coming under the central government, with combined government and private sector representation on the Board. Training takes place in conjunction with enterprises, who provide the major facilities.

165. Private sector influence is more dominant in Chile and Brazil. In Chile, the government agency plays an almost purely administrative role in accrediting training provided by private sector organisations, who compete for the training programmes demanded by industry. Presently, the government is involved is regaining somewhat more control of the system, which is now dominated by a few large training companies. Brazil has a more balanced system which is useful as example to the Philippines, in that the national authority sets general guidelines, but the initiative in management and implementation is with private industry through industry-sector organisations together with public state-level departments. The industry sectoral organisations are structured along the lines of manufacturing, commerce/services, agricultural sector, and small and micro-enterprises, recognizing the differences in their needs.

166. Devolution to local government and industry associations has also differed. In Uruguay, there is almost no devolution, with the exception of the German-backed dual training system in an experimental stage. In Colombia, the government is pushing for private sector participation through committees of firms, labour and universities developing training curricula, but employers are reluctant to take on more responsibility because of government's emphasis on a social agenda. In Costa Rica, there is no devolution to local government, but much decision-making is left to the training centres themselves, a good example for the Philippines. In Chile, devolution to regional offices has been completed. Currently the role of trade union representation vis-a-vis management is being strengthened in committees which jointly design training programmes put out for tendering. In Brazil, devolution is not an issue, because the private sector was involved from the beginning in setting up the system.

5.2 Finance and cost-sharing in Latin America

167. Uruguay is the only country without a levy system; the government provides funding, and enterprises can deduct 150% of training costs against taxes. Colombia has a 2% levy on private enterprises and half that for public enterprises, with a total budget of US$ 350 million. Enterprises are allowed to send 5% of their employees for training, or have to pay one month's salary equivalent. Costa Rica has a 2% levy on payrolls for private enterprises with more than 5 employees, and all government and public sector

employers, and a small levy for the agricultural sector. It is topped up with 1% rents on government securities and government subsidy.

168. In Chile, employers advance the cost of training through direct payment, but can deduct the training cost equivalent of 1% on payroll, so that government contributes about 70% of total costs. Brazil has a 1% levy on payrolls, with larger companies making a slightly higher contribution. The Industry Sector TVET Association (SENAI) has its own budget.

169. Joint public-private ventures in financing include a limited German-funded dual system in Uruguay, and a limited number of services in Colombia. In Costa Rica, technical schools and enterprises use their premises and equipment as common facilities. In Brazil, the government collects the levy on behalf of SENAI and the other organisations, but there is little joint financing. In Chile, the government has a training programm for displaced workers from labour-intensive industries, in which it works together with the national TVET administration.

170. Non-participation in TVET systems for all countries studied is penalized, as enterprises cannot avail of possible tax deductions and or subsidies from government. Brazil also has positive incentives, through reduction of levies when companies participate in TVET training, and tax breaks when they accept apprenticeship training. If a levy is contemplated for the Philippines manufacturing sector it is most likely to be acceptable to employers if they are able to maintain some control of it. The proposals in the previous section for industry-led Boards might offer a means for achieving this.

5.3 Managing and delivering training provision in Latin America

171. In Uruguay, Colombia and Costa Rica, public sector training is extensive. Dual training systems of varying size exist, with Uruguay in experimental stages. Apprenticeships systems also exist in Costa Rica on a dual training basis.

172. In Chile, training is provided by the private sector, accredited by the government, with curriculum designed jointly by training providers and firms. A small number of large private training providers dominate the market, and this is criticised. In Brazil, the national joint TVET service sets general guidelines for provision, but the regional departments are flexible in their implementation. The sectoral organisations run training centres, with feedback from industry on curriculum and skills needed. Outstanding 'technology centres' are rewarded with recognition as 'national centres' (14 out of 34). Apprenticeship training is mandatory for up to 5% of employed labour per enterprise. The feedback in this system is part of its strength.

5.4 Monitoring provision and evaluation in Latin America

173. Uruguay does not carry out monitoring and evaluation centrally; apprentices are monitored by their training coordinators through a logbook system. In Colombia the national authority monitors training institutions quarterly, and evaluates outcomes through placement of graduates. In Costa Rica, there is no impact evaluation system, and monitoring is done through joint development by central staff and training centre staff of curricula.

174. In Brazil, the sectoral organisation monitors programme implementation at the centres, and evaluates the centres annually according to their quality standards; compliance leads to recognition as a 'centre of excellence'. This has lessons for the Philippines, because it allows monitoring and evaluation at institutional as well as programme levels. In Chile, evaluation is limited to post-employment training providers and feedback is through complaints from enterprises. This system is seen by Chileans as having taken privatisation too far, and the government is trying to regain control of this function.

5.5 Attracting and supporting trainees in Latin America

175. In Uruguay, the central authority plans to set up a data bank to make support to trainees more efficient and effective. No other form of support is mentioned. In Colombia, guidance and counselling services are provided to attract trainees to TVET, and LMI is provided at training centres. There is no information on Costa Rica.

176. In Brazil, the sector organisations take a proactive role in providing LMI. In Chile, the municipalities allocate the numbers of apprentices, and the social programmes are targeted at specifically displaced groups. Altogether, with the exception of Brazil and Colombia, no financial support and little labour market information seems to be provided to trainees in any systematic fashion in these countries.

5.6 Labour market information systems in Latin America

177. In Uruguay, there is no joint government-enterprise LMI system; enterprises are left to their own devices. In Colombia, the national organisation works with universities to research the magnitude of structural and seasonal unemployment as basis for LMI. In Costa Rica, there is some information provision to job seekers and employers. In Brazil, the sector organisation is active in LMI, through the *Centre for Education, Labour and Technology Transfer*, which carries out market research. In Chile, there is no LMI system; something the government agency wants to redress.

178. LMI systems based on feedback from the industry sub-sectors to both training centres and the national TVET organisations are not well-developed in the Latin American countries studied, with the exception of Brazil, where lessons can be learned from the work of an intermediary centre for labour market and related research.

SECTION 6: CONCLUSIONS AND RECOMMENDATIONS

179. In this section, conclusions and recommendations form a package, to which the various key participants in the Philippine TVET system can and should make their own contributions. Under each issue discussed in the following paragraphs, recommendations are directed at specific participants. Figure One summarises the main recommendations.

6.1 Increasing firms' training focus for industrial competitiveness

180. Higher technology firms are generally larger, more export-oriented and exhibit higher levels of training and skills development than lower technology. However there are signs of increased attention to training among low technology firms who are planning to upgrade technology.

There is little evidence in firms of any size that attention is being given to job redesign and competence definition in parallel with technology and production system development.

Both the awareness of government training schemes as well as the use of such schemes is lowest among smaller firms.

181. Low-technology and small and medium firms need to improve their training focus in order to attain greater labour productivity and higher quality products, although individual small employers may not recognize this need. Large firms need to point the way to others, and intermediate organisations to assist in the process of dissemination to their members.

182. **Actions by firms.** A two-fold strategy for intensifying the training focus of firms is required; one part for large firms and the other small and medium firms.

Large firms should:

* enhance government's knowledge and understanding of industry-specific TVET, and assume a leadership role in manpower development for their sub-sector through redevelopment of national job design and competence definitions;
* enter into dialogue with TESDA in order to learn, if necessary, and to establish mutually agreed modes of discussion and operation. Government policy formation and the ensuing programme formulation in the area of industrial training will be given more accurate and cost-effective direction if it is fully informed of industry's intentions, preoccupations and requirements;
* take on the role of industry leaders in training matters. This entails building capability for training for new technology and production systems, including comon facilities centres and extending firm-based training into new areas. Through intermediate organisations, they should demonstrate the nature and benefits of a "training focus" to small firms. Large firms should also participate actively in regional and industry sub-sector TVET planning, teacher

training, properly designed and executed OJT, and institutional governance through Boards of Trustees.

183. Smaller firms are recipients of "launch aid" in developing their training focus. They should take on some of the activities and responsibilities of larger firms as soon as they are able to do so, and aim to become industry leaders themselves.

184. **Action by intermediate organisations.** Intermediate organisations, such as industry associations, should regularly inform their members and training institutions about new technologies in their sub-sector, production systems and quality control systems. They should lobby government for support for introducing training on such emerging technology systems, and take the lead in specifying curriculum upgrading needs in relation to such new production processes. They should contribute to formation of government support policies for emerging technologies and systems.
Small firms should be helped to link in local networks with training institutions to their mutual benefit, in developing forms of OJT appropriate and manageable for small firms.

INCREASING PRIVATE SECTOR PARTICIPATION IN TVET: A NEW PARTNERSHIP

Recommendations from University of Amsterdam Consortium/UNIDO VTP II Sector Survey

	FIRMS	INTERMEDIATE BODIES	TRAINEES	PRIVATE TRAINING INSTITUTIONS	PUBLIC TRAINING INSTITUTIONS	GOVERNMENT
STRATEGIC PLANNING & GOVERNANCE	* industry-led Boards of Trustees for govt. TIs * defining training needs	* sector-wide TVET planning with govt	* take-up & demand * local & national LMI as planning tools	* membership of Boards of Trustees * helping to define training needs	* governed by Boards of Trustees * helping to define training needs	* national TVET planning by TESDA with industry assocs. & firms * setting minimum standards for programs & instructors * rationalise & expand TVET scholarship & loans systems
TRAINING PROVISION: - schools - dual systems/ apprenticeships - firm-based training	* contribute to curriculum design * contribute to national skills definitions * membership of industry-led Boards of Trustees * provide high quality OJT, Dual Training & apprenticeships with training element * firm-based capacity-building training provision with govt. help	* skills definitions & certification * Board of Trustees membership * Industry Board membership * articulate collective sector needs * promote shared facilities for SMEs	* entitlement to: - access to training through scholarships - apprenticeships with training element - choice of training through relevant, accurate information - OJT as training component - equality of access	* build in more OJT * more Dual Training * more integration with industry * instructors with industry experience & qualifications	* more specialisation * build in more OJT * more Dual Training * more integration with industry * instructors with industry experience & qualifications	* amend Dual Training & apprenticeship legislation & rules * phased withdrawal from direct provision * build National Skills Certification linked to school certificates & unit-based competences * promote more Dual Training * targeted access to selected programs through scholarships & loans * upgrade TESDA planning capabilities
MONITORING & EVALUATION	* monitor performance of TIs through Boards of Trustees * benchmarking nationally & internationally	* monitor performance of TI & firms using Boards of Trustees * develop Dual Training manual	* enrolment, wastage & success rate monitored * trainee satisfaction surveys * destination surveys	* performance surveys * develop Dual Training manual * program monitoring by Boards of Trustees	* performance surveys * financial & program monitoring by Boards & TESDA * develop Dual Training manual	* regulations for national monitoring system * monitoring minimum standards for programs & instructors * financial & planning monitoring in TIs * publish Dual Training manual * monitoring OJT, Dual System & training element of apprenticeships * upgrade TESDA monitoring capabilities * commission evaluations

Recommendations for Increasing Private Sector Participation in TVET / 2

FINANCE	* tender for capacity-building govt. loans * co-management of govt. TIs through Boards of Trustees	* fund-raising for sector-specific training	* scholarships for pre-entry * training loans for employees	* tender for govt. loans for capacity building * training contracts with TESDA * co-management of govt. TIs	* local financial management through Boards of Trustees * incentives for income generation * incentives for efficiency gains	* TVET funding through TESDA * monitoring for efficiency & probity * national system of scholarships & loans * training loans for firms & private TIs * DOST/DTI funds (inc. GATT) for training responses to new technologies in firms & TIs
LABOR MARKET INFORMATION	* provide information to Boards of Trustees * use LMI for HRD planning * information & visits for trainees on careers, job requirements & work ethics	* monitor & publish industry trends & emerging needs * facilitate visits to firms & other information for potential trainees	* LMI as guidance on job opportunities, career routes, training requirements & industrial employment/values *	* collect/use local LMI for planning * invest in own capacity to collect/use LMI * disseminate information to firms on trainee throughput & other services	* collect/use local LMI for planning * invest in own capacity to collect/use LMI * disseminate information to firms on trainee throughput & other services	* national LMI collected/published through' TESDA * provide training in LMI techniques & systems * reinforce TESDA capabilities as a 'learning organisation'
TRAINING FOR INDUSTRIAL COMPETITIVE-NESS	* capability building for new technologies & production systems, including common facilities centers * extend firm-based training * review skills definitions in response to innovation * SMEs work through local networks & shared facilities centers	* inform industries & TIs on new technologies, production systems & quality control * specify curriculum upgrading NEEDS * lobby govt. for support for emerging technologies/systems	* access to skills upgrading & ladderisation	* liaise with industry on curriculum upgrading * offer 'new skills' bursaries * upgrade instructors through OJT * joint programs with firm-based centers	* upgrade instructors through OJT * joint programs with firm-based centers	* TESDA work with DTI/DOST to upgrade training in line with new technologies * assist development of sector-specific advanced training centers * DOST/DTI to pick & publicise 'new technology winners' through TESDA * inform industries & TIs on new technologies, production systems & quality control

185. **Action by government.** Smaller firms should be offered assistance in developing their knowledge of training planning, management and execution, in the form of information, positive financial assistance such as tax rebates and subsidised consultancy and management seminars on training matters. It should be offered wherever possible through intermediate organisations. Assistance should be strictly cost-limited and time-limited in respect of any one firm.

186. Larger firms should be brought into partnership with government. The most practical mechanisms for this kind of interaction are likely to be through local chambers, industry associations or boards and professional associations (the choice of channel will depend on local circumstances).
At the industry sub-sectoral level, **government** may wish through TESDA, DTI and DOST to fund research and development of training responses to new technologies and production systems and contribute to the implementation of this training in firms and training institutions. TESDA should work with DTI and DOST to upgrade training in line with new technologies, in particular through the development of advanced training centres (sector-specific or generic).

187. Policy and programme issues for TESDA and larger firms include:
* job design and competence definition
* certification
* national secondary and post-secondary curricula, and especially basic, generic subject-matter such as literacy, numeracy, computer familiarity, personal attributes and interpersonal skills
* methods of designing and proposing training investment projects
* assistance to smaller firms in intensifying their training focus
* the collection, analysis and application of labour market information.

TESDA must ensure that its professional knowledge and capacity is adequate to fulfil these functions.

6.2 Finance and cost sharing

188. These recommendations are directed at three aspects of institutional and enterprise-based TVET:
* funding strategies, designed to improve the flow of funds to TVET;
* internal efficiency strategies within training institutions;
* externally-focused effectiveness strategies, to enhance quality of training, and to achieve greater integration between training providers and customers.

We strongly recommend incremental changes rather than radical shifts.

189. **Action by government.** Public and private training institutions should be encouraged to review their fees and charges through an analysis of their local and training markets. Fee levels should be set at levels appropriate to their market niche.
Public institutions should be permitted to retain all the income generated through fees and charges, as an incentive to review fee levels. This income should be used only for approved investments in institutional quality and productivity. The public sector

institutions can improve their internal efficiency (and thus bring down unit costs) through increasing productivity of staff time in terms of training hours/week or year, and spending fewer resources on management and administration.

190. TESDA, together with industry intermediate organisations (such as PCCI), should organize training seminars and study visits for senior training managers (both public and private members) in order to demonstrate ways of generating income and of managing the greater diversity of activities; and thereby stimulate training-related activities which complement training provision and generate income (customised training and consultancy, production under certain conditions).

6.3 Managing and delivering training provision

191. **Actions by firms.** Firms can help improve training provision in schools through contributions to curriculum design, and by developing national skills definitions and standards. Firm representatives should also be active members of training institution Boards of Trustees, focusing particularly on the liaison with firms in OJT and programmes of dual training.

192. Firms should build up their capacity for training provision inside the firm with the help of government. They should be very active in developing further high quality OJT, dual training and apprenticeships with a high training element, firmly integrated in training programmes delivered by the institutions.

193. **Actions by intermediate bodies.** Industry associations and CCIs should help improve training provision by taking the lead in skills definitions and certification of trainees. They should provide members for institutions' Board of Trustees and Industry Boards. They should be active in articulating the collective training needs of their specific sub-sectors, and should help promote shared training and equipment facilities for small scale enterprises.

194. **Actions by training institutions.** Both public and private institutions can improve their effectiveness by building in more OJT and more dual training into their programmes and develop more specialized programmes for new target groups, such as employed technicians. This presupposes a more intensive liaison with industries in their localities, directed towards these activities. Finally, private institutions should invest in staff upgrading and the recruitment of instructors with industry experience and qualifications. Public institutions in particular should review the diversity of their programmes, with a view to rationalisation and greater internal efficiency.

195. **Actions by government.** The Dual Training and Apprenticeship Acts and their rules and regulations should be amended to make them more flexible. The rules which specify the proportions of on- and off-the-job dual training need to be more flexible. The Apprenticeship Act needs such extensive revision that it may be better to abolish it altogether.

196. TESDA should continue its phased withdrawal from direct provision of training, but should promote financial and legal autonomy of its institutions through Boards of Trustees rather than through local government units.

197. TESDA should, in cooperation with industry representatives, build up a system of National Skills Certification linked to school certificates and unit-based competencies. It should promote more dual training initiatives and cost-effective methods of applying them.

198. TESDA should improve access for deserving trainees to selected training programmes through loans and directing scholarship programs to TVET candidates rather than university students.

199. TESDA should upgrade TESDA planning capabilities for setting directions for new initiatives in training provision together with industry.

6.4. Labour market information systems

200. **Action by firms.** Firms should work with local or sub-sectoral training institutions to develop the LMI systems which they require; (2) provide employment information and plans to Boards of Trustees and the training sector in general; and (3) use LMI for HRD planning purposes.
Intermediate organisations should monitor and publish industry trends and emerging needs for knowledge and skills. They should carry out certified placement surveys as an instrument for feedback to government and their members.

201. **Trainees** should have better access to and learn to use LMI as guidance on industrial employment and training, education and career routes, job opportunities and their associated training requirements.

202. **Public and private training institutions** should (1) continue to collect and use local LMI for planning and invest in their own capacity to do so; (2) work with firms on developing systematic LMI to suit local or industry sub-sectoral needs, (3) provide information to intermediate organisations and firms on enrollment and output, and (4) have better access to national level LMI to be provided by government.

203. **Actions by government.** Government, through DOLE and TESDA may wish (1) to develop the structure and scope of LMI so that it is comprehensive, understandable and useful to all users; (2) to institute training in the collection and analysis of LMI and (especially) its dissemination by various media and its application for planning and information purposes; (3) to promote and improve the collection, analysis and application of LMI on a national basis.

6.5. Monitoring provision and evaluation of outcomes

204. **Actions by firms.** Firms should monitor the performance of training institutions, dual training programmes, and OJT through their participation in Boards of Trustees and direct monitoring of participating firms. They should benchmark the contributing firms

both at the national and international level.

205. **Actions by intermediate bodies.** Associations should also monitor performance of training institutions and firms participating in training provision through Boards of Trustees with industry representatives.

206. Associations should develop with TESDA a Dual Training Manual as a guide for training institutions and firms who are developing dual training programmes. The associations should promote the widespread use of the Manual and update it regularly.

207. **Actions by training institutions.** They should conduct trainee satisfaction surveys, and destination surveys in order to monitor their own effectiveness. They should also carry out performance surveys on a regular basis, and their Boards of Trustees should monitor their programmes. They should contribute by experience to the development of the Dual Training Manual.

208. **Actions by government.** TESDA should recommend to Congress ways of establishing national monitoring system. This must include minimum standards for programs and instructors which relate not only to didactic qualities but also the necessary industry experience and qualifications needed. The developed standards need to be monitored regularly and updated with the help of a committee with strong industrial representation.

209. TESDA in conjunction with industry representatives needs to set up an effective monitoring system for OJT provisions, Dual Training and apprenticeships being carried out by firms. TESDA should monitor enrolment, wastage and success rates of the different types of training provisions on a continuous basis. TESDA should carry out financial and planning monitoring of training institutions at the national level, based on business plans provided by the Boards of Trustees.

210. TESDA should publish the proposed Dual Training Manual and work with industry associations to disseminate its messages.

211. In order to carry out these monitoring activities, TESDA needs to upgrade its monitoring capabilities at the central level. It needs to commission further evaluations of specific types of training provision as a step to developing its monitoring system.

6.6. Governance, policy and legislative framework

212. **Industry** should be invited to become more centrally involved in TVET planning at local levels, by taking the lead in new local BOARDS OF TRUSTEES. These would take responsibility for TVET planning and analyses of training needs at the local level, and in particular for the performance of government training institutions. They should consist of representatives of local industry and business along with TESDA regional officers, local government representatives and representatives of the private training sector. Board members would normally be appointed for single large institutions, but areas served by several small institutions should have a single Board. They should be

appointed by TESDA for a fixed term, and their performance should be monitored by TESDA as a part of its sectoral monitoring responsibilities.

213. The tasks of the Boards of Trustees should be to:

* review the annual income and expenditure proposals of institutional managers in the form of a business plan, and when satisfied as to their feasibility submit them to TESDA for formal approval;
* receive regular reports from the institution's chief executive on the extent to which the organisational and financial objectives of the business plan are being achieved;
* review the extent to which the institution collects and uses information about its local labor market in order to update and modify the range of services it offers to its customers; and
* monitor the institution's personnel and HRD policies and report to the chief executive and TESDA where these are thought to be not in keeping with best private sector practice.

214. **Intermediate bodies** have a central planning and management role in the development of sector-specific training programmes, working with TESDA, individual firms and training providers to identify and develop appropriate specialised provision for the sector.

215. **Private training institutions** should participate with firms in the proposed Training Boards of Trustees, with whom they should work in defining local training needs. **Government training institutions** should be freed from the restrictive regulatory framework which our evidence suggests inhibits their ability to improve either their efficiency or their effectiveness. They should be governed by industry-led Boards of Trustees, as indicated above.

216. **Government**. TESDA, working with firms, training institutions and intermediate bodies, should provide the overall regulatory framework under which the Boards of Trustees would operate. It should set minimum standards, including those for training programs and instructors in both public and private sectors, and rationalise the currently fragmented system of support for trainees and industry, including scholarships, contracts and loans. The planning function at TESDA should be reinforced in line with recommendations concerning labor market information and monitoring/evaluation, so that it can provide a regular information and planning service to training providers, employers and other government agencies.

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ANNEX 2 SYSTEMS ANALYSIS MODEL