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Prepared by
Association of Canadian Community Colleges
Canada

For Ministry of Labor and Vocational Training

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Asian Development Bank

TVET SUB-SECTOR ASSESSMENT

SUBMITTED TO:



ASIAN DEVELOPMENT BANK

KINGDOM OF CAMBODIA

PROJECT PREPARATORY TECHNICAL ASSISTANCE

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STRENGTHENING TECHNICAL AND VOCATIONAL EDUCATION AND
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ACRONYMS AND ABBREVIATIONS

ADB	Asian Development Bank
AFD	Agence Française de Développement (French Development Agency)
ASEAN	Association of South East Asian Nations
BSP	Basic Skills Project (ADB)
CAMFEBA	Cambodian Federation of Employers and Business Associations
CNPA	Cambodian National Petroleum Authority
CIDS	Cambodian Institute of Development Studies
CIEDC	Cambodia-India Entrepreneurship Development Centre
CDS	Community Development Specialists
COM	Council of Ministers (COM)
DGE	Directorate General of Employment
DGFA	Directorate General of Finance and Administration
DGTVET	Directorate General of Technical & Vocational Education & Training
DTIS	Diagnostic Trade Integration Strategy
DLMI	Department of Labor Market Information
EMIS	Education Management Information System
ESDP I / II	Education Sector Development Program I and II (ADB)
EU	European Union
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GITC	Garment Industry Training Centre
GMAC	Garment Manufacturers Association in Cambodia
GNP	Gross National Product
GO	Government Organization
GMS	Greater Mekong Sub-region
HDI	Human Development Index
ILO	International Labor Organization
ISCO	International Standard Classification of Occupations
KLMI	Key Labor Market Indicator
KHR	Cambodia Riel
LFP	Labor Force Participation
LMI	Labor Market Information
LMIS	Labor Market Information System
M&E	Monitoring and Evaluation
MOC	Ministry of Commerce
MOEF	Ministry of Economics and Finance
MOLVT	Ministry of Labor and Vocational Training
MOWVA	Ministry of Women's and Veterans' Affairs
MOEYS	Ministry of Education, Youth and Sport
NEA	National Employment Agency
NGTI	National Garment Training Institute
NGO	Non-Government Organization
NIS	National Institute of Statistics
NQF	National Qualifications Framework
NSDP	National Strategic Development Plan (Overarching RGC Development Plan)

NTB	National Training Board
NTDP	National TVET Development Plan (Annual Plan update of MOLVTSP)
NTF	National Training Fund
NTQF	National TVET Qualification Framework (The TVET band of the NQF)
NTTI	National Technical Training Institute
NVTC	National Vocational Training Centre
PIF	Performance Incentive Fund
PFMRP	Public Financial Management Reform Program
PPPs	Public Private Partnerships
PPP	Purchasing Power Parity
PPTA	Project Preparatory Technical Assistance
PB	Program Budgeting
PTC	Provincial Training Centre
RGC	Royal Government of Cambodia
RPL	Recognition of Prior Learning
RTC	Regional Training Centre
SIDA	Swedish International Development Agency
SME	Small and Medium Enterprises
SME	Small and Medium-Size Enterprises
SNEC	Supreme National Economic Council
MOLVTSP	MOLVT Strategic Plan (5 year plan consistent with NSDP)
TNA	Training Needs Analysis
TOR	Terms of Reference
TVET	Technical and Vocational Education and Training
UNDP	United Nations Development Program
UNESCO	United Nations Education Social and Cultural Organization
USD	United States Dollars
VAT	Value Added Tax
VSTP	Voucher Skills Training Program
WB	World Bank
WFP	World Food Program
WTC	Women's Training Centre
WTO	World Trade Organization
YEP	Youth Employment and Social Dialogue Project

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SUMMARY

1. Economy and Labor Market: in the decade prior to 2008 the Cambodian economy was growing strongly and contributing to rising living standards for its people and to reductions in the levels of poverty.

Cambodia has an economy in transition – its modern corporate economy, based largely upon the garment industry, tourism and hospitality and construction, is vulnerable to the global downturn, but its traditional agrarian economy, upon most Cambodians depend, has been largely insulated from it. As the crisis persists and deepens, however, even the rural economy is becoming affected.

Job shedding, particularly from the garment industry, has not been as likely to lead to sharp rises in unemployment, as has been the case elsewhere. The response of many of the least skilled who have been laid off so far has probably resulted in return of workers to their rural communities, and to seek to earn a livelihood as unpaid family workers and own-account workers. Under-employment, rather than unemployment, is the more likely outcome.

The Ministry of Labor and Vocational Training (MOLVT) Track 1 programs already play a strong role in providing short-course training in rural-based livelihood skills. The Vocational Skills Training Program (VSTP) has assisted in this role, and could be used as a model for its expansion for livelihood training for rural underemployed and displaced factory workers.

Recovery of economic growth and development in Cambodia to levels achieved prior to 2008 will not occur until the global economy picks up. Cambodia must be ready to take up the opportunities this will bring. With support, Cambodia can use this period of downturn to build up its physical and human infrastructure. TVET is crucial to this national effort, but currently lacks the capacity to adequately respond

The TVET sub-sector can assist by training in skills, knowledge and aptitudes to (i) increase productivity by performing existing jobs more effectively (ii) perform more value-adding jobs within a given industry (many of which are currently being filled by foreign workers); and (iii) widen the range of production processes and industries (eg ones that the government has identified as potential export enhancing and/or import replacing). These are contributions to the medium-long-term growth and development of the country.

For the National Training Board (NTB) and the management of the Directorate General TVET (DGTVET) to more effectively respond to the current crisis and plan for future economic growth, they need to have at their disposal up-to-date, reliable and comprehensive information regarding, and analysis of, patterns and trends in the economy and the labor market, and in the operations of the TVET system itself.

The Department of Labor Market Information, within the DGTVET, has the responsibility to collect analyze, interpret and report on labor market information, but does not have the expertise, resources, or the cooperation of other key elements of the Ministry or of other government agencies such as NIS

2. Career development and guidance (CDG): Some organizations are aiming to assist students and unemployed youth to improve job-hunting tools and the preparing for job interview. However, there are as yet few institutionalized CDG programs in the TVET institutions. CDG has the potential to assist TVET students in making more informed career decisions, and appropriate CDG interventions could strengthen the effectiveness of TVET. Establishment of job shops under a National Employment Agency (NEA) would provide an information base where employers can announce their needs for workers, and provide new graduates, out-of-school youth, and the unemployed with information. Longer-term, it is envisioned that an NEA will also offer job placement, services and information about occupational health, workplace safety, skills retraining and overseas placement services.

3. Governance of TVET: The NTB was established 2005 under the Deputy Prime Minister, with approx.50% members from private enterprise, labor, training and NGOs and 50% from concerned ministries, with a mandate to assist private sector development and employment generation and expand the national skills base, and pool of skilled manpower through TVET. Its specific tasks are to prepare national training plans and coordinate and orient TVET to meet the demand-driven needs of the national economy.

4. TVET National Plans: The MOLVT Strategic Plan, 2006-2010, stresses accelerated development and poverty reduction through better working conditions, labor law, and capacity building development of technical and vocational skills. The Plan stresses that TVET is currently unable to cover all rural areas across the country and the quality of training is unable to fully respond to labor market needs due to lack of national competency standards and curriculum, lack of LMIS, and poor management systems. NTB approved implementation plans provide for a two-track approach of: (i) continuing non-formal programs for poverty alleviation mainly in rural areas, and (ii) development activities to improve the quality and effectiveness of the formal, industry-driven and institution-based TVET leading to credentials for formal sector employment to meet national demand for quality skills

5. TVET Management, Institutions and Delivery: Until 2004, formal TVET was a part of the Ministry of Education, Youth and Sport (MOEYS). In 2005 these responsibilities were transferred to a newly constituted Ministry of Labor and Vocational Training (MOLVT) along with those for non-formal (short course) vocational training from the Ministry of Social Welfare, to the DGTVET within a newly constituted MOLVT. The DGTVET currently has three operational departments: (i) TVET Management; (ii) National Competency Standards; and (iii) Labor Market Information. The GDTVET is the Secretariat of the NTB.

There are currently 36 TVET institutions under the MOLVT. Twenty Provincial Training Centres (PTC) across most provinces nationwide and some 10 other institutions, provide ongoing and relatively extensive short-course programs of up to six months in length in basic “entry level” technical skills to school dropouts (track 1 training), with some 10,000 trainees completing, 2007, mainly in agricultural courses. Successful completion of such programs carries a certification of completion issued by the relevant training centre, but not a formal award. In addition further track 1 provision has been initiated under the ADB assisted ESDP II VSTP for basic skills training in identified areas of local skills needs with more than 100,000 trainees, June 2006 to December 2008, of whom 60 percent were female.

About 16 “long course” institutions under DGTVET currently offer formal post secondary (or post junior secondary) programs at basic skills level, diploma, bachelor and master’s levels, although not all levels, or training areas, are provided in all institutions. Some 2,000 graduates completed such programs in 2008 in technical/trades areas (mechanical, electrical, electronics, and construction), computing, and business.

Limited amounts of training is also provided, generally on an “at need” basis by some of the service ministries, and enterprise-based training is currently estimated to occur in some 200 medium to large enterprises for their own workforce again on an “at-need” basis. Formal apprenticeships are predominately in the garment and textile areas. Private provider provision is almost entirely in language training, computing, business, hairdressing and beautician skills. Significant on-the-job training apparently also takes place in small enterprises, either in the form of apprenticeships against fee or unpaid labor, but little data is available. A relatively small quantity of generally short-program training is also provided intermittently under various NGOs.

The CAMFEBA Study of youth and employment, 2008 through a sample of 220 employers in Cambodia, found that the majority of employers required further training, usually a skills certificate, when employing technical staff, but considered that there is a skills gap in the preparation of youth for work.

6. Improving and extending TVET delivery: Significant progress has been made in developing the Voucher Skills Training Program (VSTP) as an informal TVET model (track 1) to provide training for communes and villages in short course, basic skills they request through the PTC.

Most student places in formal public sector provision of training at the skilled worker-technician level are in Phnom Penh. There is little enterprise involvement, so training remains supply oriented rather than demand driven, and there are no competency standards and related curriculum. Much equipment is inadequate, and few teachers have technical skills related to workforce needs, and many lack effective training skills.

Output of graduates from DGTVET long-course programs, especially at NTQF levels 3 and 4 in technical trades and crafts, is currently relatively very small. Although no up-to-date information is available on which to access the demand for particular types of middle-level skilled workers, the current output from certificate courses is unlikely to be sufficient to meet the needs of employers, as they tool-up again as the economic upturn occurs, and as the government seeks to implement its industrial diversification strategies.

7. TVET system finance: Absence of up-to-date, comprehensive and reliable financial data within MOLVT with regard to major aspects of financial performance of the TVET system is an obstacle to the formulation of well-informed policy, planning and operational decisions by DGTVET senior management.

Overall RGC recurrent expenditure as a percentage of GDP is low by comparison with similar countries. The same is true of education expenditure as a percentage of government outlays where the bulk is directed towards primary education. TVET expenditure as a percent of total education and training expenditure is not reported separately but post-compulsory education spending constitutes only about 5% of the education budget.

Estimates of per capita expenditure on TVET compared with Higher Education (HE) puts TVET at around USD\$1.16 for each dollar spent on the latter. This may be explained by recent relatively large TVET investments in poverty alleviation training for rural poor as opposed to smaller public investments in HE, where the bulk of participants pay fees.

Major sources of funding for institutionalized publicly provided TVET have changed little in the past 16 years -- government recurrent expenditure, international donors, and the private sector. The majority of quantifiable private investments are tuition fees.

Industry claims to expend very significant amounts on in-company delivered technical and vocational training. While there is no systematic data collection on this matter in DGTVET, anecdotal evidence strongly suggests there is some truth to the assertion.

Government outlays on TVET for 2009 are approximately USD\$2.52 million, with around USD\$1.2 million earmarked for spending on training programs. Base salary and utility costs are about USD\$1 million. TVET funding since 2005 has increased on average, at about 45% year on year.

The majority of DGTVET program funding is expended on short-course provision (up to 6 months) directed principally at agricultural production. Most of this provision is delivered directly by or under contract to PTCs, utilizing one of two main financing facilities – VSTP (funded through ADB loan funds under ESDP II) and the National Training Fund.

VSTP and NTF utilize systems of internal financial transfers that differ from one another, although the differences are narrowing since DGTVET has been selected by MOEF as a pilot site for trialing of Program Budgets (PBs). The efficiency with which cash transfers within VSTP are effected has contributed significantly to the success of the program, although there are still important improvements which should be designed into any expansion of the scheme. The reasons for these efficiencies in large part stem from the fact that financial transfers and delegations under VSTP are in part 'quarantined' from prevailing RGC financial regulations because of the source of funds and the specific terms of its establishment.

Internal cash transfer systems under NTF are less efficient, as are similar transfers to "long course" institutes. It would appear that delays in disbursement under NTF and other program funds have been a major contributing factor to DGTVET budget under-spending in the past.

PB offers real hope for improvement but a great deal more work needs to be done in DGTVET and DGFA on setting specific targets and indicators for rolling trienniums, as well as in systematic data collection against those indicators, continuous monitoring of progress against targets, and in undertaking specific program evaluation.

The general direction of education and training policy across the entire sector appears to be heading towards privatisation but what this precisely means is open to some interpretation. Its current interpretation seems to lean more towards privatisation of costs as opposed to that of delivery. Nonetheless, there is a robust TVET private provider sector in the country, which although currently mainly delivering computer, business and language training, could be induced through incentives to participate in the delivery of more broadly defined TVET.

Private contributions to publicly delivered TVET by way of fees are claimed to contribute between 70 and 90 percent of total annual recurrent costs in several long course institutes. Government support through salary support, utility payments and PB provides the balance. However, reliable information on this issue is not available due in major part to the fact that Institutes charging fees and retaining income is officially in contravention of RGC regulations. For the time being, this breach is being overlooked.

In the current economic situation, to attract students private providers are reporting having to make significant cuts, up to 50 percent, in their fee schedules. It is assumed that cuts have also been made by public institutes. In the current climate, it seems reasonable to assume there is neither room to increase fees nor the percentage to which fees contribute to recurrent costs in publicly provided TVET.

There appears to be little likelihood at present of the national levy-grant scheme designed under ESDP as a potential means to mobilise or generate new private sector financial contributions to TVET being implemented in the near future.

However, a new model of a public private partnership (PPP) has recently been developed for the garment industry with assistance from Agence Française de Développement (AFD). It has substantial appeal to the private sector because it takes a sectoral rather than a comprehensive national approach; it will be managed equally by government and the peak industry body (GMAC) with control in the hands of two independent Directors; and, it involves all members contributing a self-imposed levy set at a level commensurate with the capital loan provided by AFD. It will almost certainly proceed.

The PPP will be called the National Garment Training Institute (NGTI). It has considerable potential as a future model for middle-level skill development in a number of other industry sectors critically important to the Cambodian economy such as construction, tourism/hospitality, and other parts of the service sector.

I. INTRODUCTION

1. The inception review phase of the Technical Assistance (TA) was completed with the submission of an *Inception Report* following an Inception Workshop held in Phnom Penh on 3 March 2009. The *Inception Report* recorded the outcomes of initial system document review, consultations and preliminary institutional visits and analysis.

2. The second phase of the Project Preparatory Technical Assistance (PPTA) commenced following the Inception Workshop. This phase involved the development of a more extensive and detailed subsector assessment of technical and vocational education and training (TVET) in Cambodia, and current and likely future economic trends. On the basis of this assessment, initial and long-term needs, priorities and strategies for TVET development were identified.

3. This process built on the earlier work carried out in the ADB *TVET in Cambodia* study, 2008 (the Johanson Study)¹. In addition, the assessment included analysis of the costs and financing of TVET; detailed analysis of the labor market, including the effects on Cambodia of the current world economic downturn; review of the current TVET provision through a wider coverage of training institutions and their performance, including private sector training, and consideration of alternative modalities for training.

4. Central system policy and management were reviewed, as were the support systems for trainer training; training curriculum development; skills standards development; and testing; and the monitoring of institutions.

5. On the basis of this further review and analysis, needs for system development and possible supporting policy changes were identified and needs for specific assistance prioritized for possible Bank assistance. These identified needs will be reviewed by Government and stakeholders in the forthcoming Mid-Term Review Workshop to be conducted in late May 2009, as the basis for the development of specified costed interventions, detailed methodologies for assistance, and a full costed project design.

6. All members of the PPTA consultant team were involved in the preparation of this report.

¹ Johanson, Richard, *TVET in Cambodia: An Initial Subsector Assessment*, ADB, January 2009

II. COUNTRY BACKGROUND

A. Geography, Natural Resources and Population

7. The Kingdom of Cambodia borders Thailand to the west and northwest, Laos to the northeast and the Gulf of Thailand to the south. It has a total land area of 181,035 sq km, about 20 percent of which is currently used for agriculture. Cambodia's total population, census 2008, was 13.4 million (female 51.5 percent, and 80.5 percent rural) compared with 11.4 million in 1998 (female 52.0 percent, and 84.0 percent rural). At least 90 percent of the population is ethnically Khmer with minorities of Cham, Vietnamese, and Chinese origins.

8. Cambodia's main geographic features are the Mekong River system, amongst the great rivers of the world, and the huge Tonle Sap, the largest freshwater lake in Southeast Asia and one of the richest sources of freshwater fish in the world. In the southwest are the densely forested Cardamom Mountains, and in the northeast the Eastern Highlands which extend into Vietnam and Laos.

B. Government, Administration and Development

9. The present Kingdom of Cambodia is the modern successor to the ancient kingdoms of the great Khmer empire of Angkor. Modern Cambodia is a constitutional monarchy with a bi-cameral elected parliament of National Assembly and Senate. The Council of Ministers is the Royal Government of Cambodia (RGC) and the executive organ of the State led by the Prime Minister. The Prime Minister is assisted by seven Deputy Prime Ministers, 15 Senior Ministers and 135 Secretaries of State. Administratively the country is divided into four municipalities, 183 districts and 1,609 communes. Major proposals for decentralization are currently in process of implementation.

10. Despite a recent period of very high economic growth, Cambodia still has relatively high, although declining, poverty rates compared with most other Southeast Asian countries, and currently relatively low Human Development Index (HDI) rating. This has been further marked by a widening gap between the majority rural poor and the relatively better off urban population. Nevertheless, major improvements in educational coverage are now to be observed, with an overall increase in literacy rates (for total population aged 7 plus) from 63 percent in 1998 to 74 percent, 2004².

C. National Policies and Planning

11. The *Rectangular Strategy* for Growth, Employment, Equity and Efficiency, 2004, is the current planning framework for RGC's socio-economic development. Based on good governance, peace, political stability, social order, macro-economic stability, partnership and economic integration, the strategy focuses on critical development issues. These include improvement of productivity and diversification of agriculture, private sector development, employment generation and capacity building, and human resource development.

12. The *National Strategic Development Plan, 2006-2010* (NSDP) is the official overarching development strategy for determining and implementing prioritized goals and actions for the period 2006-2010, based on the *Rectangular Strategy*.

² Cambodia, National Institute of Statistics, *Statistical Yearbook of Cambodia 2008*, Ministry of Planning, Phnom Penh, December 2008

13. The NSDP links the vision of the *Rectangular Strategy* to concrete goals, targets and strategies, and brings together goals and targets of the *Second Five Year Socio-Economic Development Plan, 2001-2005*, the National Poverty Reduction Strategy, 2003-2005, and the Cambodian Millennium Development Goals to be achieved by the RGC by 2015. The NSDP thus highlights essential strategies, targets and actions with emphasis on priority growth and human development sectors to accelerate general development and to achieve poverty reduction targets. Public sector expenditure allocations for the plan period are prepared consistent with these targets, currently with over 60 percent of estimated resources to be allocated to rural areas, given that poverty reduction is of highest priority, and poverty levels are high in rural areas.

14. Development of detailed implementation strategies, in terms of the priorities identified in NSDP, is allocated to the involved ministries and agencies for the preparation of sectoral and sub-national plans.

15. The NSDP was developed through groups which are representative of RGC ministries and agencies, donors, and civil society organizations under a secretariat within the Ministry of Planning. The Plan was approved by the Council of Ministers in January 2006; by the National Assembly in May; by the Senate in June; and promulgated by the King in early July 2006. An NSDP monitoring framework and monitoring indicators were approved and annual reviews commenced in 2007.

16. Introduction of policies under the NSDP are being assisted by the *Public Investment Program, 2007-2009*, (approved February 2007), which assists in aligning the annual national budget to the targets of the NSDP, and through the ongoing phased introduction of the *Public Financial Management Reform Program (PFMRP)* launched in December 2004. The latter involves program budgeting (Stage 1) and subsequent impact monitoring through an agreed *Performance Management Framework and Indicators* (Stage 2), targeted at strengthening accountability for achieving effective financial management.

D. The TVET Sub-Sector

17. Current systems of TVET in Cambodia and the first of its present and continuing major institutions³ began in the early 1980s following the end of the Khmer Rouge period. With assistance from Russia, Vietnam and Eastern Europe, the system was essentially one for the training of skilled labor and technicians for more-or-less guaranteed employment in state enterprises. From about 1989, and increasing movement towards a market based economy, such training declined and eventually state guaranteed employment of TVET graduates ceased.

18. By the mid 1990s, trainee numbers in the then existing general TVET institutions had apparently fallen substantially below intended capacity, partly because of the ending of guaranteed employment, but also because of the lack of appropriateness of the existing training programs in terms of the new emerging labor market. At much the same time, substantial and increasing non-government organization (NGO) and international organization (IO) assistance occurred for the provision of non-formal and informal training for small and medium enterprise (SME) employment and self-employment. Training provision of this type was predominantly rural and probably significantly larger in overall training numbers and total person months than training under the formal TVET system.

19. Considerable non-formal training continues - the majority through short programs in rural areas and most commonly, through government provision. This training is almost entirely aimed at income support and supplementation through the enhancement of relevant agricultural or agriculture-related skills for increased productivity, craft skills, and basic level mechanical and related skills.

³ Including the Russey Kao Institute and what is now the National Technical Training Institute in Phnom Penh

20. A relatively large, although geographically restricted, part of this current provision has been in the 210 communes of seven provinces under the pilot Voucher Skills Training Program (VSTP) of the ADB-supported Education Sector Development Program II (ESDP II). These training programs have generally been delivered through the government's local Provincial Training Centres (PTC) under the Directorate General TVET, (DGTVET) of the Ministry of Labor and Vocational Training (MOLVT), with more than 100,000 trainees, June 2006 to December 2008, of whom 60 percent were female. Somewhat similar, but relatively extremely limited provision in location and extent, is also currently occurring through NGO and IO initiatives.

21. Extension of such non-formal and informal training has recently been proposed (March 2009), to assist those returning to rural areas following retrenchment from urban wage employment, under the effects of the current global economic downturn.

22. More than 30 MOLVT institutions across most provinces nationwide also provide ongoing and relatively extensive short-course programs of up to six months in length in basic "entry level" technical skills to school dropouts. In 2007 more than 15,000 trainees graduated from such programs, most in rural areas. Programs are financed through the government's National Training Fund (NTF) administered by the DGTVET under the National Training Board (NTB). Successful completion of such programs carries a certification of completion issued by the relevant training centre, but not a formal award.

23. Some 16 "long course" institutions under DGTVET currently offer formal post secondary (or post junior secondary) programs at basic skills level, diploma, bachelor and master's levels, although not all levels, or training areas, are provided in all institutions. Some 2,000 graduates completed such programs in 2008 in technical/trades areas (mechanical, electrical, electronics, and construction); computing and business. The majority of this provision is in Phnom Penh⁴.

24. In general, most current provision at all levels and programs in the MOLVT institutions appears to be driven by trainee demand, with few, if any, established links to determined industry or local area demand for skills.

25. Increasing provision of short course private training, mainly for English language and computing, has been occurring in urban areas, particularly in Phnom Penh. Some centres also offer technical skills training.

26. Skill training is also provided directly by some of the service ministries. These providers are represented on the RGC's official National Training Board (NTB). Similarly, enterprise-based training is currently estimated to occur in some 200 medium to large enterprises which from time-to-time provide skills upgrading or specialist training for their own workforce on an "at-need" basis. Significant on-the-job training also takes place in small enterprises, either in the form of apprenticeships against fee or unpaid labor.

27. Various national NGOs and recognized IOs conduct institution-based skills training programs, mostly short term, depending on donor funds availability and/or donor interest. Programs for a total of approximately 3,000 trainees were reported in 2008, nationally. Three members of the NTB are nominated as representing NGOs.

⁴ As in most training systems, classification and/or listing of institutions by formal category (or title) of programs offered is confused by variations in program levels and offerings.

III. ECONOMY AND LABOR FORCE

A. The Economic and Employment Situation in Cambodia

1. The Role of TVET in the Cambodian Economy

28. The role of TVET in Cambodia, as elsewhere, is to act as the primary source of middle-level craft, trades and technician skills training for those seeking to enter the labor force for the first time, for those already in the labor force who seek to upgrade their skills, and for those wishing to re-enter the labor force. The focus is primarily upon middle-level occupations, not upon elementary skill occupations or advanced level skilled and managerial occupations and the professions. In terms of ILO's International Standard Classification of Occupations (ISCO 08)⁵, set out in Figure 1, the focus of TVET is on the skills, knowledge and aptitudes required by workers in major occupation groups 3 through to 8, with the most basic of vocational training focusing on major occupation group 8 and the most advanced upon occupations in major occupation group 3⁶.

Figure 1: Major Occupational Groups of ISCO-08 to which TVET Typically Provides Trained Workers

1	Managers
2	Professionals
3	Technicians and associate professionals
4	Clerical support workers
5	Service and sales workers
6	Skilled agricultural, forestry and fishery workers
7	Craft and related trade workers
8	Plant and machinery operators, and assemblers
9	Elementary occupations
0	Armed forces occupations

29. Viewed in this way, it is clear TVET is integral to the growth and development of all sectors of the economy, providing as it does training in the core skill range employed in most agricultural, industrial and service sector operations. The patterns and trends in these cross-cutting occupational groups, and their likely directions in the medium to longer term, are crucial to the types of skills that will be in demand, and hence the sorts of training TVET providers should be offering.

30. TVET, especially that delivered by the formal TVET system (Track 2), and the certification of acquired skills that it provides, whether through formal TVET qualifications or recognition of prior learning (RPL), is particularly important and relevant to the modern globally competitive wage-based economy that Cambodia is increasingly engaging with. As the Cambodian economy grows and develops away from its traditional agrarian roots, TVET will become increasingly important, both to the country, and as an option for those wishing to acquire employable skills.

⁵ <http://www.ilo.org/public/english/bureau/stat/isco/docs/resol08.pdf>

⁶ TVET is often seen as focussing primarily upon non-agricultural occupations, that is, to the exclusion of major group 6, on the grounds that development of skills in this area is more properly the province of agricultural colleges and extension programs.

2. Population

31. Cambodia has a relatively small population, 13.4 million, Census 2008. At a current rate of about 1.7 percent per annum, its growth is also modest. The population, however, is heavily skewed towards the lower age groups. According to the inter-censal survey of 2004⁷, about half the population was below the age of twenty⁸. This has a number of implications for the economy: (i) it means Cambodia has an unusually high youth dependency ratio; (ii) it places a lot of pressure on the education system, in the immediate and medium term; (iii) it is putting increasing pressure on the economy, as young people enter the labor market seeking employment, especially at a time of contracting employment opportunities; and (iv) it presages a rising birth rate as these cohorts move in to the child-bearing years.

3. The Economy

32. Cambodia is also a very poor country. Of the 43 member countries in the ADB region, it ranked fifth lowest in 2006 in terms of real per capita GDP⁹. In terms of the UNDP Human Development Index (HDI) world rankings in 2005, Cambodia sat between Laos and Myanmar at 131¹⁰.

33. The country, however, grew quite rapidly over the decade or so to 2007, and this led to substantial improvements in per-capita incomes and reductions in poverty. Gross domestic product (GDP) grew at an average annual rate of about ten percent over the period 2000 to 2007, albeit from a low base. This was the highest achieved in the South-east Asia region. Per capita incomes grew over the same period from about USD 380 in 2000 to USD490, (from USD 910 to USD 1,633 in terms of purchasing power parity (PPP))¹¹, and the incidence of poverty declined to 35 percent from an estimated 45 percent in 1994¹².

34. Cambodia is an economy in transition – on the one hand from a traditional agrarian base largely built upon paddy, with only small-scale handicraft manufacture, to a modern industrialising economy, and on the other from a closed central command economy to one that is market-based and open to the global competitive environment. Cambodia is a member of ASEAN and the WTO. It remains, however, the least urbanised and industrialised country in South-East Asia.

35. Over 80 percent of Cambodians still live in rural areas, and about 68 percent of the labor force still finds employment in the agricultural sector. Paddy employs just over 48 percent of the labor force, but its productivity is very low. It is largely conducted on a small-scale basis, and in unirrigated areas usually produces only one crop per year. Only a comparatively small surplus is generated, and Cambodia is a net importer of cereals¹³. Despite the large numbers that derive their livelihood from it, paddy contributed only an estimated 7 percent of GDP in 2007, and as Figure 2 shows, there has been little growth in real terms over recent years. There is little commercial, plantation-style, agriculture and livestock production. Forestry and fisheries are not great contributors to the national economy either, and do not employ all that many. It is estimated that the contribution to GDP of the whole agricultural sector was only 27 percent in 2007.

⁷ National Institute of Statistics (NIS), *Cambodia Inter-Censal Population Survey 2004* (CIPS)

⁸ 38.6 percent below age 15, 50.3 percent below age 20, and 60.4 below age 25.

⁹ ADB *Key Indicators*, 2008, Figure 2.3

¹⁰ ADB *Key Indicators*, 2008, Box 1.1

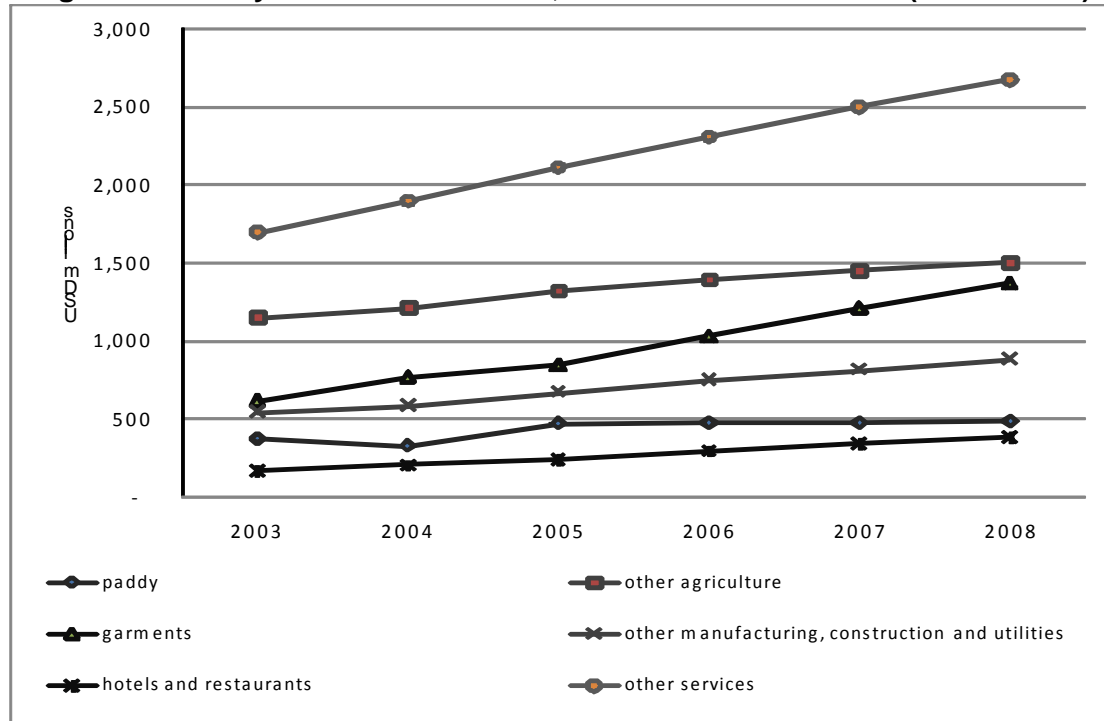
¹¹ ADB *Key Indicators*, 2008, Tables 2.2 and 2.3

¹² Johansen R., *TVET in Cambodia: An Initial Assessment*, ADB, 2009, page 4

¹³ UNCTAD/WTO, see <http://www.intracen.org/tradstat>

36. The manufacturing sector in Cambodia is small, undeveloped, and built on a very narrow base. In 2008 it was estimated that manufacturing employed only about nine percent of the labor force, but contributed 23 percent to GDP in 2008, and roughly 28 percent of the growth in GDP from 2000 to 2008.

Figure 2: GDP by Sector 2003 to 2008, at Constant 2000 Prices (USD million)



Source: Economic Institute of Cambodia *Cambodia Economic Watch*, Issue 6, April 2007, Tables A1.7

37. The garment industry is by far the largest area of manufacturing, in terms of contribution to GDP, as seen in Figure 2, employment, attraction of foreign direct investment (FDI, see also Figure 5 below) and as a contributor to export earnings. On all counts it has also been the fastest growing manufacturing industry, although even before the current global economic downturn it was showing signs of slowdown.¹⁴

38. By 2008, the garment industry employed around seven percent of the labor force, however, this represented 72 percent of manufacturing sector employment, and accounted for almost 90 percent of the growth in manufacturing sector jobs over the period 2000 to 2008¹⁵. In terms of its contribution to GDP, the dominance of the garment industry in the manufacturing sector is even more striking. In 2008, it accounted for over 81 percent of the manufacturing contribution to GDP and more than 91 percent of the increase in GDP coming from that sector. Garments also contributed over 70 percent of Cambodia's total exports. There is simply no other manufacturing activity of any significance in Cambodia. However, as this industry, along with tourism, is the most open to the global economy, it is also one of the most vulnerable in the face of the worsening global economic environment.

¹⁴ With the January 2005 expiration of a WTO Agreement on Textiles and Clothing, Cambodian textile and garment producers were forced to compete directly with lower-priced countries such as China and India

¹⁵ Economic Institute of Cambodia, *Cambodia Economic Watch*, Issue 6, April 2007, Tables A1.7 and A1.10

Table 1: Contributions of the Service Sector to Employment and GDP

Sub-sector	percent of total		average annual percentage rate of change, 2003 to 2008	
	employment	GDP	employment	GDP
Transport and communication	1.3	6.1	6.0	9.6
Trade	6.2	12.8	3.2	7.9
Hotels and restaurants	1.8	5.2	11.2	18.6
Other private services	4.5	16.5	7.2	11.9
Public administration	5.1	1.2	0.0	0.9
Total Service Sector	18.8	41.9	3.9	10.5

Source: Economic Institute of Cambodia, *Cambodia Economic Watch*, Issue 6, April 2007, Tables A1.7 and A1.10

39. As Figure 2 above shows, the service sector is the major contributor to GDP, as well as the major contributor to the change in GDP in recent years. It is also the next most important sector to agriculture in terms of employment. Table 1 above shows that whilst trade and other private services including personal service and business and financial services remain the two most important areas of service sector employment, the growth area is in hotels and restaurants. Indeed, the tourism and hospitality industry has been booming in recent years and, as Table 2 below shows, Cambodia has out-performed all other ASEAN member countries in recent years in terms of the growth in the number of international tourist arrivals. Just how well it will perform in the face of the current global economic downturn is another matter, (but see Section III B below).

Table 2: Tourist Arrivals, by Source, ASEAN Region

Country	Total arrivals, by source, 2007 (thousands)			Average annual rate of change 2004 to 2007 (%)		
	Intra-ASEAN	Extra-ASEAN	Total	Intra-ASEAN	Extra-ASEAN	Total
Brunei Darussalam	84.6	93.9	178.54	1.5	35.5	15.5
Cambodia	363.3	1,398.7	1,762.05	27.8	16.8	18.7
Indonesia	1,320.7	2,789.7	4,110.46	-16.9	-1.0	-7.6
Lao PDR	1,054.5	267.3	321.78	17.6	2.0	13.6
Malaysia	14,164.3	4,217.1	18,381.36	5.1	9.6	6.1
Myanmar	53.0	195.3	248.28	-3.7	-28.6	-25.4
The Philippines	235.6	2,856.4	3,091.99	16.2	9.2	9.7
Singapore	3,692.1	6,484.6	10,176.76	6.1	7.5	6.9
Thailand	2,471.7	7,933.9	10,405.52	-3.7	-1.1	-1.8
Viet Nam	661.2	3,488.3	4,149.53	25.6	9.3	11.4
Total ASEAN	24,101.0	29,725.2	53,826.26	3.3	4.4	3.9

Source: <http://www.aseansec.org> – Tourism Statistics

40. Two other sectors of the economy, the utility sector – electricity, gas and water – and the construction industry, together only employ about four percent of the labor force, and contribute eight percent of GDP. Employment in the latter did, however, grow on average by an estimated nine percent per annum between 2003 and 2008, and its contribution to GDP grew by almost 15 percent over the same period. This made the construction industry the strongest performing sector of the economy in these terms, after the garment industry and tourism and hospitality.

41. In 2005, exploitable oil and natural gas deposits were found beneath Cambodia's territorial waters, representing a new revenue stream for the government, if commercial extraction begins. As a source of GDP growth the potential of these finds is obviously considerable, but whether they will lead directly to significant employment creation is problematic¹⁶. Mining also is attracting significant investor interest, particularly in the north-eastern parts of the country, and opportunities are said to exist for mining bauxite, gold, iron and gems. The implications of these opportunities for employment are also doubtful.

4. Labor Force and Employment¹⁷

42. The total estimated number of Cambodians over the age of 12 who were economically active (in the labor force) in 2004 was about 7.5 million (see Table 4). This represents a labor force participation (LFP) rate of almost 75 percent. As Table 3 shows, the extent of labor force participation differs between males and females – with males typically being lower than females – and between Phnom Penh, other urban areas and the rest of the country – with the LFP rate being higher in rural areas than in the towns and cities. Female LFP rates are usually lower than that for males due to the greater role females tend to play in child-rearing, housekeeping and other caring activities. Rates tend to be lower for both sexes because education retention rates are generally higher in metropolitan and urban areas, and a greater proportion of young people are in full-time schooling.

Table 3: Labor Force Participation, Employment and Unemployment of Population from the Age of 10, 2004 (percent)

	Cambodia	Phnom Penh	Other Urban	Rural
Labor force Participation Rates				
Both sexes	74.6	60.8	69.5	77.0
Males	78.9	65.1	73.1	81.4
Female	70.7	56.7	66.0	73.0
Employment rates				
Both sexes	99.2	96.7	98.7	99.5
Male	99.2	97.3	98.8	99.4
Female	99.1	96.2	98.6	99.5
Unemployment rates				
Both sexes	0.8	3.3	1.3	0.5
Male	0.8	2.7	1.2	0.6
Female	0.9	3.8	1.4	

Source: NIS Cambodia Socio-Economic Survey, 2004, <http://statsnis.org/SURVEYS/CSSES2003-04/Statistic.htm>

43. Table 3 also shows that unemployment rates in Cambodia in 2004 were very low, under one percent on average. Unemployment is really only a phenomenon of the modern wage economy, where employment contracts tend to be formal and at arms-length. In traditional rural-based economies, where most are employed as unpaid family workers or own-account workers, an oversupply of labor or a fall-off in demand for labor services generally manifest themselves as *underemployment* rather than unemployment¹⁸. Where formal wage labor markets are more prevalent, as in metropolitan and urban areas, or in regions of plantation agriculture, unemployment can be expected to be higher. Table 3 bears out this tendency. It shows that unemployment rates are much higher amongst males and females who are economically active in Phnom Penh and other urban areas than they are in rural areas.

¹⁶ Whether these new-found deposits of oil and gas will represent a 'resource blessing' or a 'resource curse' to Cambodia is discussed in UNDP *Cambodia Human Development Report, 2007*, Chapter 6.

¹⁷ One of the major sources of statistics used in this section is the NIS *Cambodia Socio-Economic Survey, 2004*. NIS also conducted a Socio-Economic Survey in 2007, but this has yet to be published. SNEC, however has used data from this survey in its report, *Labor Market and Youth Employment*, March 2009. This report was only received by the project team as it was finalising this Sub-Sector Assessment. As both NIS surveys were conducted prior to the current economic crisis, the changes in key relativities were only minor.

¹⁸ For a definition and discussion of underemployment in Cambodia, see Section III B (d) below

44. The educational composition of the Cambodian labor force is shown by age group in Table 4, and between urban and rural areas in Table 5. The latter shows that in 2004 the majority of the economically active population had not completed primary education. Less than 45 percent of those in the age group 15 to 20 had completed primary school, and that figure fell to between 25 and 30 percent for those over the age of forty. The proportion completing upper secondary schooling was only three percent overall, and reached a maximum in the age group 25 to 35. The total number economically active that had both completed upper secondary schooling and undertaken post-secondary education was estimated at only about 325,000 in 2004.

Table 4: Economically Active Population by Education and Age 2004 (percent)

Age group	None or only some educat'n	Primary		Lower secondary	Upper secondary	Post secondary	Total
		Not complete	Complete				
10-14	11.3	78.1	10.4	0.2	-	-	100
15-19	13.4	42.2	34.5	8.9	1.0	0.1	100
20-24	18.9	36.3	25.4	11.6	5.7	2.0	100
25-29	23.7	37.0	22.4	9.1	5.3	2.6	100
30-34	21.9	34.0	26.6	8.7	6.0	2.8	100
35-39	26.6	37.5	22.0	7.9	3.9	2.0	100
40-44	32.3	43.0	15.8	6.2	1.3	1.3	100
45-49	31.9	40.7	14.3	9.2	2.6	1.3	100
50-54	32.9	39.1	16.6	8.4	1.8	1.1	100
55-59	37.2	34.1	16.7	9.0	2.3	0.7	100
60-64	49.8	26.2	15.5	6.6	1.8	0.1	100
65+	64.0	22.8	8.2	4.3	0.4	0.2	100
Total	23.7	42.4	21.8	7.8	3.0	1.3	100
Total population	1,773,000	3,177,000	1,635,000	586,000	226,000	99,000	7,496,000

Source: NIS Cambodia Socio-Economic Survey, 2004, <http://statsnis.org/SURVEYS/CSES2003-04/Statistic.htm>

45. Table 5 shows that the more educated amongst the economically active tend to be located more in metropolitan and urban areas than in the rest of the country. In 2004, whereas almost 75 percent of the rural labor force had not completed primary school (and 36 percent had not completed any grade of schooling), that percentage fell to about 58 percent in urban areas outside the capital, and 37 percent in Phnom Penh. (that still meant, however, that over a third of the labor force in the capital had little or no schooling. In contrast, however, 22 percent of the metropolitan labor force had completed senior-secondary schooling, compared to only two percent of the rural labor force.

Table 5: Education Attainment of the Economically Active, Age 25 and Over, 2004 (%)

Education attainment	Phnom Penh	Other Urban	Rural
No or only some (not completed any grade)	11.4	25.6	36.1
Primary not completed (grade 1-5)	25.9	31.8	37.6
Primary completed (grade 6-8)	23.3	22.4	16.9
Lower secondary completed (grade 9-11)	16.2	11.1	6
Upper secondary completed (Completed grade 12)	13.9	7.0	1.9
Post-secondary education (higher)	8.0	1.0	0.2
Other	1.3	1.1	1.4
Total	100.0	100.0	100.0

Source: NIS Cambodia Socio-Economic Survey, 2004, <http://statsnis.org/SURVEYS/CSES2003-04/Statistic.htm>

5. Employment Status

46. Employment status provides an approximate gauge of the extent of the transition an economy has made from a traditional one based on small-scale unincorporated enterprises to a modern corporate wage-based economy. In the former most are employed as own-account workers and unpaid family workers. In such an economy, public administration is generally the only significant source of paid employment. In the latter, in contrast, most workers are paid employees in the private sector, in small and medium size enterprises (SME) and large corporations.

47. These differences have important consequences for the provision of TVET. Put simply, Track 1 TVET is often more appropriate to the traditional style economy, because it more closely mirrors its traditional forms of training delivery. On the other hand, the requirements of the modern wage-based economy, with its more arms-length forms of employment contracts, are for more formal accredited training programs that clearly signal to employers the types and levels of skills job-seekers possess. Track 2 TVET, therefore, becomes increasingly important as economies grow, develop and transform.

Table 6: Employment Status of those in Employment, 2007

Category	Males	Females	Total
Employers	0.1	0.1	0.1
Employees			
Private sector employees	na	na	14.9
Public administration employees	na	na	5.1
Total paid employees	23.3	16.6	20.0
Own account workers	39.9	28.8	34.4
Unpaid family workers	34.8	52.0	43.3
Others	0.6	0.3	0.5
n/a	1.4	2.2	1.8
Total	100.0	100.0	100.0

Source: Department of Labor Market Information, MOLVT, *Labor Market Information, 2007*, KLMI3, and Economic Institute of Cambodia *Cambodia Economic Watch*, Issue 6, April 2007, Tables A1.7

48. Table 6 shows the recent patterns of employment in Cambodia. It indicates quite clearly that over 75 percent of the labor force is still engaged in traditional forms of employment, and that only 15 percent are employed in the modern private sector based wage economy.

49. Again, there are clear differences between the employment situation in the rural areas and that found in the urban and metropolitan centres. Table 7 shows that the modern wage economy is far less developed in the rural areas, where less than 17 percent of those in employment are employees, compared with 26 percent in urban areas outside the capital, and 48 percent in Phnom Penh. What Table 7 also underscores, however, is that even in the capital, the seat of government and the commercial and industrial hub of the country, half those in employment are still in the most traditional forms of employment – forms of employment in which formal vocational qualifications do not count for a great deal.

Table 7: Employed Population (10 years and over) by Employment Status, 2004 (%)

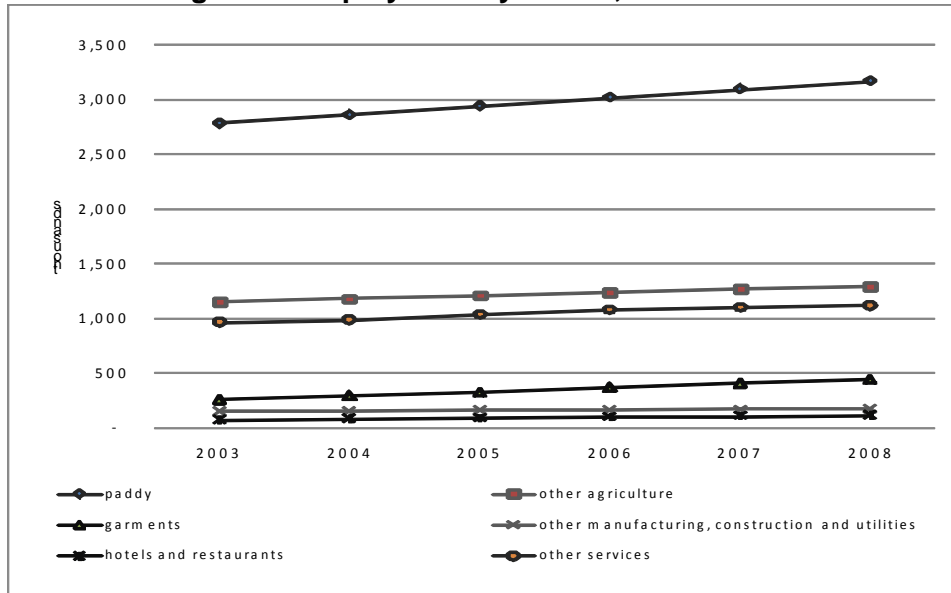
	Cambodia	Phnom Penh	Other Urban	Rural
Paid employee	20.0	48.0	26.3	16.7
Employer	0.1	0.1	0.2	0.1
Own account worker/Self-employed	34.4	27.1	34.5	35.0
Unpaid family worker	43.3	22.9	36.5	46.0
Other	0.5	0.7	0.2	0.5
NA	1.8	1.2	2.4	1.8
Total	100.0	100.0	100.0	100.0

Source: NIS *Cambodia Socio-Economic Survey, 2004*, <http://statsnis.org/SURVEYS/CSSES2003-04/Statistic.htm>

6. Employment by Sector

50. Figure 3 reinforces the points already made – that in absolute terms employment in paddy is still the major activity for the economically active in Cambodia, and that jobs in other forms of agriculture and in the service sector account for most of the remainder. Employment in the so-called ‘secondary sector’, of manufacturing, construction and utilities is comparatively very small.

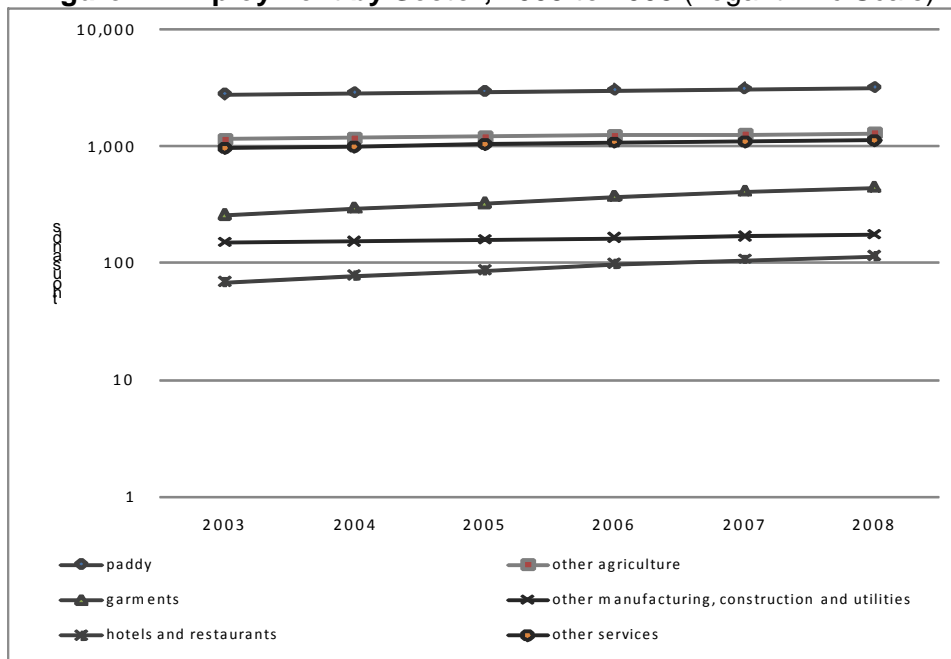
Figure 3: Employment by Sector, 2003 to 2008



Source: Economic Institute of Cambodia - *Cambodia Economic Watch*, Issue 6, April 2007, Tables A1.10

51. In terms of where the growth in employment has been, at least up until 2008, however, the picture changes somewhat. Figure 4 shows the relative growth profiles of employment over the period 2003 to 2008. What is clearer from this is that whereas employment in most sectors more or less flat-lined over the period, which in the garment industry and in tourism and hospitality noticeably increased.

Figure 4: Employment by Sector, 2003 to 2008 (Logarithmic Scale)



Source: Economic Institute of Cambodia *Cambodia Economic Watch*, Issue 6, April 2007, Tables A1.10

7. Occupational Patterns and Trends

52. At this point it would be useful to be able to examine changing patterns and trends in the labor force, in terms of its occupational composition. To repeat what was stated at the outset, the whole rationale of TVET is to provide training in the skills, knowledge and aptitudes required in middle-level, particularly non-agricultural, occupations. This being so, it is vital for TVET planners and policy-makers to have reliable, comprehensive, detailed and up-to-date information regarding this area of employment. Regrettably, the latest labor force survey that sought such information was conducted by the National Institute of Statistics (NIS) in November 2001, prior to much of the accelerated economic growth and development of recent times. The only data collected on employment by occupation since then was in the Cambodia Inter-Censal Population Survey of 2004. Data are only now available from these two sources at the major occupational group level, and not at the lower levels of disaggregation needed by TVET planners. What are available are summarized in Tables 8 to 10.

53. Not surprisingly, Table 8 shows that there is a heavy concentration of employment in skilled agricultural occupations and an apparent increase in that concentration between 2001 and 2004. If the majority shown in elementary occupations are added in, then between seventy and eighty percent of workers are in occupations directly related to agriculture. Employment in middle-level non-agricultural occupations – in major groups 3,4,5,7 and 8 – accounted for around 23 percent of the labor force in 2001, but this had apparently fallen back to about 20 percent in 2004. Table 9 shows that amongst non-agricultural occupations in 2004, over half were in sales and service and craft and related trades occupations.

Table 8: Distribution of Employed Persons Age 10 Years and Over by Major Occupational Category, 2001 and 2004

Major occupational group	2001			2004		
	Males	Females	Total	Males	Females	Total
1 Legislators, senior officials and managers	1.20	0.20	0.70	0.72	0.04	0.37
2 Professionals	1.50	0.70	1.10	0.32	0.09	0.21
3 Technicians and associate professionals	2.70	1.20	1.90	3.61	1.71	2.62
4 Clerical support workers	0.50	0.40	0.40	1.77	0.73	1.23
5 Service and sales workers	6.20	13.80	10.10	5.66	9.85	7.84
6 Skilled agricultural, forestry and fishery workers	67.80	66.20	67.00	70.66	75.01	72.65
7 Craft and related trade workers	6.10	9.50	7.80	6.55	6.38	6.46
8 Plant and machinery operators, and assemblers	4.40	2.30	3.30	3.82	0.17	1.92
9 Elementary occupations	8.50	5.70	7.10	6.14	5.99	6.07
0 Armed forces occupations	1.20	0.00	0.60	1.35	0.04	0.67
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: for 2001 - NIS, *Labor Force Survey of Cambodia*, November 2001, Table 2 for 2004 - NIS, *Cambodia Inter-Censal Population Survey, 2004, Analysis of CIPS Results Report 3, Labor Force and Employment*, Table 2.11

Table 9: Distribution of Employed Persons Age 10 Years and Over in Non-Agricultural Occupations, 2004

Major occupational group	Total	Urban	Rural	Male	Female
1 Legislators, senior officials and managers	1.35	0.74	1.62	2.40	0.16
2 Professionals	0.77	1.55	0.37	1.07	0.36
3 Technicians and associate professionals	9.57	9.35	9.61	12.06	6.84
4 Clerical support workers	4.49	8.39	2.59	5.91	2.92
5 Service and sales workers	28.62	34.34	25.68	18.90	39.40
7 Craft and related trade workers	23.59	19.09	25.50	21.88	25.52
8 Plant and machinery operators, and assemblers	7.01	8.09	6.47	12.76	0.68
9 Elementary occupations	22.16	15.86	25.82	20.51	23.96
0 Armed forces occupations	2.45	2.58	2.36	4.51	0.16
Total	100.00	100.00	100.00	100.00	100.00

Source: NIS, *Cambodia Inter-Censal Population Survey, 2004, Analysis of CIPS Results Report 3, Labor Force and Employment*, Table 2.11

54. An indication of the important cross-classification of employment by occupation and education is given in Table 10. Unfortunately, the published figures available from the NIS are incomplete, so this table only contains the cross-classification for employment in rural areas¹⁹.

Table 10: Distribution by Educational Attainment of Employed Persons of Both Sexes in Rural Areas in Each Major Occupational Group in 2004

Major occupational group	illiterate	education attainment								total
		no schooling	incomplete primary	complete primary	lower secondary	secondary education/ diploma	vocational training	undergraduate	graduate	
1 Legislators, senior officials and managers	0.53	1.64	31.4	34.48	14.77	10.85	1.87	0	3.42	100.00
2 Professionals	0	0	6.69	11.12	8.5	6.01	0	0	67.66	100.00
3 Technicians and associate professionals	1.45	1.47	5.9	13.79	32.21	30.42	13.7	0.49	0.42	100.00
4 Clerical support workers	0	1.13	12.97	23.92	28.6	25.74	2.5	0	5.15	100.00
5 Service and sales workers	15.46	1.68	35.71	29.04	13.21	4.23	0.25	0	0.34	100.00
6 Skilled agricultural, forestry and fishery workers	30.77	2.24	44.34	16.74	4.99	0.78	0.02	0.01	0.02	100.00
7 Craft and related trade workers	14.7	1.61	37.85	30.33	12.49	2.93	0	0.07	0.03	100.00
8 Plant and machinery operators, and assemblers	7.95	0.55	33.36	34.21	18.02	5.47	0.3	0	0.14	100.00
9 Elementary occupations	31.89	2.38	40.82	17.76	5.68	1.2	0.16	0.1	0	100.00
0 Armed forces occupations	7.45	5.02	42.67	22.78	13.41	6.08	0.46	0.43	1.71	100.00
All occupations	27.74	2.14	42.1	18.55	6.86	2.01	0.35	0.03	0.15	100.00

Source: NIS, *Cambodia Inter-Censal Population Survey, 2004, Analysis of CIPS Results Report 3, Labor Force and Employment*, Table 2.12

¹⁹ The published figures for this important cross-classification of employment are incomplete. Table 2.12 of NIS, *Cambodia Inter-Censal Population Survey, 2004, Analysis of CIPS Results Report 3, Labor Force and Employment*, presents statistics for urban females, rural males, rural females, and rural both sexes, but not for urban males, urban both sexes, or for males, females and both sexes for the country as a whole. No explanation is given for these critical omissions.

55. The salient points to emerge from Table 10 are:

- The high levels of illiteracy and very low levels of education, even amongst those who are literate, and the spread of these in rural employment to occupations outside of major group 8, that is, into those that generally require more than elementary skill levels;
- The apparently very low proportion of the rural workforce that have received vocational training (0.35 percent);
- By far the greatest concentration of rural workers with vocational training in technician and associate professional occupations; and
- The apparent lack, in rural areas, of any workers with vocational training in craft and trade related occupations, the very occupations that typically require vocational training.

8. Relative Earnings

56. As key labor market indicators, data on relative wage rates are most effective when sufficient observations have been made over time for trends to be discerned. If labor markets are relatively free, changing wage rate relativities can provide indicators of where skill shortages and surpluses are emerging. Movements in relative earnings are less reliable in this respect since changes in earnings can be a function not just of wage rate changes but also changes in hours worked. Either that or they are comprised mainly of salaries that may be determined on institutional and non-competitive grounds. Single point observations of either wage rates or earnings are even less useful as indicators of what is happening in labor markets.

57. There are no regular time-series of relative wage rates or earnings in Cambodia. The latest across-the-board statistics of relative earnings are for 2004 and are summarized in Table 11. Whilst earnings differences between males and females, and between metropolitan, urban and rural areas are what could be expected, the occupational relativities shown appear anomalous. According to these figures, the occupational group with the highest average monthly earnings are clerical support workers, and their earnings are about 50 percent higher than either managers or professionals. That would seem unlikely.

Table 11: Average Monthly Earnings, by Gender, Location and Major Occupational Group, 2004

	KHR	USD
Males	188,840	47.21
Females	170,315	42.58
Phnom Penh	310,678	77.67
Other urban	194,580	48.65
Rural	143,843	35.96
Managers	240,025	60.01
Professionals	243,044	60.76
Technicians and associate professionals	313,228	78.31
Clerical support workers	383,398	95.85
Service and sales workers	172,048	43.01
Skilled agricultural, forestry and fishery workers	84,644	21.16
Craft and related trade workers	198,786	49.70
Plant and machinery operators, and assemblers	241,938	60.48
Elementary occupations	158,507	39.63
Armed forces occupations	140,948	35.24

Source: NIS Cambodia Socio-Economic Survey 2004, as per Department of Labor Market Information, MoLVT, *Labor Market Information, 2007* Table 4.5

58. A more realistic set of earnings relativities are those obtained from a survey conducted within the garment industry. Table 12 draws on data collected from a sample of 58 factories (out of 233 on a Garment Manufacturers Association in Cambodia (GMAC) list in the Phnom Penh area). It shows clear lines of distinction between (i) foreign and local (Cambodian) employees and (ii) between shop-floor workers and those with any management/supervisory responsibility. Amongst local employees, even skilled and experienced workers on the floor earned only half that of their supervisors. On the other hand, however, the earnings premium skilled workers enjoy over those not so skilled is comparatively small.

Table 12: Average Monthly Earnings in the Garment Industry, 2007

	All employees	Foreign employees	Local employees
(General) director	1,602	1,802	-
Function director	1,013	1,081	-
Manager	609	769	450
Senior executive	435	516	269
Supervisor	324	475	224
Executive	174	288	169
Staff (skilled worker)	91	357	88
Assistant (experienced worker)	85	-	85
Worker	73	-	72
Unskilled worker	50	-	50

Source: GMAC *Garment Industry Salary Survey, 2007-8*, Tables 7-9

9. Impact of the Global Financial Crisis and Economic Downturn

59. Cambodia is not immune to the global financial crisis and the ensuing economic downturn. The more exposed sectors of the economy are to global competitive forces the more they are vulnerable to the disturbances that are occurring. Whilst the impact is, and will continue to be, felt across the whole economy, the most vulnerable areas of the Cambodian economy are the garment industry, tourism and hospitality, and construction – the very industries that have performed most successfully over the last decade or so. Other sectors to feel the pinch are real estate and, to some extent, non-paddy agriculture. Figure 5 summarizes these impacts.

Figure 5: Extent of Exposure to Global Competition By Cambodian Industries/Sectors

Industry/sector	Capital sources	Markets
Textiles and garments	90 percent FDI, mainly from: Taiwan 25 percent Hong Kong 20 percent China 15 percent South Korea 12 percent	Almost 100 percent exports, mainly to: USA 75 percent EU 20 percent
Tourism and hospitality	c.75 percent FDI, predominantly in: Siem Reap Sihanoukville Koh Kong	2.3 million international tourist arrivals in 2008 (see also Table 2 above) Unknown number of local tourists, but internationals have a much higher purchasing power
Construction	c.75 percent FDI	All local, but demand is driven by commercial and industrial investments, which are strongly influenced by foreign companies – and residential real estate Both depend on availability of finance
Real estate	c.50 percent FDI	Mostly local, although expatriates are important at the high end
Crops	Mostly local	Only a small percentage of cash crops exported Imported cereals also give a measure of exposure
SMEs	Almost all local	Almost all local

Source: CIDS/ILO *Rapid Assessment on the Impact of the Financial Crisis in Cambodia*, January 2009

60. Two studies have been undertaken directly dealing with these issues:

- Cambodia Institute of Development Studies (CIDS), with the support of the ILO, *Rapid Assessment on the Impact of the Financial Crisis in Cambodia*, January 2009; and
- Supreme National Economic Council (SNEC), in conjunction with UNDP, *Increasing Cambodia's Competitiveness for Growth and Poverty Reduction in the Face of the Global Financial Crisis*, Third Cambodia Economic Forum, February 5 2009, (not yet published at the time of writing)²⁰

61. CIDS/ILO also estimates the extent of the impact so far of the global downturn. They show that real GDP growth slowed to 6.0 percent over 2008 and further to 5.1 percent in 2009²¹, and its conclusion is that the loss in potential real income (output) to the country, due to external shocks, could be as much as USD 282 million in 2008 and USD 677 million in 2009. Because of the fluid nature of the crisis, and the degree of uncertainty, CIDS/ILO do not attempt to forecast what will happen beyond this year.

62. The textile and garment industry contracted by an estimated four percent in 2008, and is predicted to decline a further three percent in 2009 (CIDS/ILO, page 17). New investment in construction fell by 12.5 percent in the first eleven months of 2008, and real estate prices fell by 25 percent (pages 18 and 19). Whilst international tourist arrivals rose in 2008 above 2007 levels, they fell short of government targets, indicating that there is something of a lagged response in this industry. Growth in tourist receipts are predicted to fall from the high of 15.7 percent in 2008 to 5.5 percent in 2009 (page 19).

63. CIDS/ILO's assessment of the impact upon industry and sector employment, and upon household incomes is as follows:

Since mid-2008, workers in garment factories and construction have observed a massive increase in layoffs and reduction in overtime, which has caused their average effective income to decline. Due to the fall in demand caused by the global financial crisis, approximately 40,000 garment factory jobs and 15,000 construction jobs have been eliminated as of December 2008. Employment in the service sector such as tourism services (hotels, restaurants, tour guides, etc.) and real estate have not been affected yet, but could see job loss in the near future as income levels decline. Tuk-tuk drivers are starting to feel the impact; their daily earnings dropped by 60%-87% in 2008 compared to 2007 due to fewer tourists.

Due to the fall in average effective income combined with higher living costs in the city, workers have less/no money to send home. This is creating financial pressure on the household economy²².

²⁰ See also, ADB Economics Working Paper Series, No.139, *The US Financial Crisis, Global Financial Turmoil, and Developing Asia: Is the Era of High Growth at an End?* William E. James, Donghyun Park, Shikha Jha, Juthathip Jongwanich, Akiko Terada-Hagiwara, and Lea Sumulong, December 2008

²¹ CIDS/ILO acknowledge these are only estimates, and that they may differ from others made by other agencies – see CIDS/ILO, 2009, Table 4, page 12.

²² CIDS/ILO page 34

64. Since these studies were undertaken the situation has deteriorated further. In such a fluid situation often it is press reports that provide the most up-to-date information. For example, the English language *Cambodia Daily* reported, weekend, 28-29 March 2009:

So far, about 20 out of 291 factories, owned mostly by Taiwanese, Chinese, South Koreans and Malaysians, have closed their doors, said (a spokesperson for GMAC). Other factories, at best, were running at 70 percent of capacity now. Some had no orders at all. About 70,000 workers have been laid off since last year, and an additional 100,000 jobs are under threat over the next two years, according to the country's leading labor union Chea Mony.²³

65. In April 2009, the World Bank issued an updated forecast for Cambodia, predicting that the economy will contract by one percent in 2009:

In Cambodia, an expansion of 10.2 percent in 2007 stands in stark contrast to a contraction of 1.0 percent projected for 2009. The difference (11.7 percent) over two years is the largest in the region, and arises from a sudden drop in garment exports and tourist arrivals. The drop has been compounded by a sharp downward adjustment in credit growth that had earlier fuelled overheating in the economy, reflected in a rapid increase in real estate prices.²⁴

66. The same report goes on to make the following predictions:

Since the downturn is largely driven by the external environment, the recovery is highly conditional on a pickup in growth abroad. Forecasts for 2010 are therefore highly uncertain, but could be in the 0-4 percent range if external demand is supportive. A lengthy contraction will deepen concerns about the social and poverty impact. At the very least, 2009 – which comes on the heels of higher food prices in 2008 – will undo some of the progress Cambodia made towards its Millennium Development Goals, including in reducing poverty²⁵

B. TVET Initiatives to Help Cushion the Downturn and Prepare for the Upturn

67. TVET is not, of course, in a position to do much on its own to combat the financial crisis and economic downturn. In concert with other sectors and agencies, however, and as part of a package of initiatives, it can help the country to cushion the impact, and be better able to emerge from difficulties when the global up-turn commences²⁶.

68. Specifically TVET can assist in the following ways:

- a) TVET can help improve the productivity of workers;
- b) Cambodian producers can be assisted to move along the value-added chain in their own industries;
- c) Cambodian manufacturing has a very narrow base – TVET can assist in diversifying and broadening that base by widening and deepening the country's available middle-level skilled labor force; and
- d) In the short-term TVET can provide livelihood skills training for those who have been retrenched.

²³ Ek Madra 'Closing its doors: an ailing economy threatens the garment industry', *The Cambodia Daily Weekend*, 28-29 March 2009, pp 10-11.

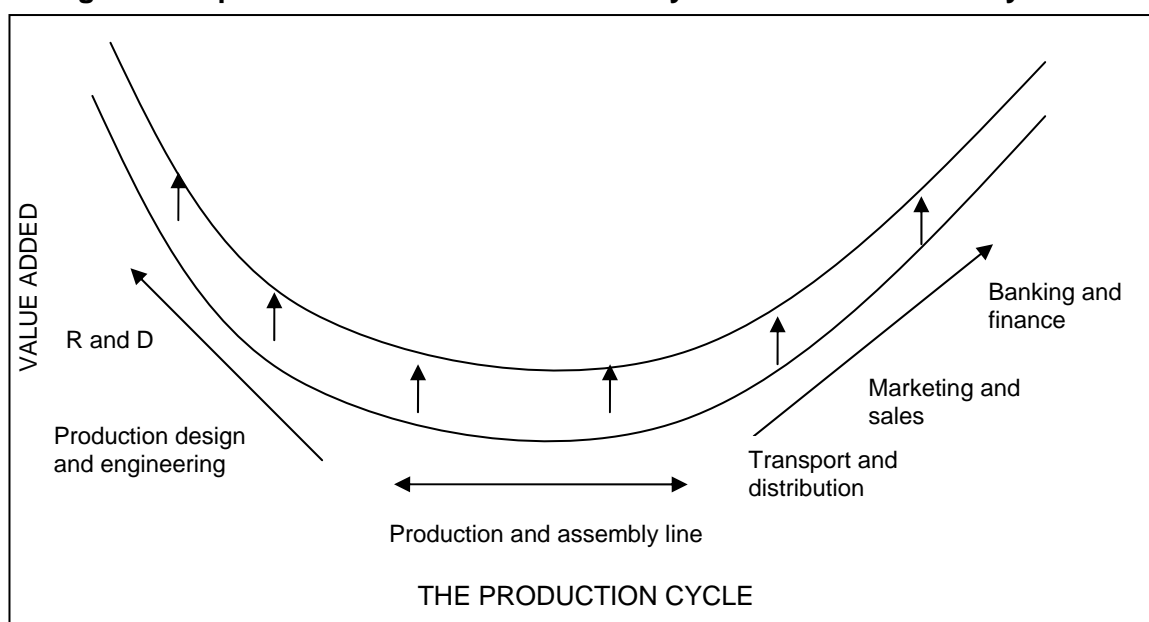
²⁴ *Battling the Forces of Global Recession*, A World Bank Economic Update for East Asia and the Pacific Region, April 2009, page 8

²⁵ *Ibid*, page 57

²⁶ Cambodia will need to do better across the board, however, with respect to how easy it is to do business in the country. In 2009 it ranks 135 (albeit up from 150 in 2008) out of 181 countries on the World Bank *Doing Business Index*, see <http://www.doingbusiness.org/economyrankings/>

69. Figure 6 illustrates contributions (i) and (ii). Up-grading of worker skills, in conjunction, say, with the introduction of new technology and improved workplace organization and practices, can assist in raising productivity, at whatever point along the production cycle they happen to be employed. That is, they can shift the value-added curve upwards. Furthermore, by training a pool of workers with the requisite skills, TVET can assist in giving entrepreneurs the opportunity in extending their operations along the value-added chain in their industry. This could be either backwards – away from simply engaging in low value-added production and assembly line functions, towards production engineering and design, and possibly even to research and development – or forwards to incorporate such higher value-added functions as the production of fully made-up finished goods, rather than semi-finished products, their transport and distribution, the marketing of finished products and the finance of industry operations, etc.

Figure 6: Improvements in Labor Productivity that can be Assisted by TVET



70. Contributions (i) to (iii) are essentially medium to long-term in nature. They need careful planning and, to be effective, TVET needs to work closely with industry groups, employers and government economic and planning agencies to identify emerging skill needs and opportunities. It then needs to develop training programs that best meet these requirements as the economy begins to emerge from the current crisis. Contribution (iv) is much more directed to the current crisis, and is intended to have an immediate impact.

1. Improving Worker Productivity

71. The purpose of any sort of training, be it vocational, technical, or professional, in Track 1 or in Track 2, is to provide the skills, knowledge, and aptitudes that raise productivity in employment. Training, of course, is only one of the factors that can bring about labor productivity growth - investment in plant and machinery, improved management, organization and workplace practices, an improved work ethic and positive incentive programs, are some of the others – and training can only be effective if it comes as part of a package of other measures.

72. Table 13 compares labor productivity (as measured by GDP per worker at constant prices) and productivity change across sectors. What it shows is that whilst productivity levels vary across sectors, they are generally lower in agriculture, especially in paddy. Moreover, productivity growth is also variable across sectors, with the leading growth sectors of garments, tourism and hospitality, and construction also performing well in this respect. What cannot be ascertained is whether real wages growth has kept pace with these increases.²⁷

Table 13: GDP per Worker, in Constant 2000 Prices

Industry/Sector	2008 (US dollars)	av annual % change 2003/08
Paddy	153	4.5
Other crops	1,029	6.4
Livestock	726	3.6
Fishery	1,794	1.6
Rubber and forestry	3,341	-0.8
Total Agriculture	446	3.4
Garments	3,095	5.2
Food, beverages and tobacco	1,628	1.7
Other manufacturing	2,192	2.8
Total Manufacturing	2,760	5.2
Electricity, gas and water	3,111	2.2
Construction and mining	2,117	5.5
Transport and communication	5,212	3.4
Trade	2,314	4.5
Hotels and restaurants	3,313	6.6
Other private services	4,068	4.4
Public administration	272	0.9
Total Services	2,472	6.3
Total	1,110	6.5

Source: Economic Institute of Cambodia, Cambodia *Economic Watch*, April 2007, tables A1.7 and A1.10

Table 14: GDP per Worker per Sector in Cambodia Compared to Other Countries in Asia, 2004(USD in constant 2000 prices)

	Agriculture	Industry	Services
Cambodia	320	1,445	789
India	583	2,055	3,196
Laos	479	2,290	2,331
Vietnam	359	2,294	1,491
China	581	4,847	2,979
Indonesia	738	5,394	2,351
Philippines	1,163	5,789	3,268
Thailand	751	9,710	5,470
Malaysia	6,095	17,670	8,487

Source: ILO, *Labor and Social Trends in ASEAN*, 2007

73. Table 14 shows the scope there is for quite dramatic improvements in productivity across the board. In every sector GDP per employee in Cambodia lags well behind the other countries in Asia included in this ILO study.

²⁷ Further discussion of the determinants of changes in GDP per capita in Cambodia can be found in World Bank *Sustaining Rapid Growth in a Challenging Environment: Cambodia Country Economic Memorandum*, Draft, January 14, 2009, paragraphs 3.17 to 3.25

74. To contribute most effectively to raising worker productivity, TVET planners and providers need to work closely with employers and their organizations to identify the training workers need to improve their job skills and work habits and aptitudes, in order to improve their productivity. Such training is most effective if it has a strong on-the-job component, such as do dual training programs and apprenticeship schemes. Even the off-the-job components should have strong employer input into design of curricula and training modalities and assessment.

2. Providing the Skills Required to Shift Around the Value-Added Chain within the Same Sector

75. The UNDP *Cambodia Human Development Report* of 2007 noted that...‘the Cambodian labor market is fraught with shortages of skilled workers at the middle skill level: mechanics, forepersons, electricians, motor winders, machine repairers, skilled masons, and the like. Expatriates fill up these positions, legally and illegally’²⁸.

Table 15: Percentage of Foreign Workers Amongst Garment Sector Employees by Level and Function, 2007

Level	Function								Total
	Top management	Production and planning	Production line	Industrial engineering and maintenance	Warehousing	Merchandising	Shipping	Finance and accounting	
(General) director	83								83
Function director	100	86					100		92
Manager	50	88	100		50		50	50	50
Senior executive		33	70-90	55	40	39	14	33	67
Supervisor		50	50-70	44	50			11	40
Executive			30-50			50			4
Staff (skilled worker)			1	3	6	13			1
Assistant (experienced worker)									0
Worker				2					1
Unskilled worker									0
Total	69	24	1-6	5	1	26	3	5	1

Source: GMAC *Garment Industry Salary Survey, 2007-8*, Table 6

76. Table 15 above provides an illustration from the garment industry of the job opportunities that could present themselves for Cambodian workers, if they have the appropriate training, and have acquired the requisite skills and experience. It shows that as the level of skill requirements and managerial expertise and experience needed increase, so too does the proportion of positions taken by foreign workers. Typically, Cambodian workers are confined to low skill low value-added jobs on the shop-floor.

77. As Table 12 above shows, foreign workers cost considerably more to employ than local workers, so an important consideration must be that the skills and experience required to perform higher value-added jobs satisfactorily are available in Cambodia. The skill gaps are not just in the higher levels of supervisory and managerial responsibility, but also in functional areas of the production process around the value-added chain – in those jobs that tend to make a higher value-added contribution than do those in the production lines on the shop-floor.

²⁸ UNDP *Cambodia Human Development Report, 2007*, page 99.

78. Similar opportunities no doubt exist in tourism and hospitality, construction and in other industries for Cambodian workers to be trained up to a level of competence where they can compete effectively with foreign employed workers²⁹

79. For TVET to make a contribution to Cambodia's economic growth and development, by providing Cambodian workers and job-seekers with the training that would enable them to apply for and secure employment in these more skilled occupations, thereby obviating the need to employ foreign workers, a two-pronged strategy is called for:

- (i) TVET long-course providers must offer training programs in a broad range of generic technical/trade and business-related skills that frequently represent the core competencies of higher value-added functions in many manufacturing and service/customer/client oriented industries; and
- (ii) These providers need to work closely with employers and industry bodies to develop customized training programs that target specific functions in particular industries.

3. Providing the Skills Needed for any Broadening of the Industrial Base

80. Contribution (c) can be made by providing would-be investors in areas of light manufacturing other than textiles and garments with a pool of skilled workers that could form an integral part of their labor forces. Even a cursory examination of Cambodian trade statistics³⁰ reveals a range of potential areas of export diversification and import replacement that could be exploited by investors and entrepreneurs (even in SMEs), given sufficient incentives. The gains to the country in foreign exchange savings and earnings could be large.

81. RGC has already in place a policy of *export diversification*, priority products that the country could target in an effort to broaden its narrow export base. In 2007, with support from its development partners (led by the UNDP), the government finalized its Diagnostic Trade Integration Strategy (DTIS) and identified 19 products with good export potential³¹. The selection was based on factors such as:

- actual and potential export performance
- world markets,
- domestic supplies, and
- human development impact (e.g. impact on employment and rural poverty).

82. These products are:

- **Agriculture:** beer, cashew nuts, cassava, maize, fish, livestock, rice, rubber, silk, soybeans, fruit and vegetables, including organic, mango, palm, pepper, and wood products
- **Industry:** footwear, garment, and light manufacturing assembly
- **Services:** tourism, labor services such construction and domestic services, transport, business services including IT

²⁹ A good example of movement around the value-added curve in the fields of electrical and electronics production is given in SNEC *Labor Market and Youth Employment*, March 2009, Figure 4.3. This has been adapted from an earlier study JICA *The Study on Economic Policy Support in the Kingdom of Cambodia*, 2007

³⁰ See UNCTAD/WTO International Trade Center detailed import and export figures for Cambodia, by product group, at <http://www.intracen.org/tradstat/>

³¹ World Bank *Sustaining Rapid Growth in a Challenging Environment: Cambodia Country Economic Memorandum*, Draft, January 14, 2009, page 37

Table 16: Cambodian Imports, by Product Group, 2001 to 2004 (USD thousand)

product group	2001	2002	2003	2004	2004 percent of total	av percent rate of change 2001 to 2004
Rice	3,125	8,889	7,280	8,506	0.4	32.4
Cereals other than rice	1,521	1,863	3,014	3,159	0.2	30.7
Cereal preparations	5,399	4,929	6,828	8,701	0.4	19.2
Vegetable, fruit and other edible products	39,178	41,183	22,392	29,818	1.4	-13.3
Meat fish and dairy products	6,054	5,304	9,054	15,295	0.7	39.3
Beverages and tobacco	83,460	79,959	77,395	88,512	4.3	1.4
Rubber, wood and fibres	38,067	42,002	44,360	48,988	2.4	8.5
Other animal and vegetable products	7,777	7,177	9,391	8,084	0.4	3.9
Minerals and ores, etc	3,740	7,228	4,825	3,925	0.2	-2.6
Coal, petroleum and natural gas	207,982	182,734	196,323	202,863	9.8	0.0
Chemical and petrochemical products	99,734	93,593	99,708	124,233	6.0	7.5
Leather, rubber, wood and paper products	44,631	42,995	51,837	53,887	2.6	7.8
Textiles	509,354	643,045	712,400	866,365	42.0	18.5
Pottery, glass and glassware, etc	50,154	57,277	55,064	58,855	2.9	4.5
Metals and heavy metal manufactures	60,696	66,688	57,134	71,878	3.5	3.6
Machinery and heavy equipment, including vehicles	196,750	227,767	246,992	286,053	13.9	12.8
Clothing and footwear	52,183	57,828	60,180	65,312	3.2	7.4
Other light manufacturing	79,772	85,210	92,523	100,272	4.9	8.0
Other nei	17,328	11,562	17,985	17,989	0.9	5.7
Total product imports	1,506,905	1,667,233	1,774,685	2,062,695	100.0	10.6

Source: UNCTAD/WTO International Trade Center, <http://www.intracen.org/tradstat/>

83. The corollary to export diversification is *import replacement*, where domestic capacity is built up to produce locally products that have hitherto been imported³². Table 16 above groups Cambodia's product imports for the period 2001 to 2004, the latest year for which figures are available. It shows that many of the DTIS products identified as potential export earners are also possible candidates for import replacement. The biggest single area of potential import replacement, however, is in textiles. Cambodia currently imports most of the textiles it uses as inputs into its garment industry, and these alone account for over 40 percent of merchandise imports.

84. Industries identified for immediate diversification are food processing and simple electric assembly, electronics and machinery³³

³² In a globally competitive environment, and within WTO obligations, import replacement requires locally produced goods and services to be costed and priced competitively, free of subsidy and other protective barriers.

³³ See SNEC *Labor Market and Youth Employment*, March 2009, Chapter IV. 'Moving Cambodia Towards Industrial Economy'

85. For TVET to contribute to developing the country's capacity to pursue either export diversification or import replacement it would need to be able to provide a supply of graduates trained in the range of skills that would make them employable in middle level occupations across a growing diversity of industries. A solid grounding in the technical skills that are common to all potential areas of production identified, plus the capacity to be adaptable to the special requirements of a particular industry – be it in agriculture, manufacturing, construction or the service sector - are the primary requirements. What is required, that is, is training at NTQF levels 3 and 4 in the following fields:

- Automotive and mechanical engineering
- Welding and metal fabrication
- Plumbing and gas-fitting
- Electrical engineering
- Electronics
- Carpentry and joinery
- Pottery, glass and ceramics
- Information and communications technology
- Business, marketing and management.

4. Providing Livelihood Skills for Rural Underemployed and Job Re-entry Skills for Retrenched Garment Workers

86. Providing livelihood skills for the underemployed, particularly in rural areas, has been a priority of government well before the current economic downturn. Whilst there are no up-to-date figures for underemployment, it is probably running at over forty percent of total employment, and rising. As the World Bank country economic memorandum for Cambodia of January 2009 put it:

“Underemployed” is officially defined as employed persons who expressed the desire to have additional hours in their present job, or in an additional job, or to have a new job with longer working hours. The latest available figure for the underemployment rate is for 2001, when the rate was estimated at 38 percent. The rate is likely to still be high, given that there are substantial numbers of new job seekers, and many workers have primary and secondary jobs.³⁴

87. The current crisis can only add to the problem. As noted above, an estimated 70,000 employees or so have so far been laid off from the garment industry, and to that can be added those still to come in that industry and those who have similarly lost their wage-sector jobs in tourism and hospitality, construction and elsewhere. For many of these, especially the least skilled, the response is to return to the countryside, where at least there is still the option of slipping back into traditional forms of employment – as unpaid family and/or own-account workers. For many of these this will mean underemployment.

88. Publicly provided TVET can and does offer training and retraining programs for these people. Indeed, for almost all Provincial Training Centers (PTC) the only training programs they offer are Track 1 short-courses. Short courses are defined as all non-certificated courses that are less than 12 months duration. In general, as is evident in Section III.C, the short courses conducted by PTCs are often only a week or so in length, and are rarely over four months in duration. The vast majority of these provide livelihood skills appropriate to rural communities that are almost totally dependent upon agriculture. Very few of these programs, however, offer skills training in the technical and trades areas.

³⁴ World Bank *Sustaining Rapid Growth in a Challenging Environment: Cambodia Country Economic Memorandum*, Draft, January 14, 2009, footnote 16, page 27

89. If this role of public provided TVET is to be expanded, as appears to be the intention of the government, there is to hand a scheme that has been piloted in seven provinces over the last few years, that could be used as the vehicle and model. This is the ADB-supported VSTP. The numbers passing through this scheme are given in Tables 20 and 29 below, and its effectiveness to date is reviewed in Section VI.A of this report.

C. Supply of Skilled Workers from the TVET Sub-Sector

90. The question arises as to what extent the TVET sub-sector in Cambodia can contribute in the ways outlined to solving the short and medium economic and social development problems facing the country. Can it do so at present, and where and in what ways can its capacity be improved? The following section looks at the information that is available on the role of TVET on the supply-side of the labor market, as a source of training for middle-level skilled workers. Information is available for numbers either enrolled in or completing the following TVET programs (i) DGTVET short-courses, (ii) DGTVET long-courses, (iii) Private provider short-courses, (iv) NGO training programs, (iv) Apprenticeship programs.

1. DGTVET Short-Courses

91. Tables 17 and 18 below show the latest available data provided by the DGTVET for numbers completing short courses offered by their PTCs, for the years 2006 to 2008. These figures exclude the numbers trained under the pilot VSTP program. The number of person-months of training is calculated by multiplying the average length of course by the number completing, on the assumption that virtually everyone who starts a non-assessed short-course completes it.

92. The following salient points emerge from this data:

- (i) The number undertaking PTC short-courses is small - in both 2006 and 2008 less than ten thousand completed the courses. This contrasts with 'the estimated 3.3 million young people, mainly school dropouts, with needs for skills training,'³⁵ and the estimated 300,000 new entrants to the labor force each year³⁶
- (ii) Not only are the numbers small, but they vary substantially from year to year.
- (iii) Variations from year to year in the number completing the courses are much greater than in the number of person-months of training provided. This suggests that there is considerable variation from year to year in the average length of courses provided.
- (iv) The overwhelming number of completions are from agricultural courses – 65 percent in 2006, over 98 percent in 2007 and 75 percent in 2008. Only small numbers are from courses in auto repair and other technical trades areas, fewer still in computing and sewing, and hardly any at all from other TVET fields of training.

³⁵ See Johansen, *TVET in Cambodia: an initial sub-sector assessment*, January 2009, page 36

³⁶ See <http://ki-media.blogspot.com/2006/06/very-bleak-future-for-cambodian.html>

Table 17: DGTJET Short Courses, 2006 to 2008 Person-Months of Training and Numbers Completing, by Field of Training

Field of training	no. of courses offered 2006-2007	no. of courses offered 2008	no. of person- months training			no. completing		
			2006	2007	2008	2006	2007	2008
Agricultural courses								
cereal growing	2	1	120	60	90	60	60	90
vegetable and fruit growing	17	18	515	1,818	1,597	440	1,773	1,327
mushroom growing	17	17	930	1,890	1,183	420	1,800	1,183
mixed animal husbandry	10	0	2,620	1,200	-	700	990	-
poultry raising	20	18	210	3,871	1,355	210	2,431	1,085
pig raising	42	20	4,335	5,004	1,515	2,310	3,851	1,515
cattle raising	12	10	270	1,570	690	270	1,570	690
fish raising	13	11	675	1,361	955	420	948	685
other aquatic husbandry	5	2	100	270	210	40	270	210
fertiliser improvement	6	4	210	840	300	150	720	300
basic veterinary programs		2	-	-	160	-	-	40
other assorted agricultural courses	5	0	945	300	-	378	300	-
unspecified agricultural courses	3	0	-	2,062	-	-	628	-
Total agricultural courses	151	103	10,930	20,246	8,055	5,398	15,341	7,125
Technical courses								
mechanical	21	15	1,229	234	1,368	397	26	342
electrical courses	12	5	900	-	400	276	-	100
electronics	14	3	538	234	240	170	26	60
air-conditioning	2	3	218	-	324	63	-	81
plumbing	2	0	-	-	-	-	-	-
welding and metal fabrication	5	1	248	-	80	75	-	20
construction	2	0	143	-	-	45	-	-
masonry	6	5	400	225	400	100	25	100
carpentry	4	1	320	-	80	80	-	20
light manufacturing	1	1	60	-	120	60	-	120
Total technical courses	68	34	4,174	693	3,012	1,251	77	843
Textile and garment courses								
weaving	1	1	80	-	80	20	-	20
sewing	20	18	1,418	753	1,652	451	157	413
tailoring courses	1	3	80	-	328	20	-	82
Total textile and garment courses	22	22	1,578	753	2,060	491	157	515
Handicrafts and jewellery								
Total handicrafts and jewellery	5	2	360	180	240	45	25	60
Hairdressing and beautician courses								
hairdressing	5	3	368	-	336	123	-	84
beautician courses	6	1	350	-	80	110	-	20
Total hairdressing and beautician courses	11	4	718	-	416	233	-	104
Computing courses								
Total computing courses	26	22	1,610	-	2,734	555	-	667
Tourism and hospitality courses								
cooking	2	-	-	-	-	-	-	-
front-office	2	1	160	-	80	40	-	20
Total tourism and hospitality courses	4	1	160	-	80	40	-	20
Business courses								
accounting	3	1	320	-	80	80	-	20
small business management	3	1	240	-	80	60	-	20
other	1	1	80	-	80	20	-	20
Total business courses	7	3	640	-	240	160	-	60
Language courses								
English	-	1	-	-	338	-	-	75
Korean	-	1	-	-	162	-	-	36
Total language courses	-	2	-	-	500	-	-	111
Arts and design courses								
graphic design	-	2	-	-	160	-	-	40
Total arts and design courses	-	2	-	-	160	-	-	40
Miscellaneous courses								
Total miscellaneous courses	4	1	378	-	60	157	-	60
TOTAL	293	195	20,247	21,692	17,476	8,345	15,575	9,585

* excluding VSTP funded programs

** for fields of study see provisional classification and coding system in Appendix 4 Attachment A.4.1

Source: DTVET-M supplied figures, March 2009

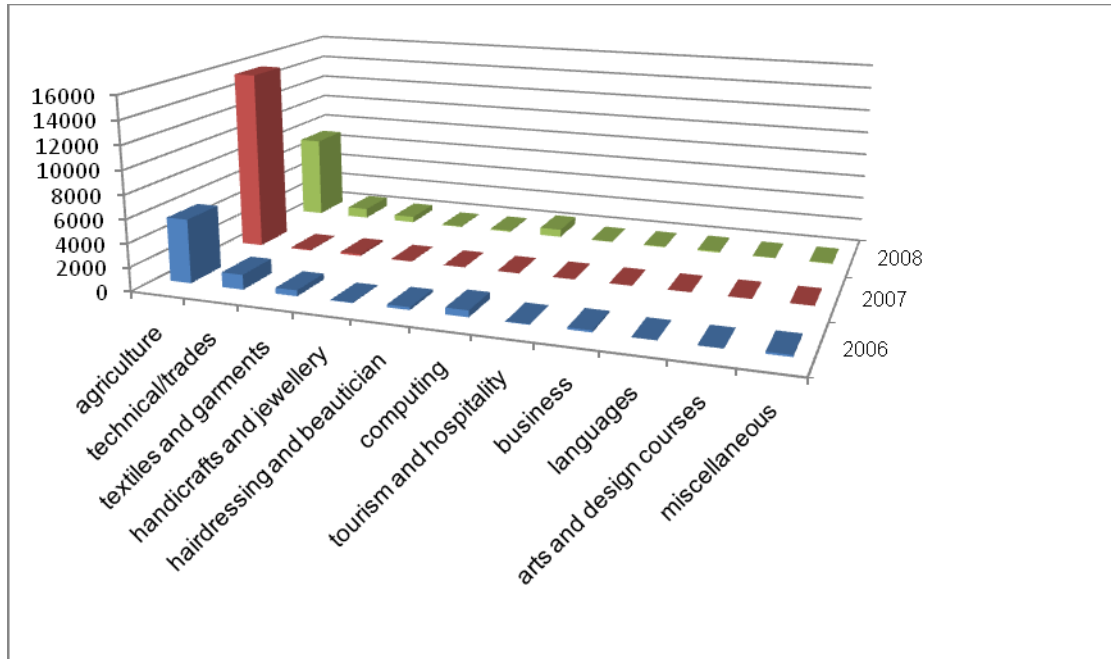
Table 18: Distribution Between Fields of Training by Person-Months and Numbers Completing DTJET Short Courses, 2006 to 2008

Field of training	no. of courses offered 2006-2007	no. of courses offered 2008	no. of person- months training			no. completing		
			2006	2007	2008	2006	2007	2008
Agricultural courses								
cereal growing	2	1	0.6	0.3	0.5	0.7	0.4	0.9
vegetable and fruit growing	17	18	2.5	8.4	9.1	5.3	11.4	13.8
mushroom growing	17	17	4.6	8.7	6.8	5.0	11.6	12.3
mixed animal husbandry	10	-	12.9	5.5	-	8.4	6.4	-
poultry raising	20	18	1.0	17.8	7.8	2.5	15.6	11.3
pig raising	42	20	21.4	23.1	8.7	27.7	24.7	15.8
cattle raising	12	10	1.3	7.2	3.9	3.2	10.1	7.2
fish raising	13	11	3.3	6.3	5.5	5.0	6.1	7.1
other aquatic husbandry	5	2	0.5	1.2	1.2	0.5	1.7	2.2
fertiliser improvement	6	4	1.0	3.9	1.7	1.8	4.6	3.1
basic veterinary programs		2	-	-	0.9	-	-	0.4
other assorted agricultural courses	5	-	4.7	1.4	-	4.5	1.9	-
unspecified agricultural courses	3	-	-	9.5	-	-	4.0	-
Total agricultural courses	151	103	54.0	93.3	46.1	64.7	98.5	74.3
Technical courses								
mechanical	21	15	6.1	1.1	7.8	4.8	0.2	3.6
electrical courses	12	5	4.4	-	2.3	3.3	-	1.0
electronics	14	3	2.7	1.1	1.4	2.0	0.2	0.6
air-conditioning	2	3	1.1	-	1.9	0.8	-	0.8
plumbing	2	-	-	-	-	-	-	-
welding and metal fabrication	5	1	1.2	-	0.5	0.9	-	0.2
construction	2	-	0.7	-	-	0.5	-	-
masonry	6	5	2.0	1.0	2.3	1.2	0.2	1.0
carpentry	4	1	1.6	-	0.5	1.0	-	0.2
light manufacturing	1	1	0.3	-	0.7	0.7	-	1.3
Total technical courses	68	34	20.6	3.2	17.2	15.0	0.5	8.8
Textile and garment courses								
weaving	1	1	0.4	-	0.5	0.2	-	0.2
sewing	20	18	7.0	3.5	9.5	5.4	1.0	4.3
tailoring courses	1	3	0.4	-	1.9	0.2	-	0.9
Total textile and garment courses	22	22	7.8	3.5	11.8	5.9	1.0	5.4
Handicrafts and jewellery								
Total handicrafts and jewellery	5	2	1.8	0.8	1.4	0.5	0.2	0.6
Hairdressing and beautician courses								
hairdressing	5	3	1.8	-	1.9	1.5	-	0.9
beautician courses	6	1	1.7	-	0.5	1.3	-	0.2
Total hairdressing and beautician courses	11	4	3.5	-	2.4	2.8	-	1.1
Computing courses								
Total computing courses	26	22	8.0	-	15.6	6.7	-	7.0
Tourism and hospitality courses								
cookery	2	-	-	-	-	-	-	-
front-office	2	1	0.8	-	0.5	0.5	-	0.2
Total tourism and hospitality courses	4	1	0.8	-	0.5	0.5	-	0.2
Business courses								
accounting	3	1	1.6	-	0.5	1.0	-	0.2
small business management	3	1	1.2	-	0.5	0.7	-	0.2
other	1	1	0.4	-	0.5	0.2	-	0.2
Total business courses	7	3	3.2	-	1.4	1.9	-	0.6
Language courses								
English	-	1	-	-	1.9	-	-	0.8
Korean	-	1	-	-	0.9	-	-	0.4
Total language courses	-	2	-	-	2.9	-	-	1.2
Arts and design courses								
graphic design	-	2	-	-	0.9	-	-	0.4
Total arts and design courses	-	2	-	-	0.9	-	-	0.4
Miscellaneous courses								
Total miscellaneous courses	4	1	1.9	-	0.3	1.9	-	0.6
TOTAL	293	195	100.0	100.0	100.0	100.0	100.0	100.0

Source: Table 17

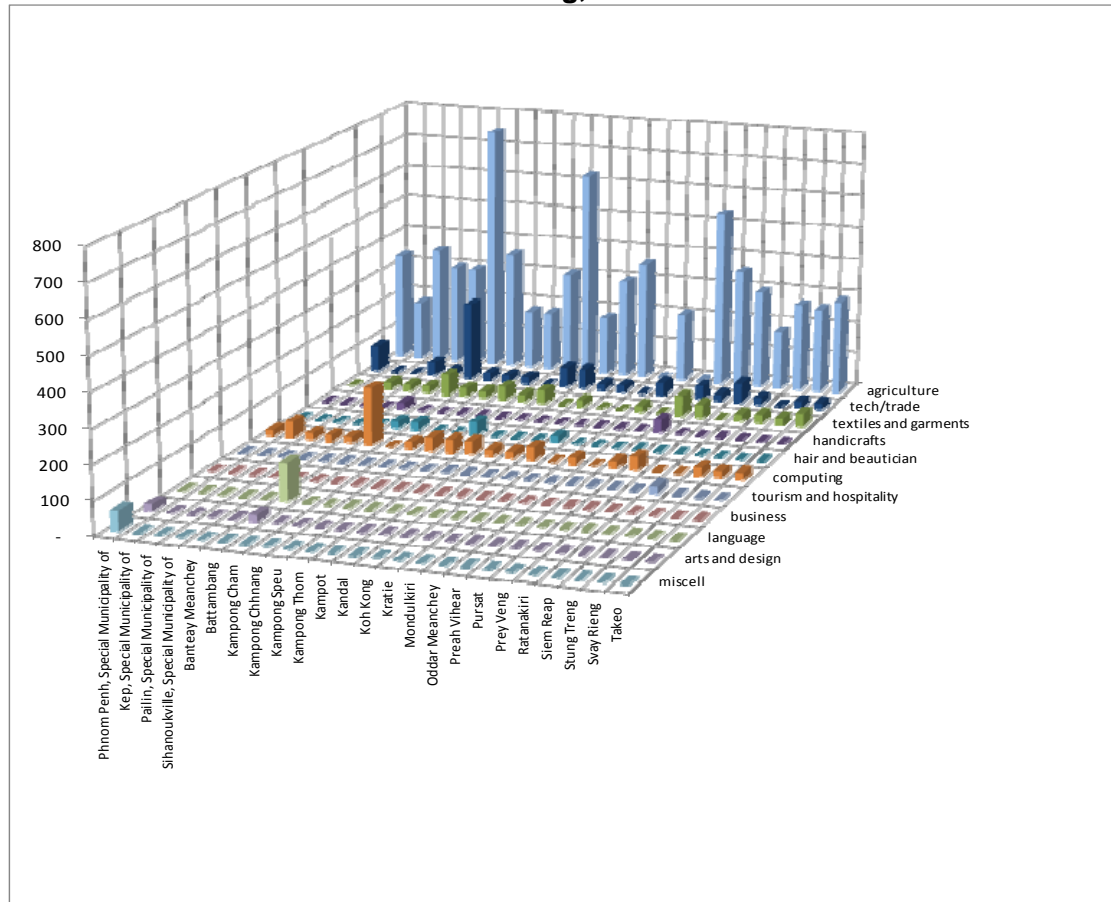
93. Figure 7 below graphically illustrate the annual variations in course completions and the dominance of agriculture as the field of training in PTC short-course training.

Figure 7: Numbers Completing DGT VET Short Courses, by Field of Training 2006 to 2008



Source: Table 17

Figure 8: Numbers Completing DGT VET Short Courses by Province and Field of Training, 2008



*For fields of study see provisional classification and coding system in Appendix 4 Attachment A.4.1
Source Appendix 3, Table A3.3

94. Figure 8 shows the distribution of PTC short-courses across provinces and fields of training. What is clear is that the predominance of agricultural courses is common across all provinces, and it was only in Battambang where there was even some semblance of diversity.

95. The inclusion of VSTP funded short-course completions dramatically alters the total numbers receiving non-assessed, un-accredited training, especially in the provinces where the scheme is being trialed, but also nationally, as is clear from Table 19 below.

96. In 2008, for example, even though it was only operating in seven provinces, with VSTP included the total PTC short-course completion numbers nationally rose by five-fold. The number of person-months this represented, however, only doubled, indicating that VSTP courses were typically much shorter than regular PTC courses. Table 26 below shows that this was because the vast majority of VSTP courses were community-based.

97. If the inclusion of VSTP course completions greatly increases the size of the DGTNET short-course output, so far they have done little to increase the diversity of programs being undertaken. Table 19 below also shows with the inclusion of VSTP 72 percent of course completions were in agriculture, not much down on the 75 percent when they are not counted. What has happened, however, is the non-agricultural courses under VSTP ate typically longer than agricultural ones, so that agricultural courses only accounted for about 40 percent of person-months of PTC short-course training.

98. Table 20 and Figure 9 below show the provincial pattern of short-course completions once you include VSTP funded programs. What is clear from these is how unbalanced DGTNET short-course offerings are, and they pose the question of whether the patterns displayed could be regarded as supply-driven or demand led.

Table 19: DGTNET Short Courses, Including those Funded through VSTP by Person-Months of Training and Numbers Completing, by Field of Training, 2008

field of training	course completions	person months	percent of total	
			course completions	person months
Agriculture	39,579	16,276	72.1	40.7
Mechanical Engineering	642	2,409	1.2	6.0
Electricity/Electrical	60	240	0.1	0.6
Electronic	237	1,154	0.4	2.9
Airconditioning	78	312	0.1	0.8
Welding and Metal Fabrication	32	128	0.1	0.3
Construction	174	622	0.3	1.6
Woodworking/Carpentry	20	80	0.0	0.2
Light Manufacturing	514	196	0.9	0.5
Technical/trades	1,757	5,141	3.2	12.8
Textiles and garments	689	3,166	1.3	7.9
Handicrafts and Jewellery	74	324	0.1	0.8
Hairdressing and Beautician	386	1,670	0.7	4.2
Computing	732	3,001	1.3	7.5
Tourism and Hospitality	1,008	327	1.8	0.8
Business/Management	32	128	0.1	0.3
Languages	143	486	0.3	1.2
Art and Design	22	88	0.0	0.2
Miscellaneous	8,714	4,262	15.9	10.7
Total	54,893	40,009	100.0	100.0

*for fields of study see provisional classification and coding system in Appendix 4 Attachment A.

Source: PPTA survey of PTCs, 2009

Table 20: Numbers Completing DGTVET Short Courses, Including Those Funded Through VSTP, by Province and Field of Training, 2008

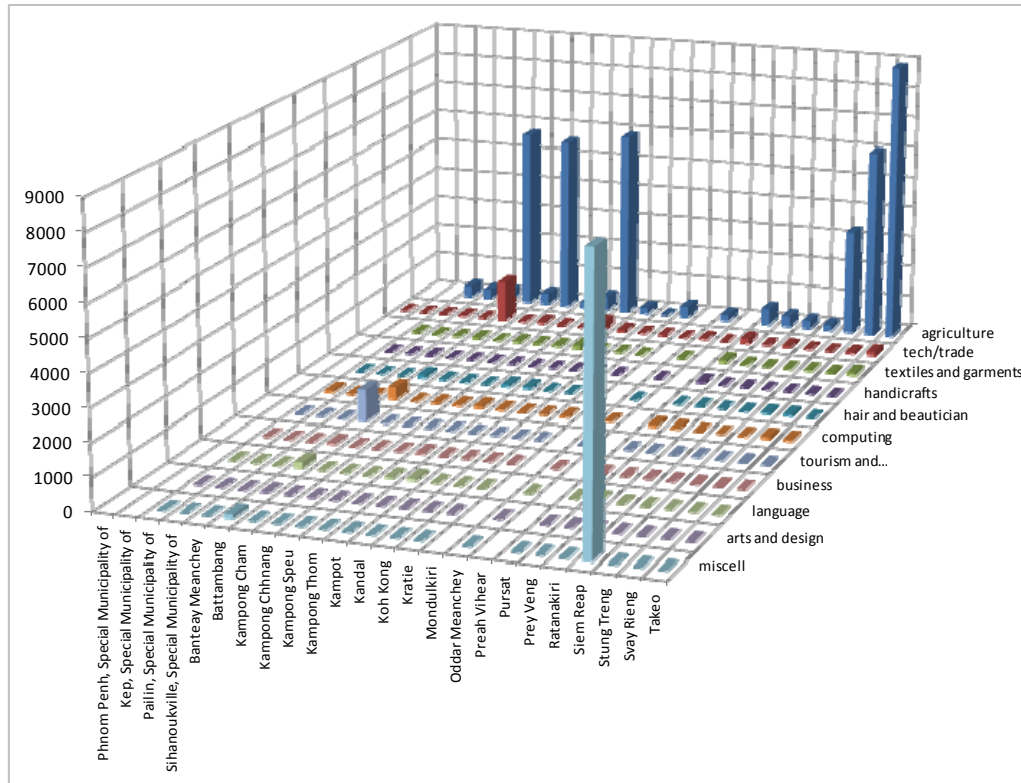
province/municipality	agriculture	tech/trade	textiles and garments	handicrafts	hair and beautician	computing	tourism and hospitality	business	language	arts and design	miscell	total
Phnom Penh, Special Municipality of	-	-	-	-	-	-	-	-	-	-	-	-
Kep, Special Municipality of	-	-	-	-	-	-	-	-	-	-	-	-
Pailin, Special Municipality of	355	20	23	-	-	75	-	-	-	-	-	473
Sihanoukville, Special Municipality of	300	40	18	-	-	20	-	-	-	-	-	378
Banteay Meanchey	300	20	20	20	-	20	-	-	-	-	-	380
Battambang	5,748	1,277	49	-	98	381	988	40	184	20	132	8,917
Kampong Cham	360	22	-	-	23	-	-	-	-	-	-	405
Kampong Chhnang	5,590	80	46	-	14	26	-	-	-	-	-	5,756
Kampong Speu	180	20	40	-	-	40	-	-	-	-	-	280
Kampong Thom	434	-	44	-	65	73	-	32	31	-	-	679
Kampot	5,935	265	110	-	58	36	-	-	72	-	11	6,487
Kandal	180	60	-	-	-	20	-	-	-	-	-	260
Koh Kong	-	20	20	-	-	20	-	-	-	-	-	60
Kratie	360	20	-	-	20	40	-	-	-	-	-	440
Monduliri	-	-	-	-	-	-	-	-	-	-	-	-
Oddar Meanchey	210	40	20	-	-	20	-	-	-	-	-	290
Preah Vihear	-	-	-	-	-	-	-	-	-	-	-	-
Pursat	540	154	98	54	-	64	-	-	-	-	-	910
Prey Veng	360	20	20	-	20	40	-	-	40	-	-	500
Ratanakiri	270	60	-	-	-	-	-	-	-	-	-	330
Siem Reap	180	20	20	-	-	-	20	-	-	-	8,668	8,908
Stung Treng	3,342	17	41	-	32	25	-	-	-	2	-	3,459
Svay Rieng	6,047	43	25	-	51	69	-	-	-	-	-	6,235
Takeo	8,888	126	95	-	5	46	-	-	-	-	-	9,160
Total	39,579	2,324	689	74	386	1,015	1,008	72	327	22	8,811	54,307

* excluding VSTP funded programs

** for fields of study see provisional classification and coding system in Appendix 4 Attachment A.4.1

Source: STVET PPTA survey of PTCs, 2009

Figure 9: Numbers Completing DGTVET Short Courses, Including those Funded Through VSTP, by Province and Field of Training, 2008



Source: Table 17

2. DGTVET Long-Courses

99. Tables 21 and 22 outline the information provided regarding numbers completing DGTVET long-courses in 2008. Long-courses are defined as those of twelve months or more duration and that lead to a qualification under NTQF. DGTVET institutions offer long-courses at the certificate, diploma, bachelor and post-graduate levels. These institutions are heavily concentrated in Phnom Penh, and there are two in Battambang and one in Kampot.

Table 21 : Numbers Completing DGTVET Long-Courses by Level and Field of Study, 2008

field of training	levels 1, 2 and 3		diploma level 4		bachelor level 5		masters level 6		total	
	no. of courses	graduates	no. of courses	graduates	no. of courses	graduates	no. of courses	graduates	no. of courses	graduates
agriculture	-	-	-	-	-	-	-	-	-	-
technical/trades										
mechanical	4	75	3	46	-	-	-	-	7	121
electrical courses	3	159	4	302	2	159	1	9	10	629
electronics	2	72	3	61	2	55	-	-	7	188
air-conditioning	2	60	2	32	-	-	-	-	4	92
plumbing	-	-	-	-	-	-	-	-	-	-
welding and metal fabrication	-	-	-	-	-	-	-	-	-	-
construction	2	66	4	195	3	154	1	11	10	426
masonry	-	-	-	-	-	-	-	-	-	-
carpentry	-	-	-	-	-	-	-	-	-	-
other manufacturing trades	-	-	-	-	-	-	-	-	-	-
total technical/trades	13	432	16	636	7	368	2	20	38	1,456
textiles and garments	-	-	-	-	-	-	-	-	-	-
handicrafts and jewellery	-	-	-	-	-	-	-	-	-	-
hairdressing and beautician	-	-	-	-	-	-	-	-	-	-
computing										
information technology	-	-	1	29	1	30	-	-	2	59
CAD/CAM	-	-	1	12	-	-	-	-	1	12
total computing	-	-	2	41	1	30	-	-	3	71
tourism and hospitality										
tourism	-	-	1	5	-	-	-	-	1	5
total tourism and hospitality	-	-	1	5	-	-	-	-	1	5
business										
management	-	-	1	21	2	212	1	109	4	342
business administrative	-	-	1	16	-	-	-	-	1	16
accounting	-	-	1	22	2	105	-	-	3	127
marketing	-	-	1	23	2	49	-	-	3	72
total business	-	-	4	82	6	366	1	109	11	557
languages										
English	-	-	1	31	-	-	-	-	1	31
total languages	-	-	1	31	-	-	-	-	1	31
teacher training										
junior teaching	1	64	-	-	-	-	-	-	1	64
senior teaching	1	148	-	-	-	-	-	-	1	148
total teacher training	2	212	-	-	-	-	-	-	2	212
arts and design courses										
graphic design	1	59	-	-	-	-	-	-	1	59
total arts and design courses	1	59	-	-	-	-	-	-	1	59
miscellaneous	-	-	-	-	-	-	-	-	-	-
Total	16	703	24	795	14	764	3	129	57	2,391

*For fields of study see provisional classification and coding system in Appendix 4 Attachment A.4.1

Source: DTNET-M supplied figures, March 2009

Table 22: Distribution of DGTVET Long-Course Graduations by Field of Study, 2008

field of training	levels 1, 2 and 3		diploma level 4		bachelor level 5		masters level 6		total	
	no. of	graduates	no. of	graduates	no. of	graduates	no. of	graduates	no. of	graduates
agriculture	-	-	-	-	-	-	-	-	-	-
technical/trades										
mechanical	25.0	10.7	12.5	5.8	-	-	-	-	12.3	5.1
electrical courses	18.8	22.6	16.7	38.0	14.3	20.8	33.3	7.0	17.5	26.3
electronics	12.5	10.2	12.5	7.7	14.3	7.2	-	-	12.3	7.9
air-conditioning	12.5	8.5	8.3	4.0	-	-	-	-	7.0	3.8
plumbing	-	-	-	-	-	-	-	-	-	-
welding and metal fabrication	-	-	-	-	-	-	-	-	-	-
construction	12.5	9.4	16.7	24.5	21.4	20.2	33.3	8.5	17.5	17.8
masonry	-	-	-	-	-	-	-	-	-	-
carpentry	-	-	-	-	-	-	-	-	-	-
other manufacturing trades	-	-	-	-	-	-	-	-	-	-
total technical/trades	81.3	61.5	66.7	80.0	50.0	48.2	66.7	15.5	66.7	60.9
textiles and garments	-	-	-	-	-	-	-	-	-	-
handicrafts and jewellery	-	-	-	-	-	-	-	-	-	-
hairdressing and beautician	-	-	-	-	-	-	-	-	-	-
computing										
information technology	-	-	4.2	3.6	7.1	3.9	-	-	3.5	2.5
CAD/CAM	-	-	4.2	1.5	-	-	-	-	1.8	0.5
total computing	-	-	8.3	5.2	7.1	3.9	-	-	5.3	3.0
tourism and hospitality										
tourism	-	-	4.2	0.6	-	-	-	-	1.8	0.2
total tourism and hospitality	-	-	4.2	0.6	-	-	-	-	1.8	0.2
business										
management	-	-	4.2	2.6	14.3	27.7	33.3	84.5	7.0	14.3
business administrative	-	-	4.2	2.0	-	-	-	-	1.8	0.7
accounting	-	-	4.2	2.8	14.3	13.7	-	-	5.3	5.3
marketing	-	-	4.2	2.9	14.3	6.4	-	-	5.3	3.0
total business	-	-	16.7	10.3	42.9	47.9	33.3	84.5	19.3	23.3
languages										
English	-	-	4.2	3.9	-	-	-	-	1.8	1.3
total languages	-	-	4.2	3.9	-	-	-	-	1.8	1.3
teacher training										
junior teaching	6.3	9.1	-	-	-	-	-	-	1.8	2.7
senior teaching	6.3	21.1	-	-	-	-	-	-	1.8	6.2
total teacher training	12.5	30.2	-	-	-	-	-	-	3.5	8.9
arts and design courses										
graphic design	6.3	8.4	-	-	-	-	-	-	1.8	2.5
total arts and design courses	6.3	8.4	-	-	-	-	-	-	1.8	2.5
miscellaneous	-	-	-	-	-	-	-	-	-	-
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Table 21

100. The salient points to emerge from these tables are:

- The numbers at each level, especially at the vital certificate and diploma levels, are very low, compared to the estimated 8,000 or more graduates each year from the country's 47 colleges and universities.³⁷
- Agricultural training courses, so dominant at the short-course level, are absent amongst long-course programs.

³⁷ <http://newsgroups.derkeiler.com/Archive/Soc/soc.culture.cambodia/2006-06/msg00123.html>

- Technical and trade training programs produce the majority of long-course graduates at the certificate and diploma levels, but are comparatively less important at the bachelor and post-graduate levels.
- Business and management courses are relatively more numerous at the bachelor and post-graduate levels.
- Within the range of technical/trades long-courses, most graduates have come from automotive and mechanical, and electrical and electronics courses. What are conspicuously lacking are graduates from courses in plumbing, welding and metal fabrication, and carpentry and joinery, all core technical and trades training programs. What is not clear is whether this is because these courses are not available or that there is no student demand for them.

3. Private Provider Short-Courses

101. Information on trainee and completion numbers for the estimated 300 or more private providers is sketchy and incomplete. The DLMI has statistical returns for 2008 from only 47 registered private providers in only four provinces. The figures for these are summarized in Tables 23 and 24. The former shows that private providers vary considerably in size - from having as few as ten completions in 2008 to about one thousand. The latter reveals that of the private providers for whom information is available, the majority offered language training and courses in computing, business and hairdressing and beautician skills. None provided courses in agriculture or the technical/trades areas.

Table 23: Numbers in 2008 Completing Short-Course Training under Private Providers (as Data Returned to DLMI)

Province and institutions	Number of training completions
Kampot	
CTC Center	87
CIT Center	216
Apple Computer Center	64
Phnom Penh Beauty Salon	144
New Ton Thi Lay School	315
Computer Center	93
Education and Economic Development School	150
Thida Computer	60
Kong Vuthoa Computer	39
New Life International School	128
Bun Thoeun Computer	40
Global Education	255
International Language and Computer School	166
Global Language School	508
Computer Science Center	198
New Life International School	126
total Kampot	2,589
Ratanakiri	
Kruyoeng Center	122
Heng Leang International Center	100
Likasa Beauty Salon	10
BBU	125
total Ratanakiri	357

Province and institutions	Number of training completions
Batambang	
Batambang Computer Center	105
SMAT Center	94
Language and Skills Center	100
Moriya Foreign Language School	60
I T Specialty School	100
Computer School of USA	70
KBS School	780
Leang Menghong Computer Training	23
New Phnom Penh Poly Technique School	66
Computer Technology	100
ABC Computer	64
total Batambang	1,562
Kampong Thom	
New York International School	1,050
Kampong Thom International School	201
Kaka Language Center	107
Apsara School	748
Computer Training School	256
Panha Bot School	734
Tong Hour School (Chinese)	18
Australia Center for Development (English)	85
Computer Technology Center	50
Angkor City Institute	636
Phnom Penh Beauty School	20
Dai Thom II Driving School (Bus Driving)	510
Unidentifiable	50
Oxford International School	236
Fada English Language School	436
Day Chamnan Driving School (Bus Driving)	260
Total Kampong Thom	5,397

Source: DLMI Report on Labor Statistics, Year 2008

Table 24: Numbers Completing Short-Course training Offered by 47 Private Providers in 4 Provinces in 2008, by Field of Training

field of training	number completing
Hairdressing and beautician	149
Computing	1,932
Business	780
Foreign languages	4,628
Miscellaneous	917
Unidentifiable	1,705
Total	10,111

*See classification and coding system in Ap.ix 4 Attachment A.4.1. Source: DLMI Report on Labor Statistics, Year 2008

4. NGO Provided Training

102. Information on trainee and completion numbers for the estimated 12 NGOs providing TVET training is also sketchy and incomplete. The DLMI has information for 2008 for only five of them, in three provinces. Table 25 shows that most are small, with only one or two hundred course completions a year, but there is one with a thousand. Fields of training, as indicated by Table 26, however, are less like those of private providers and more like those of PTCs. The great majority of course completions are in the field of agriculture.

Table 25: NGO Providers of Short-Course Training, 2008 for which DLMI has Statistics

Province and institutions	number of training completions
Kep, Special Municipality of Cambodian World Family Organization	162
Kampong Thom Neary Khmer Association for Health and Vocational Training	127
Kampot Culture and Foreign Language Center	218
Cambodia Center for Children Right Protection	165
Center for Children and Women Development	998
Total	1,670

Source: DLMI *Report on Labor Statistics*, Year 2008

Table 26: Numbers Completing Short-Course Training Offered by 5 NGO in 3 Provinces, 2008, by Field of Training

field of training	number completing
Agriculture	1,139
technical/trades	9
textiles and garments	87
Computing	146
Languages	162
Miscellaneous	127
Total	1,670

*for fields of study see provisional classification and coding system in Appendix 4 Attachment A.4.1

Source: DLMI *Report on Labor Statistics*, Year 2008

103. Findings from the PPTA survey of NGO and IO skills training program provision, 2009, are summarized in Section VI E below.

5. Training in Other Line Ministries

104. The PPTA survey conducted in May 2009 of data related to training provision in the major line ministries identified significant in-service training, the majority either IT or management related. Specific short-course induction training for new recruits was also reported in several ministries. Three ministries offered training to the general public at what could be deemed TVET level courses but MOLVT currently plays no role in their regulation or certification. The Ministry of Agriculture, Forestry and Fisheries (MAFF) has traditionally offered a range of short-course agricultural extension training for farmers but with recent major resource constraints, very few of these courses are actually conducted. Indeed, the very strong demand for short-course agricultural training under VSTP may well be a response to a lack of extension training provision from MAFF.

105. The Ministry of Tourism offers three month training for Tour Guides and trained 3,437 in 2008. The Ministry of Health operates the University of Health Sciences (UHS) and in 2008 there were 4000 enrollees. While the majority of training at UHS was at degree and post-graduate level, it did offer some TVET level programs for nurse-aides and midwifery.

6. Apprenticeship Programs

106. DGTVET has the oversight of formal sector apprenticeship programs. According to DLMI all establishments that have 60 or more workers are obliged by law to take on an additional 10 percent as apprentices, or pay one percent of their wages bill in lieu. One of the offices of DLMI has the responsibility for managing the program, so the statistics it has supplied can be assumed to be reliable. Table 27 summarizes the scope of the program in 2008.

Table 27: Number of Apprentices by Field of Training, 2004 to 2008

	2004	2005	2006	2007	2008
rubber trimming	419	583	665	199	249
rubber planting	300	80	35	50	40
Agriculture	719	663	700	249	289
Automotive	34	50	40	52	55
beer production	43	23	20	23	43
technical/trades	77	73	60	75	98
Weaving	1,960	1,883	1,440	2,230	2,150
Tailoring	2,628	2,277	3,144	3,823	3,610
textiles and garments	4,588	4,160	4,584	6,053	5,760
Hospitality	23	15	30	2	14
front office	20	23	5	2	10
Housekeeping	32	28	10	8	18
dealer casino	-	-	100	102	180
tourism and hospitality	75	66	145	114	222
Banking	-	-	-	10	-
Business	-	-	-	10	-
excavator driver	30	14	24	12	9
Miscellaneous	30	14	24	12	9
Total	5,489	4,976	5,513	6,513	6,378

*for fields of study see provisional classification and coding system in Appendix 4 Attachment A.4.1
Source: DLMI supplied material

107. Given the legal basis of the program, formal apprenticeships are a mode of middle-level skills training associated exclusively with the modern corporate sector. It is hardly surprising, therefore, given the importance of the garment industry in this country that most apprentices are in fields of skills training associated with textiles and garments. Other areas of importance for apprenticeships are tourism and hospitality related occupations, and those to do with rubber production, one of the few areas of commercial agriculture in Cambodia.

7. Summary of the TVET Contribution to the Supply of Skills to the Cambodian Labor Market

108. The great majority of those completing TVET courses have only received short-course training - often as short as a few weeks or months - training that is largely non-assessed and non-accredited. The great majority of this training, in turn, is in agriculture. PTCs are the largest providers of this informal (Track1) form of training, and VSTP funded programs in recent years, even though they have only operated in seven provinces, have been overwhelmingly the greatest contributor to this output. Most of this latter training, however, has not been conducted within the PTCs themselves, but out in the rural communities. NGO provided short-course training has largely complemented this

agricultural focus. Short-course training in non-agricultural fields has mainly been the preserve of private training providers, where the emphasis has been on language training and the provision of elementary skills in computing. A salient feature of Track 1 TVET is that little of the training provided by either the PTCs, private providers or the NGOs has been in the technical and trade skill areas.

109. The numbers graduating each year and joining the labor force from formal (Track 2) long-course programs are small, fewer than from Track 1 programs and from universities and colleges. Long-course programs, providing accredited training at NTQF levels 3 and above, are only offered by a handful of DGTVET training institutes. There are no private providers or NGOs offering these programs. However, it is here that the focus moves away from agriculture to the technical and trades skill training. Technical and trades training courses, and those providing training in business and management, produce most of the graduates from long-course programs. But even amongst the technical and trades training programs offered by DGTVET institutions there appear to be significant gaps. On the information provided there were no graduates in 2008 from formal Track 2 certified courses in welding and metal fabrication, plumbing and gas-fitting and carpentry and joinery - all vital middle-level skill areas needed across the board in any economic growth and development strategies the country may pursue.

110. Small numbers, lop-sidedness and gaps in fields of training aside, there are two further, and related, issues of concern: (i) the quality of the TVET training provided, and (ii) the extent to which it can add to the employability of those who undertake it. Quality has emerged as a real issue in higher education in Cambodia, where enrolments have grown rapidly (from around 25,000 eight years ago to about 135,000 in 2008). The concern is such that the lack of quality of graduates is being seen as a constraint upon economic growth³⁸

111. DGTVET long-courses have not seen the same rapid expansion, in either institutes offering courses or in enrolments. Nor are there any private providers coming into the field. There are no recognized and nationally applied standards in TVET accepted by industry, or with the setting of which employers have been involved. There is no quality control on what graduates ought to know, and on what skills and aptitudes they possess.

112. If this is a concern with the limited number of Track 2 long-course graduates coming on to labor markets from DGTVET institutes, it is potentially even greater a concern with those who have passed through unaccredited and unassessed PTC short-courses, especially with the large numbers who have completed community-based courses under VSTP. There appears to be no uniformity in course length or mode of delivery. For example, courses, say, in chicken rearing and inoculation or vegetable growing, can vary from a week or two to a month or two, and can be either center (PTC) delivered or community based.³⁹ Again there appears to be no quality control on these courses, and hence no way of monitoring what skills and knowledge course completers can be expected to display.

113. The same concerns, of course, can be expressed about the quality of the training provided by private training providers, but at least there is with them a market test – if they are of low quality, and do not deliver the standard of training either the trainees or their potential employers expect, then they have to either adapt, lift their game, or go out of business.

114. There is no information regarding the quality of the apprenticeship scheme – whether the enterprises participating are able and willing to provide quality training, or whether they are only participating because they are obliged to do so. There is no information either, on

³⁸ See, for example, <http://ki-media.blogspot.com/2006/06/very-bleak-future-for-cambodian.html> and <http://www.asiaone.com/News/Education/Story/A1Story20081005-91729.html>

³⁹ They can also vary considerably in cost per training hour. See Section VII below.

whether apprentices are retained by their employers once they have completed their indenture, whether they get jobs in the same occupations elsewhere, and what wages they receive during and after their training.

115. The question can be posed as to whether long and short course offerings at DGTVET institutes are supply-driven or demand led. The clear policy of NTB is that TVET should be demand driven, but there is little evidence to indicate that practical steps have been taken for either systematic labor market information, or the regular canvassing of employer views to ascertain where skill shortages and surpluses are emerging, are being used to guide the range of TVET programs being offered by PTCs and other DGTVET institutes⁴⁰.

116. 116. It seems clear that much of the training regularly undertaken in PTCs is determined by their capabilities rather than any concept of demand for graduate skills. On the other hand, much is made of the role of community leaders in determining the types of training being undertaken under VSTP, as evidence that at least this program is demand led. To some extent that is so, but further evaluation of the pilot program will throw more light on the bases upon which community decisions are made – be they short-term expediency, more forward planning ‘bigger picture’ perspectives of communities’ needs, or the requirement to spend the voucher money that is on offer.⁴¹

117. For DGTVET Track 2 long-course programs, the trend in recent years has been for institutes to enrol more students in bachelor level and even post-graduate programs, rather than in either certificate or diploma level courses, in response to the increased private demand (demand by would-be students) for places in those courses. This is in line with the continued strong demand for university places, even when the evidence is that only one in ten students secures a job upon graduation, and many have still been looking for work over twelve months later.⁴²

118. Information regarding post-training employment experiences of TVET course completers is either patchy or non-existent. At the macro level, there is the question of there being a lack of routine up-to-date information regarding such important labor market indicators as the unemployment rate. An English language national newspaper headline in April 2009 highlights the concern – “Absence of Unemployment Data is Hindering Government.”⁴³ The article goes on to state that “the absence of a meaningful figure on the country’s unemployment rate is hindering the government’s ability to have a clear view of the number of Cambodian job-seekers and obscuring the economic potential within the country for investors.”

119. As is discussed in Section III.D below, it is not only lack of up-to-date, reliable and comprehensive data on unemployment rates that is hindering policy development. NTB and TVET planners are similarly hindered by a lack of information regarding such vital indicators as occupational patterns and trends. The last national labor force survey conducted in Cambodia was in 2001.

120. At the micro level, there is little if any follow-up information for graduates of TVET institutions and courses. A two-stage survey has been conducted looking at post-training experiences of VSTP course completers⁴⁴, and in 2008 CAMFEBA commissioned a study⁴⁵ which surveyed expectations and experiences of youth and employers regarding the

⁴⁰ See further in Sections VII. B and C. below

⁴¹ For an appraisal of the VSTP and the role of the communes see Section VII.A.1 below.

⁴² See <http://ki-media.blogspot.com/2006/06/very-bleak-future-for-cambodian.html>

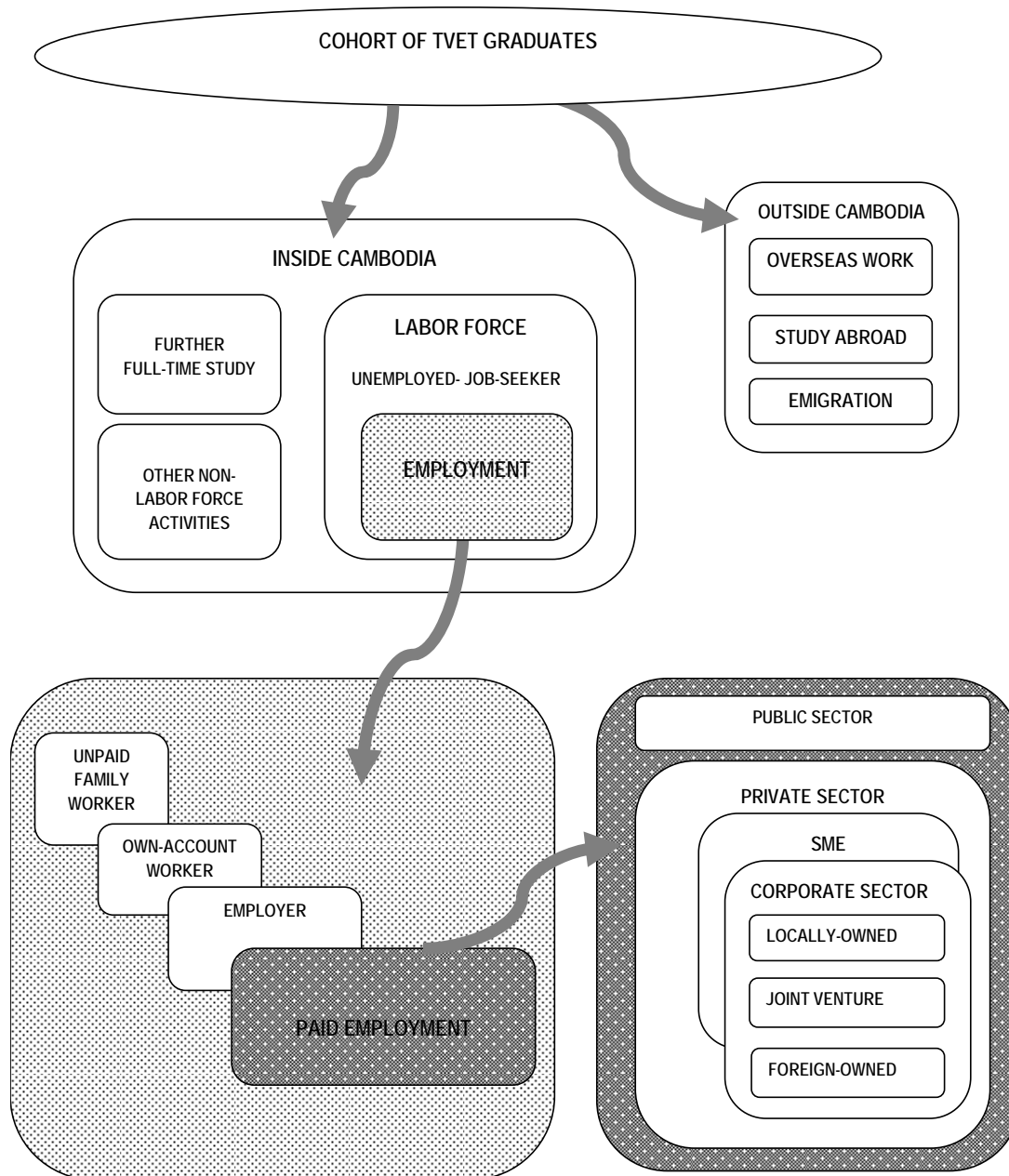
⁴³ *The Cambodian Daily – Business*, April 10, 2009, page 28

⁴⁴ see also Section VII.A.1 below

⁴⁵ Youth Employment and Social Dialogue Project (YEP), CAMFEBA, *Youth and Employment: Bridging the Gap*, July 2008,

labor market in five provinces, but no systematic tracer studies have been undertaken for any other DGTVET programs. To be comprehensive, these would have to be longitudinal studies, of at least a year or two duration, that set out to keep track of graduates, through the range of possible post-training destinations outlined in Figure 10 below.

Figure 10: Keeping Track of Graduates of TVET Training Courses



D. Labor Market Information Gathering, Analysis and Dissemination

121. According to the *National TVET Development Plan 2006 to 2010*, the mandate of the NTB is 'to link the demand for skills from enterprise and communities. A comprehensive knowledge of economic change which creates the demand for skills, combined with an overview of the work force and the supply of skills are basic requirements to meet this mandate'⁴⁶.

⁴⁶ *National TVET Development Plan, 2008 Annual Update, page 6*

122. To underline the importance of this NTB mandate and to assist the Board in being able to carry it out, a Sub-Committee of Labor Market Information of the NTB was established in October 2008. Appendix 1 has the details of the relevant Prakas of the Council of Ministers setting up the sub-committee.

123. The Department of Labor Market Information (DLMI) is one of the divisions of the DGTVET. The department has five offices:

- Labor market information
- Labor statistics
- Relations
- Special training
- Apprenticeships

124. The department currently has a staff of 42, however, most are in the sections dealing with special training and apprenticeships. DLMI's annual non-salary budget is small. The number of staff directly involved in labor market information and statistics is only about ten⁴⁷. The roles and duties of the DLMI Offices of Labor Market Information and Labor Statistics are contained in Appendix 2. It shows a large degree of overlap between the two offices, and no clear distinction between their respective roles.

125. One of the department's major initiatives so far has been the publication *Labor Market Information (LMI)*, which is a compilation of available data from both the demand and supply sides of Cambodian labor markets, as well as on wage rates. DLMI has presented some of this information in the form of key labor market indicators (KLMI):

- KLMI 1 Labour force participation rates, 2004
- KLMI 2 Employment-to-population ratio, 2004
- KLMI 3 Status in employment, 2004
- KLMI 4 Employment by sector, 2004
- KLMI 6 Hours of work, 2004
- KLMI 8 Unemployment rate, 2004
- KLMI 9 Youth unemployment, 2004
- KLMI 13 Inactivity rate, 2004
- KLMI 14 Educational attainment and Illiteracy, 2004
- KLMI 15 Manufacturing wage indices, 2001

126. So far only one edition of this bulletin, in 2007, has been published.

127. A number of problems are immediately apparent from this list of KLMI – none of the indicators is up-to-date; there are no time series, so they do not provide the all important information regarding labor market trends; and the list is not comprehensive in its coverage. Conspicuously lacking is any information regarding the distribution of employment by occupation, so vital to the planning and policy-making functions of the NTB. Closer scrutiny of the LMI shows also that the KLMI also lack detail – no information is provided at the levels of disaggregation required. Perhaps the biggest omission, however, is that the LMI contains no analysis of the statistics that have been assembled. The statistics are presented solely in tabular form, and without comment.

128. DLMI is not primarily a labor market information collection agency as such. It simply does not have the resources. It relies instead upon the good offices of other departments within DGTVET and MOLVT, the provincial DOLVT, and other government agencies, to

⁴⁷ In the FY 2009 recurrent (non-personnel) budget outlays for DGTVET, Sub-Program #7 allocates USD40,195 for labor market information. (See also Section VI below)

supply it with labor market information. Relations with the National Institute of Statistics (NIS) and the principal information gathering, census and survey conducting agency of RGOC, are crucial to any comprehensive system of labor market information collection.

129. Under the RGOC Statistics Law, MOLVT has high level representation on the Statistics Advisory Council to press the case for the NIS to conduct more comprehensive and frequent surveys that collect vital labor market information, and that can be followed up at the technical level through representation on the Statistics Coordinating Committee.⁴⁸ Moreover, NIS holds Data User Meetings before it conducts surveys, such as household surveys, to give interested line ministries and their statistics divisions (such as DLMI), the opportunity to argue their case for inclusion of relevant questions in survey questionnaires. Given the significant additional cost of each new question inserted it is incumbent upon users such as DLMI to well-prepare their case. NIS also has a Data User Service Center open to line ministry personnel to avail themselves of existing NIS data.

130. Within MOLVT cooperation with respect to information gathering and sharing is far from complete. Only 11 of the 23 provincial DOLVT sent in to the DLMI their Labor Statistics Reports for 2008⁴⁹. Moreover, the information collected by DLMI is not consistent with information collected by the department within DGTJET that routinely collects information from public short and long-course providers, the Department of Technical and Vocational Education and Training Management (DTVET-M). Even the information provided by DTVET-M itself does not always present a consistent picture. Tables 28 and 29 illustrate the difficulty of arriving at a reliable figure for DGTJET course enrolments and completions.

131. The first three columns of Table 28 compare figures for 2008 provided by DTVET-M over the period of the PPTA subsector study and the earlier Johanson study. The fourth column shows, in contrast the DLMI figures shown in its report on labor statistics for 2008, and the final column is the number of VSTP course completers quoted by Johanson. The lack of even broad consistency in these figures is striking.

132. Table 29 takes the differences in reported short-course completions down to the provincial level. It shows that discrepancies appear for many provinces (and hence for individual PTCs) even in those in which the VSTP is not being piloted. It would appear, however, that the greatest discrepancies lie in the counting of course completions amongst VSTP community-based training programs.⁵⁰

133. Appendix 3 compares short-course completion figures, 2008, by course, location of training and source of data.

Table 28: DGTJET Trainee Numbers for 2008, by Source of Information

	DGTJET training numbers for 2008				
	Johansen DTVET-M enrolments (dated Nov.08)	DTVET-M graduates (dated Dec 08)	DTVET-M graduates (dated Mar 09)	DLMI graduates	VSTP graduates
Short courses	79,546	67,178	9,585	17,870	42,963
Certificate 1, 2 and 3 programs		1,524	703		
Diploma programs	824	3,151	795		
Higher diploma programs	1,883				
Bachelor degree programs	2,965		764		
Postgraduate and teacher training	447	1,408	129		

⁴⁸ NIS Ministry of Planning, *Statistics Law*, November 2005, Articles 15 and 16.

⁴⁹ see MOLVT *Report on Labor Statistics, Year 2008*, page 1

⁵⁰ Appendix 3 compares provincial short-course completion data for 2008 from DLMI, DTVET-M and the PPTA institute survey

Table 29: DGTJET Short-Course Completion 2008 by Province and Source of Information

province/municipality	DTJET-M	DLMI	VSTP				STJET survey inc VSTP
			centre	enterprise	community	total	
01 Phnom Penh, Special Municipality of	570						
02 Kep, Special Municipality of	230	500					
03 Pailin, Special Municipality of	397						473
04 Sihanoukville, Special Municipality of	384						378
05 Banteay Meanchey	380	380					380
06 Battambang	1,375	330	145	58	5,669	5,872	7,786
07 Kampong Cham	430						430
08 Kampong Chhnang	240		126	56	4,839	5,021	5,756
09 Kampong Speu	280						280
10 Kampong Thom	409	523					679
11 Kampot	770	7,934	145	21	6,195	6,361	6,487
12 Kandal	260						260
13 Koh Kong	360						60
14 Kratie	440						440
15 Monduliri	-						-
16 Oddar Meanchey	290						290
17 Preah Vihear	-						-
18 Pursat	700	514					1,162
19 Prey Veng	460						500
20 Ratanakiri	360	638					330
21 Siem Reap	240		266	123	8,041	8,430	8,908
22 Stung Treng	320		11	63	2,396	2,470	3,459
23 Svay Rieng	320	7,051	111	75	6,444	6,630	6,235
24 Takeo	370		154	69	7,956	8,179	9,160
Total	9,585	17,870	958	465	41,540	42,963	53,453
*Johansen quoted total figure from DTJET-M	79,546						

134. The management of DGTJET and its DLMI are aware of their task, and of the current shortfalls, and are working towards improving the collection, analysis and reporting of labor market information⁵¹. Clearly, however, there is an urgent need for an education management information system (EMIS) to be established and operationalized as soon as possible within DGTJET, one that is applicable to all TVET providers under the aegis of DGTJET, and one to which all departments subscribe. The NTB should at least be able to know accurately at any given time how many trainees pass through their courses, and in what they are being trained.

135. An interesting major initiative of MOLVT with respect to labor market information gathering and dissemination is the establishment of a Job Shop program on the NTB website. Whilst not yet fully operational, it is intended to act as the online hub of information for job seekers, employers and training providers. In similar vein it is proposed under the National TVET Development Plan 2006 to 2010 to establish a National Employment Agency (NEA), initially with nine provincial centres, where the three stakeholders can get information from one another regarding employment demand from employers, employment supply from job seekers and necessary skills training to be provided by training providers to bridge the gaps⁵². Both the LMI Bulletin and the Job Shop/NEA initiatives can be seen as part of a broader, more concerted and integrated approach to labor market information that DGTJET is keen to pursue.⁵³

⁵¹ Although located within DGTJET the mandate of the DLMI and its offices of labor market information and labor statistics is broader than the TVET sector. They are required to act for the whole MOLVT. Thus they also have to collect and process statistics relating to other aspects of labor and employment, such as labor disputes, workplace accidents, hygiene and safety inspection, etc. The proposal for a LMIS detailed in Appendix 4 focuses strictly upon TVET.

⁵² see <http://www.ntb.gov.kh/jobshop/>

⁵³ In the FY 2009-2011 Capital Budget for MOLVT, Project 894 provides USD197 thousand for the creation of a job information system. (See also Section VI below)

136. For labor market information to be an effective management and planning tool, for use by the NTB in carrying out its mandate, the information gathering, processing, analyzing, reporting and disseminating must be much more systematic than they are at present.

137. A proposal for a labor market information system (LMIS, not to be confused with an EMIS) that could be developed for DGTVET for them to meet their obligations in this respect, and for them to provide the NTB and its Sub-Committee on Labor Market Information with up-to-date, reliable and comprehensive information, that has been analyzed and presented in the appropriate way is contained in Appendix 4. What is stressed is that this is a proposal at this stage, and yet to be assessed for inclusion in the design of the proposed loan project. Figure 11 below shows the current existing sources of labor market data for TVET and the responsible agencies.

Figure 11: Status of Labor Market Information Gathering for TVET, 2009

Collecting Agency	Means of collection	Information sought	Current Status
1. DGTVET	DGTVET's Education Management Information System (EMIS) Information provided by annual statistical returns from DGTVET training institutes	<ul style="list-style-type: none"> ➤ New enrolment (course starters) and total trainee numbers, drop-outs and graduates, by: <ul style="list-style-type: none"> • course level and field • length of course • gender 	The EMIS is only in the development stage and is not yet yielding data. A major problem is that not all provincial DOLVT and training institutes are transmitting data to DLMI. Another obstacle is that, up to now, TVET institutional data has been collected by DTVET-M and this information does not appear to have been shared with DLMI
2. DGTVET training institutes	Tracer Study and Graduate Survey Programs: regular tracer studies based on samples taken from long-course graduating cohorts	<ul style="list-style-type: none"> ➤ Graduate post-training experience: <ul style="list-style-type: none"> • further study? • enter labor force? • find employment? • ease of finding employment • how find employment? • where find employment? • type of employment • primary occupation • earnings (hourly, daily, monthly, etc) • how useful was TVET training in finding job and in the job? 	The only major tracer study that has been undertaken recently was for the 7 PTCs that participated in the pilot VSTP. These were for short-course programs only, not for long-course programs.
3. National Institute of Statistics (NIS)	Enterprise Surveys sample surveys of <i>registered</i> business enterprises, supplemented by periodic sample surveys of <i>unregistered</i> business enterprises (informal sector enterprises)	<ul style="list-style-type: none"> ➤ Current and previous year's employment in enterprises, cross-classified by size, type, location (province, urban/rural) and industry/sector, by: <ul style="list-style-type: none"> • occupation (ISCO 3-digit level) • function (eg production line, maintenance, warehousing, office staff, sales force, etc) • level (eg worker, foreman, supervisor, manager, etc) ➤ Vacancy levels, by: <ul style="list-style-type: none"> • occupation • function • level ➤ Training programs <ul style="list-style-type: none"> • enterprise based • external ➤ Employer opinions of TVET training ➤ How recruit employees 	The NIS Survey of Industrial Establishments 2000 is the latest. Beyond that, there is some data from the MOLVT Department of Labor Inspection on aggregate enterprise and employee figures

Collecting Agency	Means of collection	Information sought	Current Status
4. National Institute of Statistics (NIS)	<p>Employee Surveys</p> <p>sampling of employees of participating enterprises in the Annual Enterprise Surveys</p>	<p>➤ Employees in enterprises, cross-classified by size type and industry/sector, by:</p> <ul style="list-style-type: none"> • gender • age group • highest education attainment • post-school training • occupation (ISCO 3-digit level) • function • level • wage rate • average weekly hours employed in current job • length of time employed by this enterprise • length of time employed in current job • training received in this enterprise • assessment of the value of any TVET training to current job • how obtained employment with this enterprise • employment previous to this enterprise 	<p>There are no separate employee surveys</p>
5. National Institute of Statistics (NIS)	<p>Household Survey</p>	<p>➤ Individual members of households, cross-classified by location (province, urban/rural), by:</p> <ul style="list-style-type: none"> • gender • age group <p>➤ Those of working age (12 and above), cross-classified by gender and age group, by whether:</p> <ul style="list-style-type: none"> • participating or not participating in labor force <p>➤ Those not participating, cross-classified by gender and age group, by reason:</p> <ul style="list-style-type: none"> • full-time education • ill-health and/or infirmity • child-rearing • other <p>➤ Those not participating, cross-classified by gender and age group, by:</p> <ul style="list-style-type: none"> • source of livelihood when not in labor force <p>➤ Those participating, cross-classified by gender, age group and highest educational attainment, by whether:</p> <ul style="list-style-type: none"> • employed or unemployed <p>➤ Those unemployed, cross-classified by gender, age group and highest educational attainment:</p> <ul style="list-style-type: none"> • duration of unemployment • occupation in last employment • source of livelihood when not employed <p>➤ Those employed, cross-classified by gender, age group and highest educational attainment, by:</p> <ul style="list-style-type: none"> • post-school training received • employment status 	<p>The latest comprehensive sample survey was the <i>Labor Force Survey</i> of November 2001. Some more recent information is available from the Cambodia Socio-Economic Survey (CSES) 2004, although this was not specifically focused on the labor force and employment.</p> <p>See: http://statsnis.org/SURVEYS/CSE S2003-04/index-cses.htm</p>

Collecting Agency	Means of collection	Information sought	Current Status
		<ul style="list-style-type: none"> • type of employer • size of employing enterprise • industry/sector • occupation (ISCO 3-digit level) • average hours of work • earnings (hourly, daily, monthly, etc) 	
6. DGTVET	<p>Job Advertisement Surveys</p> <p>Routine monitoring of job vacancy advertisements in the print and electronic media</p>	<p>➤ Job advertisements, cross classified by size, type, location (province, urban/rural) and industry/ sector, of the advertising enterprise by:</p> <ul style="list-style-type: none"> • occupation • whether part-time or full-time • what minimum education and/or training is required • wage/salary • other stipulations 	No such program currently exists
7. DGTVET	<p>Job Shop</p> <p>An online hub, on the NTB website, for the exchange of labor market information between job seekers, employers and training providers.</p>	<p>➤ Current information from registered jobseekers, employers and training providers that points to areas of current shortages and surpluses, by:</p> <ul style="list-style-type: none"> • location • industry/sector • occupation • levels of education and training 	Job Shop is not as yet operational
8. DGTVET	<p>National Employment Agency</p> <p>A network of job centres established for the exchange of labor market information between job seekers, employers and training providers</p>	<p>➤ Current information from registered jobseekers, employers and training providers that points to areas of current shortages and surpluses, by:</p> <ul style="list-style-type: none"> • location • industry/sector • occupation • levels of education and training 	These have yet to be introduced
9.INDUSTRY BODIES AND EMPLOYER GROUPS	<p>Periodic surveys of member enterprises by such bodies as the Garment Manufacturers' Association of Cambodia (GMAC), and the Cambodian Federation for Employers and Business Associations (CAMFEBA)</p>	<p>A range of quantitative and qualitative information related to specific areas of employment</p>	<p>GMAC commissioned a study <i>Garment Industry Salary Survey</i> for 2007-8. Information from this survey is presented in Tables 10 and 12 above.</p> <p>CAMFEBA's Youth Employment and Social Dialogue Project (YEP) commissioned a study <i>Youth and Employment: Bridging the Gap</i>, July 2008, which surveyed expectations and experiences of youth and employers regarding the labor market in five provinces</p>
10.INTERN'L AGENCIES	<p>Specially commissioned (generally one-off) surveys by the ILO, UNDP, WB, ADB etc</p>	<p>A range of quantitative and qualitative information related to specific areas of employment</p>	<p>The WB have commissioned a survey of establishments, workers and TVET institutes (in 2009) but the results are not yet available.</p>

E. Career Guidance

1. Current Provisions

138. Current provisions in the area of career development and guidance (CDG) were explored through (i) rapid review of available literature, project documents, studies, reports, and articles and papers on TVET in Cambodia, (ii) internet research, (iii) fact-finding through consultation meetings and discussions, (iv) mini-survey, and (e) preliminary field visits. These rapid data gathering techniques were used to identify and meet with probable key informants in private and public TVET institutions, GOs, NGOs, IOs, and business organizations.

139. It will be useful to have a common reference regarding two key concepts in CDG: job and career. In simple terms, a job refers to a specific piece of work done in exchange for pay. In this sense, a job is based on a transaction or a contract that is time-bound. Career, in contrast, connotes a progression through an area or field of work, usually requiring a period of preparation time to acquire the requisite knowledge, skills, and attitudes. Being a progressive activity, there is usually an element of development in career and this happens either (i) through conscious efforts by the individual on his or her own accord to choose, plan, and/or develop his or her career or (ii) undertaken by the concerned individual with others who are qualified to provide assistance related to career decision-making and other career-related actions. The assistance is often referred to as career development and guidance -- usually a systematic program that facilitates career decision-making and career management.

140. Current provisions in CDG in Cambodia were explored in this context. In general there appears to be no systematic or extensive institutionalized forms of CDG in primary and secondary educational institutions in Cambodia. In universities (specifically the National University of Management, the Norton University, and the Royal University of Law and Economics), the following CDG activities were reported to be present: (i) announcements of job openings/vacancies in companies, (ii) guidance in resume writing and (iii) pointers on how to conduct oneself in a job interview.

141. In TVET Track 2, long-course institutions in Phnom Penh, it was mentioned by key informants that some activities in CDG are being undertaken. These included (i) assistance in resume writing and preparation for job interviews, (ii) job vacancy announcements, visiting speakers. The Cambodia-India Entrepreneurship Development Centre (CIEDC) conducts entrepreneurial self-assessment and personal career visioning, and organizes entrepreneurs' talks. The National Training Board (NTB) is reportedly currently planning website content is one of the references to assist TVET institutions, and job applicants in these areas.

142. The French-Cambodia Chamber of Commerce currently conducts an annual career forum at which some 40 employers, largely in the business and financial sectors, participate to provide career information and workshops are organized to assist job seekers and applicants. Visitors to the career forum have opportunity to avail of free CV-writing assistance and information on job-seeking techniques. While not usually explored in mainstream CDG, there would appear to be indigenous forms of CDG found embedded in most cultures, including Cambodia. Beliefs, tradition, and heritage thus influence, or in some cases determine career choice or rejection. Some such traditions will aim to preserve the cultural identity of their families or communities, or as in the limitation of job choice which requires travel, aim at the protection of women. Typically, parents are the sole source of career advice, albeit an essentially limited source in a rapidly developing society. In all societies career choice is commonly influenced by the occupations of previous family generations.

143. The current field study also showed the need for more available, open, and perhaps more critical processes of advice for secondary students in their choice of future study options. Enrolment data at the senior level TVET institutions indicate that there is a significantly higher preference for economics, business and management courses compared to technical courses, despite the reality of the job market and the need for civil engineers, architects, technicians, electricians, architects, and technicians. Potential students seem to choose courses based on their conceptions and aspirations, not based on job opportunities and apparently without any notion of obtaining informed advice.

144. The other area where CDG can assist students and the unemployed youth is by preparing them for the world of work. Selection of applicants for a new job in a company is not just about the level of education and training but also about communication skills, critical thinking, problem solving, and work attitudes. These are some of the job- and career-related competencies that are usually highlighted in CDG in the aspect of preparing students for their during-career or in-career period.

145. It was noted during field visits that in institutions and organizations in Cambodia where some forms of CDG are provided, the activities addressed student or unemployed youth needs in the pre-career entry stage. However, as career is a progressive activity, CDG must also be concerned with *during-career* assistance and development. TVET graduates require time-to-time assistance about options for skills upgrading skills. In more advanced societies, where a wide range of career options exists, CDG is also concerned with career shifts, that is, moving from one career to another or several others in the course of an individual's entire career life.

146. From these findings, there appears to be a need to assist students and youth in the area of information related to job and career options, before TVET entry, for first employment and for subsequent career planning. One way could be through CDG.

2. Establishment of a National Employment Agency

147. It is estimated that in Cambodia around 300,000 individuals enter the workforce every year. Approximately 90,000 of these are graduates from private and public TVET institutions. Statistics from the Department of Employment and Manpower show that for the period 2004-2006, 434 job applicants were placed in jobs through the Ministry of Labor and Vocational Training.

148. The National Training Board (NTB) has put in its priorities to begin a long-term development of a National Employment Agency (NEA) to meet its mandate to assist enterprises and the workforce. There is the intent to establish the NEA as a special agency under the NTB. The main objective is to link job seekers with employment opportunities. It is envisioned that job shops will be established. On the one hand, the job shops will be where employers can announce their needs for workers. It will also be a possibility that employers can utilize job shops as venues of their recruitment pool. On the other hand, the job shops will cater to the needs of new graduates, out-of-school youth, and out-of-job members of the work force in order to assist them in obtaining information on work opportunities.

149. In the long-term, it is envisioned that the National Employment Agency, besides job placement, will also provide other employee and employer programs and services that are not yet being addressed by any government body that caters to the concerns of either employers or employees. For employers, future programs and services can include information and assistance in the installation of occupational health, workplace safety, and education programs on ergonomics. For employees, future programs and services of the NEA can include information and training regarding employability, providing information on how and where to obtain skills retraining, providing information and placement services on overseas job opportunities.

150. An outline Terms of Reference for a specialist to initiate the establishment of an NEA is attached as Appendix 5.

3. Training and Advisory Services for Small Businesses and the Self-Employed in Cambodia

151. Cambodia has a Department of Small Industry and Handicraft under the Ministry of Industry, Mines and Energy, the first public agency dedicated solely to addressing specific small and medium enterprise (SME) issues. Its commitment to SME is reinforced by the RGC *Rectangular Strategy* which includes the creation of the National SME Sub-committee. The core of this strategy is good governance and one of the four strategic sides of the rectangular development strategy which is concerned with private sector development and income generation. This strategic side covers attracting investments, promoting jobs, and SME promotion.

152. The government also established the SME Secretariat in 2004 as a public-private partnership for coordinated SME policy formulation and implementation. The SME Secretariat has been responsible for the drafting and approval of the *SME Development Framework* in 2005 and the continuous setting of goals and monitoring of the progress of its plans and programs.

153. Recent developments point to enhanced activities under the SME development framework in Cambodia. These include the setting up of a complaint hotline for businesses to appeal administrative decisions and reporting mechanisms established by the SME Secretariat. A *Handbook on Company Registration* has been prepared in 2005 by the Ministry of Commerce and implemented in pilot provinces since 2006. Various commercial laws relevant to SME are in the drafting process such as the Commercial Contracts, Commercial Court, Export Processing Zone, Commercial Arbitration, Insolvency, and Commercial Enterprises.

154. There are currently various support institutions and business development service providers catering to Cambodia SME development and self-employment projects, including cottage industries and micro-enterprises, both registered and unregistered. These support services are in the major RGC ministries⁵⁴, and, among others, in the Women's Association of Small Business Cambodia Cooperation Committee, a coordinating committee for approximately 300 local NGOs and 200 INGOs, which has SME promotion and development in its priority agenda.

155. Donor organizations have also supported SMEs, including ADB, GTZ, ILO, UNDP, UNIDO, and the USAID. There is a coordinating mechanism among the ADB, the DFID, and the WB for a common strategic framework in programs for SMEs. Major support initiatives are listed in Appendix 6.

156. One of the major strategies employed for the development of SMEs in Cambodia has been the *Industry Cluster Development*. Self-employment within nominated clusters is encouraged, in what have been considered as the sunrise industries in Cambodia: tourism, light manufacturing, services (computer software development), rice milling, cassava processing, handloom weaving, toys, footwear an agribusiness.

157. Based on a Needs Assessment Study, 2008 of Cambodian SMEs⁵⁵ small businesses and self-employment initiatives in Cambodia needed to (i) upgrade the quality and design of products, (ii) improve production technology, and (iii) upgrade the competencies and quality consciousness of skilled labor.

⁵⁴ Department of Cottage Industries and Handicraft, Ministry of Industry, Mines and Energy, Ministry of Commerce, SME Cambodia

⁵⁵ Capati & Virtudazo, Technonet Asia, 2008

158. The major problem identified across the enterprises as a whole included (i) high cost and inadequacy of power and telecommunication, (ii) overall low productivity in the industrial sector, (iii) low managerial skills, (iv) low entrepreneurial awareness, and (iii) limited access to financial resources.

159. These needs and problems were identified by officers of institutions and organizations who were engaged in SME and self-employment promotion and development. Respondents of the study were key officers in GOs, NGOs, IOs, INGOs, business organizations, SME associations, and some of the chambers of commerce and industries in Cambodia.

160. In Cambodia, the promotion and development of SMEs and self-employment, which include training and advisory services for this sector, is a somewhat complex task given the many actors and players who already exist in the field. The extent of its complexity can be extrapolated from the SME Secretariat wherein almost all government ministries are represented. As far as support institutions, the Cambodia Cooperation Committee has a total membership of around 500 as of 2008.

161. With huge coordinating bodies such as these, there seems to be no dearth of strategies or programs that can possibly and feasibly respond to the various needs and problems of Cambodian SMEs and the self-employed. There are already numerous types of development strategies and interventions that are being implemented both in the urban and rural areas.

162. In this situation, one of the options for TVET institutions is to tie-up with existing programs. The other option is for public TVET institutions to undertake a comprehensive and targeted program to promote enterprise and entrepreneurship development in the PTCs and to inculcate and/or enhance entrepreneurial awareness in the VTCs – both for the students as well as for the VTC organizations themselves.

163. The Cambodia-India Enterprise Development Center (CIEDC) employs a methodology that has been tested in over 200 countries and has been proven to be effective in encouraging, creating, and sustaining small enterprise and self-employment initiatives. CIEDC, being one of the public TVET institutions, could perhaps be tapped to share its SME development methodology, tools, and techniques to the other public TVET institutions.

164. Overall, there already exist numerous interventions and strategies for the development of SMEs and self-employment in Cambodia. For the TVET institutions, among the most practical courses of action is (i) tie-up with existing SME and SE programs, and (ii) develop an entrepreneurial orientation within the TVET institutes and among TVET students.

IV. NATIONAL PLANNING FOR TVET

A. The National Strategic Development Plan, 2006-2010

165. As noted in Section IIC above, the NSDP is the RGC's overarching development strategy for determining and monitoring the identified and prioritized goals, development directions and key initiatives based on the underpinning long-term *Rectangular Strategy* of 2004, and focusing on accelerated general development for the achievement of poverty reduction.

166. The NSDP-stated major specific policy initiatives which most directly involve TVET include:

- (i) Private sector strengthening, including:
 - (a) economic integration of Cambodia into the economies of the region and the world and
 - (b) development of needed infrastructure and availability of a pool of skilled manpower (through technical and vocational education and other vocational training)
- (ii) Fostering and facilitating small and medium enterprises (SME)
 - (a) establishment of specific systems to support women in business and facilitate their access to SME development initiatives and services
 - (b) promotion of vocational and skills training
- (iii) Creating gainful employment opportunities in both formal and informal sectors
 - (a) increase of agricultural productivity to generate more rural employment
 - (b) Establishment of TVET and training networks to serve both men and women equitably, especially those who are from poor, disabled and vulnerable groups, to respond to labor market needs
- (iv) Linking education and training to the short and long-term labor market and the society⁵⁶

167. As also noted above, elaboration of the policy directions and detailed implementation of the NSDP across all sectors are intended to be spelt out through sectoral and sub-national strategic plans from each relevant ministry and department as appropriate.

168. For the MOLVT, these have included the *Strategic Plan of the Ministry of Labor and Vocational Training, 2006-2010*, July 2007, and the *Gender Mainstreaming Action Plan of the Ministry of Labor and Vocational Training Sectors, 2008-2010*, January 2008. These detailed subsidiary plans will also feed into the annual reviews and *Annual Progress Report* on the implementation of the NSDP.

⁵⁶ Royal Government of Cambodia, *National Strategic Development Plan 2006-2010*, 2006, pages 24-61

B. The MOLVT Strategic Plan

169. The *Strategic Plan of the Ministry of Labor and Vocational Training, 2006-2010*, identifies four priority strategy areas for 2006-2010 which will contribute to accelerated development and poverty reduction:

- (i) Employment creation
- (ii) Ensuring better working conditions
- (iii) Promoting enforcement of the labor law to ensure social security
- (iv) Capacity building development of technical and vocational skills.⁵⁷

170. In regard to strategy (iv), the Plan notes that the purpose is:

to provide good quality and effective TVET in response to local and overseas needs to achieve the goal of increasing income and improving living conditions and national development. But the TVET sector still faces a lot of challenges, including limited training networks which are unable to cover rural areas throughout the country. [and] the quality of training is still unable to fully respond to labor market needs due to limited national competency standards, labor market information system development and curriculum, combined with poor management systems etc.⁵⁸

171. The major strategies of the Plan in regard to TVET are summarized below.

Figure 12: Ministry of Labor and Vocational Training, Strategic Plan 2006-2010 Major Stated Strategies for TVET Development

1.0	Establish TVET Linkages
1.1	Mechanisms for labor market information through the NTB
1.2	Office or working group in each institution as a permanent basis for communicating with employers/enterprises
1.3	Board/council of representatives in each institution from involved sectors
2.0	Serve both Formal and Informal Sectors
2.1	Training for management
2.2	Training for self employment
2.3	Promote entrepreneurial spirit
2.4	Access to micro-credit
3.0	Improve Quality and Effectiveness of TVET
3.1	National qualifications framework, competency standards linked to market needs (local and OS) and testing against standards
3.2	Training of trainers through NTTI
3.3	Skills groups for exchange between trainers
3.4	Library and electronic resources for training and instructor upgrading
3.5	Accreditation of TVET programs and institutions
4.0	Upgrade TVET Curriculum
4.1	NTTI as national centre for TVET curriculum (and trainer training and development)
4.2	NTTI technical committees for each skill with experts from enterprises, institutions, companies, employees, trainers/etc to develop curriculum
4.3	Curriculum development committee for each skill in all TVET institutions

⁵⁷ Ministry of Labor and Strategic Plan 2006-2010, July 2007, pages 2,3

⁵⁸ Ministry of Labor and Strategic Plan 2006-2010, July 2007, page,14

4.0	Upgrade TVET Curriculum cont...
4.4	Develop curriculum which are: Based on the national competency standards as required by labor market Modular for flexible entry/completion by trainees in short-term training Include bridging courses for switch between general education and TVET
5.0	Modernize Training Facilities and Equipment:
5.1	Facilities rationalized according to training areas
5.2	Modern teaching aids
5.3	Budget for training materials
6.0	Decentralization of Provision and Management
6.1	Establish Provincial Training Boards under NTB
6.2	Strengthen local planning for local training needs
6.3	Establish new centres in unserved provinces
6.4	Improve institutional organization and management systems
6.5	Extend VSTP to all provinces and municipalities
6.6	Expand TVET provision through NTF to reduce poverty more widely
6.7	Encourage certificate based TVET programs in all provinces/municipalities
6.8	Expand programs under the NTF to contribute to poverty reduction and encourage more participation from private training providers
6.9	Encourage TVET institutions to generate own income

C. Implementation Plans

172. Detailed implementation “sub-plans” based on the strategies of the MOLVT *Strategic Plan* (Figure 12) were developed by the DGTVET, the first in 2005 (for 2006) and through subsequent updates for 2007 and 2008. These were approved by the NTB as the *National TVET Development Plans*. Milestones for implementation under the plans were set in an extended time context, 2006-2008, 2009-2014 and 2015-2020.⁵⁹

173. Specifically, the *TVET Development Plans* outlined a two-track development approach to the implementation of TVET. Two basically separate categories of key activities were identified: (i) those that directly target poverty alleviation through non-formal programs and sometimes informal NGO activities (Track 1), and (ii) formal, employer-driven and institution-based TVET leading to credentials for formal sector employment (Track 2).

174. Track 1 provision is almost totally through non-formal programs or through assistance to informal activities under NGOs. Such activities have been major implementation activities for some of the MOLVT Strategic Plan strategies under No. 1, 2 and 6 (as Figure 12 above). Track 2 provision is of formal certificated TVET programs in accredited institutions. (within Strategic Plan activities 1, 2, 3, 4 and 6).

⁵⁹ The ADB supported Second Education Sector Development Program (Loan 1864 ESDP II), assisted with the development of these plans

175. **Track 1 programs** have been offered in direct response to the overarching development objective of poverty alleviation, the majority being conducted in rural areas with high concentrations of poverty and as a first level priority for TVET expansion. The Voucher Skills Training Program (VSTP) initiative⁶⁰ was planned to provide short, direct basic skills training in local commune-determined areas of skills needs and opportunity for income enhancement. Implementation has occurred through actual training programs provision, 2006-2009, under local PTCs⁶¹ in seven pilot provinces for some 130,000 trainees in 210 of the poorest communes. The majority of such programs have been in agriculture-related areas, directly aimed at increased income through enhanced productivity, and on basic mechanical, electrical, clothing and textiles skills.

176. Additional training opportunities for income generation or enhancement through short course TVET programs have also been provided nationally during the last few years under National Training Fund (NTF) finance. Programs have been provided in both urban and rural areas, and most programs have been through the MOLVT TVET institutions, some 20,000 person months annually.

177. Overall, some 50 percent of these programs have been in agriculture; 15 percent in basic technical/trade areas, and the remainder in computing, textiles and handicrafts. A small number of NGOs have also offered similar programs through NTF funding.

178. **Track 2 TVET** implementation strategies were developed to improve the quality and effectiveness of the formal, industry-driven and institution-based TVET leading to credentials for formal sector employment. These strategies focus on the upgrading of TVET provision to meet the increasingly specialist skills needs of Cambodian industry and commerce, and the opportunities for regional export of skilled labor.

179. Specific proposed implementation activities included (i) upgrading of TVET curriculum on the basis of determined labor market needs, specified industry skills requirements and standards of performance; (ii) improved trainer capacity to organize training and ensure skill acquisition and accompanying training resources, and (iii) wider national access to effective training to meet national demand for quality skills. (See Figure X above, strategy clusters 1, 2, 3, 4 and 6).

180. These strategies were developed under the *National TVET Development Plans* for 2006-2008, but implementation priority was given to activities for poverty alleviation under Track 1 program expansion and delivery. In 2008, however, NTB approvals of the 2008 updated TVET plan stressed the need for expansion of current TVET capacity to meet the anticipated demand for skills over the next decade:

Without reducing the commitment to poverty alleviation, NTB will begin the expansion of post secondary TVET through the development of Regional Polytechnics or Regional TVET Centers which will offer diploma level programs as well as short courses. There will be an expansion of the capacity of the Phnom Penh based TVET post secondary institutions to provide demand driven diploma and degree programs in partnership with employers. Resources will be committed to bringing TVT diploma and degree programs up to a standard acceptable to enterprise and to strengthen NTTI to improve the quality of trainers and curriculum prepared for the system. Efforts will be made to expand the private provision of TVET at the same higher standards.⁶²

⁶⁰ Under ESDP II

⁶¹ A direct initiative by the NTB specifically to facilitate local level TVET planning and provision linked to local opportunities and needs for training under the VSTP and to monitor training implementation

⁶² NTB, Minutes, March 2008, Policy 3

D. Effectiveness of Implementation

181. **Track 1 strategies:** As at early 2009 it would appear that effective progress has been made towards strengthening and decentralizing Track 1 TVET initiatives for basic skills development for poverty alleviation.

182. The nature of this provision, and the extreme difficulty of obtaining measurable and reliable continuing post-training data, make statistical assessment of program effects on rural productivity, income or individual or family well being, virtually impossible.

183. It appears however, that such programs have successfully developed processes effective, decentralized basic-skills level TVET delivery under local PTCs. These have been supported by strengthened local planning under PTBs and local communes for identification of local training needs and income generating opportunities. The program approach appears to provide a model for eventual national replication, and possible enhancement towards more critical levels of skill, or access to increased skills. Accompanying initiatives to link successful training initiatives to microcredit provision are also now in place.

184. **Track 2 strategies:** Systematic action for Track 2 formal sector TVET development is now proposed on the extended time line 2009-2014 and 2015-2020 as outlined in the approved updated *TVET Development Plan 2008*. Currently no revised plan has been approved for 2009.

185. Implementation of the agreed strategies for the introduction of system competency standards and testing to meet national industry skills needs and regional employment requirements are now urgent. These will provide the basis for re-energizing the professional development of Track 2 TVET through more appropriate curriculum, improved trainer training, more appropriate instructional organization and processes, and extended, upgraded and appropriate training facility development.

186. Effective labor market information systems are also an essential precondition for systematic, phased qualitative development of system delivery, in line with the requirements of industry and for any planned system extension.

V. ORGANIZATION, GOVERNANCE, MANAGEMENT AND QUALITY ASSURANCE OF THE TVET SYSTEM

A. The National Training Board

1. Mandate and Responsibilities

187. The present NTB was formally established under Anukret [Sub-Decree] 790, of the RGC, on 14 October 2005. Unlike an earlier, and reportedly ineffective, board constituted in 1996, the current NTB was constituted at a senior level under the chair of the Deputy Prime Minister and structured to ensure the involvement of private sector enterprise and labor as well as all concerned ministries and other organizations.

188. The earlier 1996 Board was established following reviewⁱ of the organization, management and effectiveness of the TVET system, then under the management of the Office of Technical and Vocational Training of the Ministry of Education, Youth and Sports (MOEYS).

189. This review indicated major problems of coordination, financing and management of TVET. It also indicated significant system inability to meet the actual skilled labor needs of the emerging private industry sector in Cambodia—one of the key stated strategies of the first and second *National Socio–Economic Development Plans 1996-2005*, and to be further strongly endorsed in the *National Strategic Development Plan, 2006-2010* (NSDP).

190. The mandate of the newly established NTB was thus that stated in the RGC's *Rectangular Strategy, 2004*, and affirmed in the NSDP: private sector development and employment generation, and the need for an expanded skills base and pool of skilled manpower through technical vocational education and training.

191. The Board's specific tasks stated in its establishing Sub-Decree are to:

- (i) Prepare policy and a National Training Plan for TVET
- (ii) Coordinate and orient the work of TVET to meet the demand-driven needs of the national economy in the present and future
- (iii) Propose initiatives to renew and further develop the TVET system to be:
 - a. Quality driven and effective;
 - b. Linked to national development priorities;
 - c. Responsive to the needs of trade, industry, agriculture and service sectors; and
 - d. Based on continuing close relationships between workplaces and institutions.

192. The NTB gives direction to the Directorate General of Technical and Vocational Education and Training (DGTVET) of the MOLVT in policy, and the overall guidelines for provision of national skills development through the MOLVT TVET institutions. More generally, it has a commitment to expanding and supporting all skills development, from all sources, and ensuring nation-wide access to skills and training as part of an industry demand-driven system responsive to the needs of the economy. The initial meeting of the newly established NTB was held in March 2006.

2. Organization, Structure and Membership

193. The establishment of the new NTB reflects the critical national need to increase the efficiency and effectiveness of TVET. Its structure ensures emphasis on labor market needs and the demand for skills, rather than just on the supply side of training provision. Essentially, the NTB is the policy determination, consultative and monitoring authority for TVET in Cambodia.

194. Since its inception, the NTB has met annually, but with more frequent meetings of its official Executive Committee, as required. Direct implementation under the NSDP and the approved detailed MOLVT development plans, and preparation of plan updates for the Board, are the responsibility of the MOLVT's DGTVE as the official Secretariat of the NTB, and of the Director General of TVET as its Executive Director.

195. The membership of the NTB, 2006-2008, under the chair of the Deputy Prime Minister, comprised 31 additional members, 16 (52%) of whom were senior government officials (including five secretaries of state, three under secretaries, and eight directors' general or deputies).⁶³

196. Almost all ministries with direct involvement in TVET provision, through their own in-house training capacity or through external initiatives, were represented on the Board. In addition, a total of five positions were occupied by private sector or employer associations, two by representatives of the trades unions, three by NGO representatives, and four by representatives from government training institutions.

197. This pattern of membership reinforced the Government's stated intention for the membership of the NTB to reflect its commitment to a partnership among those most closely involved in the skills development process.

198. By engaging labor and enterprise with Government and private training providers, as members of the Board, a stable mechanism was created for building the long-term plan required to match workforce skills with the needs of the employment community. With its partnership based membership, the NTB can help integrate workplace and institutional training solutions as the opportunities emerge.⁶⁴

199. The Directorate General of TVET (DGTVE) of the MOLVT acts as the secretariat of the NTB and the Director General TVET as its Executive Director.

200. Recent external comment on TVET in Cambodia has suggested that there is, in general, a need for more extensive employer involvement in guiding and assessing training, and specifically the need for increased employer representation on the NTB⁶⁵. Certainly, the continuing effectiveness of the NTB will require ongoing adjustments of its membership mix to ensure that it continues to reflect the overall scope and private/public balance of the economy and the patterns of skilled labor needs and training provision. A first such review of the membership of the NTB is currently taking place (April 2009).

⁶³ Ministries represented on the NTB (2008) were (i) Ministry of Labor and Vocational Training, (ii) Social Affairs, (iii) Education, Youth and Sport, (iv) Post and Telecommunications, (v) Tourism, (vi) Planning, (vii) Commerce, (viii) Agriculture, Forestry and Fisheries, (ix) Public Works and Transport, (x) Rural Development, (xi) Women's Affairs, (xii) Economy and Finance, (xiii) Culture and Fine Arts, (xiv) Industry, Mines and Energy, (xv) Environment, and in addition (xvi) the Rehabilitation and Development Council for the Development of Cambodia.

⁶⁴ RGC National Training Board, Official Website, March 2009

⁶⁵ See Johanson, 2009, p 26

B. The Ministry of Labor and Vocational Training

1. Establishment, Organization and Responsibilities

201. Until 2004, formal TVET was under the Office of Technical and Vocational Training of the Ministry of Education, Youth and Sport (MOEYS), reporting to the Director General, Higher Education of that ministry. This office was directly responsible for the administration and development of TVET and for the management of its institutions and programs.

202. Responsibilities for formal (long course) TVET were transferred from MOEYS to a newly constituted Ministry of Labor and Vocational Training (MOLVT) as Anukret 52, 01 April 2005 of the RGC. Responsibilities for non-formal and informal (short course) vocational training were similarly transferred to the new ministry from the Ministry of Social Welfare

203. At the time of the establishment of the new ministry, technical and vocational education and training within the then traditional two track system under MOEYS had reportedly become moribund, obsolete and essentially dead end. It offered no opportunities or recognition for entry to further training or education, and it lacked status and attraction for both learners and employers.

204. Earlier analysis of the operation of the dual system with the MOEYS had indicated specific major problems in program and course definition and approvals; lack of appropriate trainee entrance requirements, and major issues of staffing skills and levels. Similarly the essentially different nature of the two strands of the system, and the relatively small size of TVET, apparently resulted in application of irrelevant or inappropriate systems of program development, training management, resource allocation and trainee evaluation to TVET. At the same time, the system had no authority or processes for wider TVET coordination beyond the MOEYS, including the development of national skills standards and testing, or the introduction of a coherent framework for accreditation and recognition for private TVET institutions and other providers.⁶⁶

205. The new ministry (MOLVT) was basically organized around two central operational directorates -- Employment and TVET -- plus a Directorate of Administration and Finance and an inspectorate, each under a Secretary of State and an Under Secretary of State, plus 24 provincial or municipal offices.

206. The current organogram of the MOLVT is shown in Appendix 7.

2. The Directorate General Of TVET

a. Mandate of DGTVE

207. The official mandate of the DTVE as RGC Ministerial PRAKAS 27/07, signed 20 February 2007, and Sub-Decree No. 52 ANKR.KB, DTVET, is stated as:

- (i) To study and develop a national policy on occupations to review the needs of the employment market
- (ii) To prepare and to develop an occupational policy based on the national policy for Technical Education and Vocational Training.

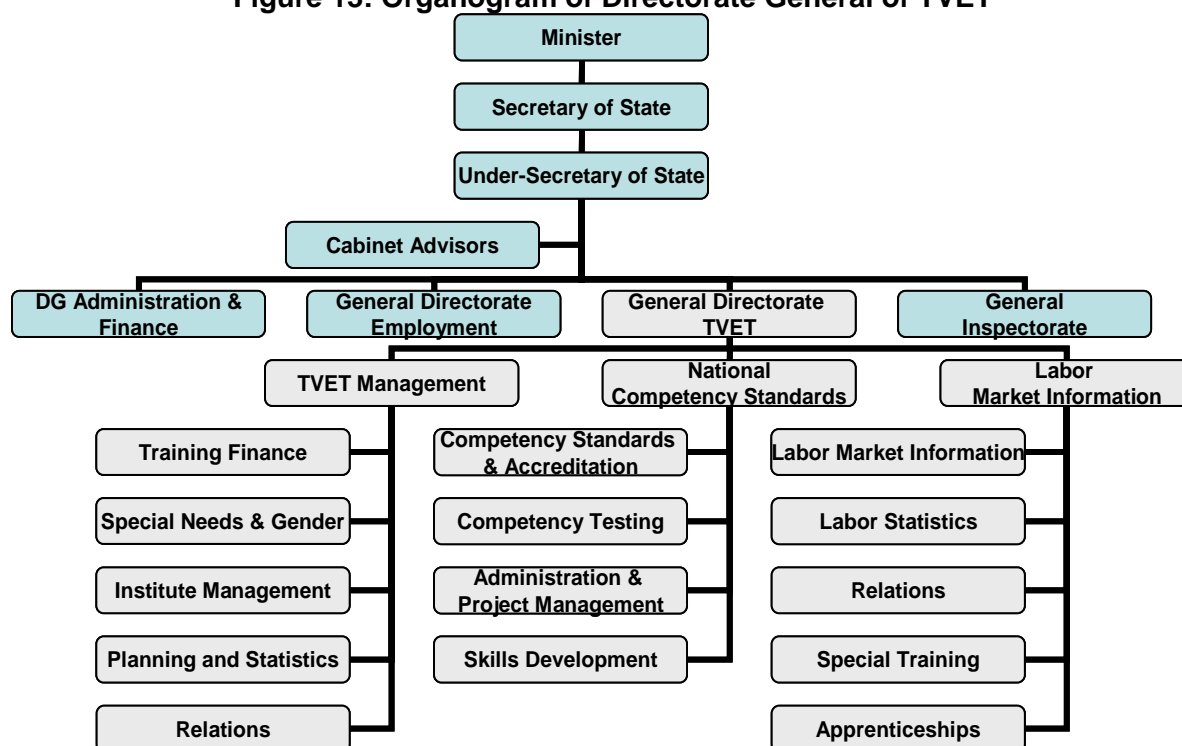
⁶⁶ ADB Education Sector Development Program (ESDP I), TA Reports, 2002-2004

- (iii) To prepare and to develop a National Policy for Technical Education and Vocational Training.
- (iv) To prepare a policy and to manage Technical Education and Vocational training systems.
- (v) To screen proposals for the establishment of institutions, centers and schools providing education, training and vocational services.
- (vi) To control, to monitor and to evaluate public and private institutions of education, technical and vocational training.
- (vii) To coordinate the communications with Ministries, institutions, organizations in the region and in the world to promote education, technical and vocational training in cooperation with the MFA and international cooperation organizations.
- (viii) To cooperate with enterprises and institutions to strengthen and promote education, technical and vocational training.
- (ix) To prepare and to develop occupation or work standards that meet national and international market needs.
- (x) To prepare and to manage testing or examinations, testing the level of competence in all occupations and to award or remove licenses or certificates acknowledging the levels of competence based on the results.
- (xi) To manage the training of apprentices and the cashier of apprenticeship training

b. Organization of DTVE

208. Figure 13 below shows the current organogram of the DGTVET.

Figure 13: Organogram of Directorate General of TVET



c. Functions of DGTVET⁶⁷

209. In compliance with the official mandate of the DGTVET as Figure X above, the current specialist tasks of each DGTVET department are:

- (i) **Department of TVET Management**
 - Supervision of PTC policy and management supervision
 - Gathering of TVET data and statistics
 - Developing policy recommendations for NTB
 - Monitoring and review of NTF
 - Developing data banks on special needs and gender within TVET and employment and preparation of recommendations for action
 - Approving criteria for new trainers/NGOs, IOs
 - Supervision and development of MOLVT training institutions
 - Monitoring and supporting other TVET provision
 - Reviewing PTB training plans
 - Supporting NTTI/NPIC
 - Supervising private technical/business institutes and policy
- (ii) **Department of National Competency Standards**
 - Developing the National Qualifications Framework
 - Developing, testing and /endorsing skills standards
 - Validating skills standards
 - Supporting curriculum development and NTTI
 - Evaluating training against standards
- (iii) **Department of Labor Market Information**
 - Maintaining links to national LMIS and responsible agencies
 - Collecting, monitoring and disseminating labor market information
 - Preparing regular reports to TNB
 - Developing and maintaining national labor force data base
 - Developing and maintaining of national labor relations data base
 - Managing apprenticeship system
 - Preparing recommendations and reports on apprenticeship
 - Providing support and advice for NGO and special needs training

C. DGTVET EMIS

210. Initial system review⁶⁸ indicates that DGTVET management requires effective linked systems for (i) monitoring and evaluation, (ii) labor market information and (iii) institute management, performance and development.

211. The review indicates further, that development, implementation and ongoing operation of these systems will require:

- Institutional strengthening of TVET management within the DG TVET, in provincial TVET offices and in all other relevant departments to accommodate the absorption of the systems and ensure their reliable operation, and
- Training of managers, including use of IT systems for planning and monitoring and evaluation of TVET quality.

⁶⁷ Review of the institutions under the DGTVET and their programs is in Section VI below; review of LMI in Section III, Skills Standards in Section V. and system finance in Section VII

⁶⁸ The specialist PPTA consultants commenced duty 1 April 2009. This section of the report are preliminary findings.

212. Initial findings suggested that:

- (i) A localized system of the international classifications of industries (ISIC) should be developed and be used for reporting and statistics⁶⁹.
- (ii) A national EMIS for the VET sector should collect basic and standardized data from all TVET providers to allow a complete assessment of the entire TVET sub-sector.
- (iii) A labour market information system will probably not be a homogenous database but a research and publication facility that consolidates data and information for decision makers and stakeholders in the VET and education sectors, and
- (iv) All TVET providers, private and public, should be included in the system.

213. Detailed national survey of key stakeholders will now be undertaken to determine the detailed needs for the proposed system as whole.

D. Skills Standards

1. Development of National Skills Standards in Cambodia

214. Technical and vocational skills standards, which are set against performance at definable and measurable levels accepted by employers, give a basis for training, assessment and employment. In the absence of such standards, TVET has no precise measures for the development of appropriate training curriculum and training procedures and its outcomes are not assured of meeting the skills requirements of industry.

215. There are arguments, further, that such skills standards should be *national standards*, i.e. officially endorsed by government and industry as the nationally applicable standards for employment at the defined levels, linked to a “matching” national qualifications framework (NQF). While some employer groups oppose such regulation of skills standards on the grounds of possible effects on labor costs, national standards do ensure worker mobility and appropriate minimum labor standards. They strengthen and simplify training development, curriculum and implementation. They provide the basis for skills testing, recognition of prior learning and eligibility for advanced training.

216. Establishing a national system of accepted skills standards is thus often regarded as a major policy initiative towards more effective skills training and national skills acquisition, and indeed as the logical starting point for the establishment of a TVET system. Assistance for the development and adoption of national skills standards and related skills training and testing has been a component of virtually every assistance project for TVET in Cambodia since the initial activity under the ILO/UNDP Vocational and Technical Education Project in the early to mid 1990s.

217. Similarly, the Bank’s BSP, 1996-2001, assisted the establishment of an earlier NTB, the NTF, and the National Vocational Training Centre (NVTC), now the NTTI. Specified activities included the design by NVTC of “skills training standards and in line with the national standards and guidelines adopted by the NTB”.⁷⁰ The ESDP I, 2002-04, and the ESDP II, 2005-08, extended the work of the earlier projects and provided assistance for the ongoing development of national skills standards and their adoption as the basis for skills training, testing and accreditation. This included the development of a definitive handbook under ESDP II to guide and support the development of nationally consistent standards⁷¹. Since 2005, the Korean Research Institute for Vocational Training has been providing assistance for establishment of a NQF, skills standards and testing centers.

⁷⁰ ADB, *Report and Recommendations to the Board of Directors on a Proposed Loan to the Kingdom of Cambodia for the Basic Skills Project*, June/July 1995, p. 16

⁷¹ ESDP-II, *The National Skills Standards Handbook*, MOLVT, Cambodia, December 2007

218. To date, some 50 sets of draft national standards across key occupations have been prepared (although not yet translated) by the Department of National Competency Standards under the DGTVET of the MOLVT. A draft Cambodian National TVET Qualifications Framework (NTQF), prepared in 2006, was revised and published in 2008 under ESDP II. Linked proposals for the accreditation of TVET programs and private training providers have also been developed⁷².

2. Current Implementation

219. There has thus been continuing, sustained, and very considerable previous efforts to develop a fully articulated skills standards system in Cambodia in line with current international best practice. However, the proposed system of skills standards, testing, accreditation and related qualifications framework has not yet been actioned.

220. PPTA discussions with a range of stakeholders have indicated that many employers oppose the introduction of a compulsory system of skills standards, as also, allegedly, do some of the labor unions. Documented evidence of this is not available. Serious concerns have also allegedly been expressed that Cambodia is not yet ready for an overall system of national skills standards, and that such a system could not as yet be properly administered.

221. PPTA discussions have also indicated that there is wide support for *the eventual adoption* of a national system of skills standards for Cambodia. There also appears to be considerable stakeholder support for training accreditation procedures related to such standards, and for skills testing and recognition of prior learning of skills based on accepted national standards. There is, too, acknowledgement of the importance of regional standards, and for Cambodia to be accepted as applying such standards as a boost for increased export of skilled labor.

222. In general, however, there would appear to be a strong, general opinion among stakeholders that the introduction of such a system of skills standards would be premature in Cambodia at this time. Certainly, it appears to be that the current proposals for the general introduction of an overall system of standards and related accreditation and qualifications framework, are considered to be far too complex for the present state of enterprise and training development in Cambodia. The current proposals, it is claimed, also assume total adoption rather than gradual implementation over time.

223. However, it is also true that there remains a lack of accepted or official national occupational standards as a basis for training and skills assessment both nationally and for international employment for new trainees and for RPL. Similarly, there is currently no accepted national qualifications framework. Consequently, there are no processes for the national accreditation and quality assurance of training provision, either public or private, as a basis for planning and system development, and no independent standards-linked procedures for the monitoring of training effectiveness either public or private.

224. As the report of the recent *Johanson Study of TVET in Cambodia* stressed, this continuing lack of an official national system of occupational standards and testing of the competencies of trainees may limit the further improvement of the quality of TVET in Cambodia⁷³.

⁷² ⁷² ESDP-II, *Registering and Accrediting TVET Programs: The National TVET Trainers Network*, MOLVT, Cambodia, June 2006 (Project proposal)

⁷³ Johanson, *op cit*, Summary of Main Points and p. 69

3. Future Progress

225. PPTA review suggests that it may be some time before an overall scheme of national skills standards and related policies and processes for assessment, certification, accreditation and regulation of training providers can be applied in Cambodia. Speedy, overall introduction of such systems through official national policy appears most unlikely to be workable. On the other hand, as noted above in the analysis of the role of TVET in the development of the Cambodian economy, the certification of acquired skills will become increasingly important and relevant for Cambodia as it increasingly engages with the modern global economy.

226. Experience elsewhere has shown that systems of national standards can be introduced over time, and as the relatively recent introduction of standards in the USA in 1994, can be introduced on a voluntary basis. Experience elsewhere has shown too, that skills standards can be phased in over time, beginning with industries, or a group of industries, which are agreed on their usefulness and appropriateness.

E. TVET System Status

1. External Review

227. A major study of formal sector training and employment in Cambodia was carried out in 2008 through the CAMFEBDA Youth Employment and Social Dialogue Project assisted by ILO and with Swedish Government support⁷⁴.

228. The introduction to the study report points out that youth (aged 15-24) comprised 72 percent of total unemployment in Phnom Penh in 2004 and the numbers of young people in the age groups seeking employment is still continuing to grow.

229. The study report also notes that, while this situation reflects the ongoing effects of the “baby boom” of the 1980s, it is also a result of a continuing mismatch between demand and supply of skills in the labor market.

230. The study set out to explore this apparent mismatch of skills through an extensive sample of youth (students, unemployed and employed) and employers (private and NGO, large and small, and from all major sectors) in both Phnom Penh and selected provinces (Siem Reap, Sihanoukville, Kampong Cham and Svay Rieng)⁷⁵.

231. **Students** were asked about the level of education they think necessary to find a job: 30 per cent of the total response said high school degree, 24 percent said vocational training certificate, 23 per cent said bachelor degree and 12 per cent said associate degree. The majority of students (96 per cent) believed they needed more skills in order to find work, despite the fact that 30 per cent of students said they intended to look for a job when they finished high school. Nevertheless, most high school students (67 per cent) wanted to continue their study to university or in vocational training. Overall, the student aspirations were similar for both females and males, although females have a slightly higher preference for finding work.

⁷⁴ Cambodian Federation of Employers and Business Associations (CAMFEBA) supported by ILO Bureau for Employers' Activities, and funding by the Norwegian Government, *Youth and Employment: Bringing the Gap*, Youth Employment and Social Dialogue Project, (YEP), Phnom Penh, Cambodia, July 2008

⁷⁵ The survey showed some considerable differences in education levels of unemployed youth in different geographical areas. In particular, unemployed youth surveyed from Phnom Penh are much more likely to have at least finished high school (84%) compared to those from Siem Reap (62%) or other provinces (62%).

232. University and vocational training students were asked about the reason for choosing their current study major or skill area. While the most common reason was their “liking for the subject” (56 per cent), and a small number said “no reason”, about 32 per cent of the respondents said they decided based on market need.

233. The sources, and reliability, of this information about labor market needs were not sought. Few schools or training institutions were reportedly providing access to such information. Some vocational training institutions were clearly effective in arranging work placements, work experience or internships with employers, unpaid or paid, and these appeared at the least to give students an edge in the search for a job; not infrequently resulting in job offers⁷⁶.

234. In general, vocational training students expressed much lower salary expectations than university students. Around half of the responses from vocational training students indicated that they expected a monthly starting salary of less than USD100, compared to just 28 per cent from university students. Only 7 per cent of responses from vocational students said they expected to earn more than USD200, compared to 35 per cent from university students.

235. **The employer responses:** A separate detailed questionnaire was completed by a sample of 220 employers. The enterprises of these employers had a total of approximately 32,000 employees in total, in Cambodia, in 2008. The composition of the sample was representative of the Cambodian labor market, in terms of sectors of activity, organization ownership (private and NGO), origin (foreign and local) and size (large and small) and sector. Questions were asked about the education, experience and skills of three categories of employees: (i) unskilled workers, mostly manual and repetitive, (ii) specialist / technical, and (iii) professional staff.

236. Across the responses as a whole, the employers did not place high importance on **education** for unskilled workers, but about 77 percent required some form of further education or training for the specialist / technical staff, most commonly a skill certificate. Almost all employers said they required some form of higher education or training for professional staff. Similarly, **experience** was rated more highly, with increasing importance for increasingly skilled job functions: 10 percent of respondents rating it important for unskilled workers, 39 per cent for specialist workers and 65 per cent for professional staff.

237. Employers were asked to nominate skills and qualities that were *most important*, as well those that were *most difficult to find*, when hiring youth. For unskilled workers almost 90 percent of employers claimed that a “good work attitude” was essential but a struggle to find (52 percent); as was “necessary experience” (32 percent difficult to find). For specialist workers, technical skills and necessary experience were seen as essential, and for professional staff analytical skills (64 per cent) and decision-making and problem-solving skills were seen as essential but difficult to find (55 per cent).

238. **Overall, the survey of employers** indicated that the majority (76 percent) considered that there is a skills gap in the preparation of youth for work in Cambodia. They consider that youth have some, but not all, of the required skills and there is a mismatch between the skills they need and the skills they possess. About 11 per cent of the employers believed that youth possess *none* of the skills needed for the workplace, while another 76 per cent believed they possess *some* – but not all – of the required skills⁷⁷.

⁷⁶ MOLVT has plans to establish Job Centres and a public website to provide information on job seekers, employers and training providers is available. (Minutes, NTB, January 2008) ¹

⁷⁷ Similar findings in other regional economies are recorded. See *The Emerging Global Labor Market: Part II: The Supply of Offshore Talent in Services*, McKinsey Global Institute, 2005, and *Trends in the Workplace Survey 2008*, International Organisation of Employers, 2008

239. Employers provided some clear messages about what they thought should be done to reduce the skills gap. The majority expressed the view that:

- (i) Youth need to develop the right attitudes and to learn practical skills
- (ii) The education system needs to focus on quality and relevance rather than quantity
- (iii) Better links are required between higher education and training providers and employers
- (iv) Stronger accreditation of education and training providers necessary to improve education standards
- (v) The skills gap cannot be reduced merely by increasing the participation rates at high school or universities.

2. Future Development

240. It would appear that employers are demanding a workforce that has the relevant, necessary practical and technical skills to enable continuing economic growth. Patterns of development elsewhere would suggest that the demand for appropriate skills training will increase as the rate of diversification and extension of the manufacturing and service sectors in Cambodia begin to increase.

241. The TVET system, however, is currently neither able to ensure that its training provision is in line with the present or likely future needs of industry in both the skills and occupational areas required nor to the standards required by industry. Activities to address these mismatches are now imperative. These are the essential directions of change of the agreed development strategies for TVET already approved by NTB for implementation but not yet fully initiated.

242. The agreed NTB strategies towards system development can be summarized as follows:

- (i) **Establishment of labor market base**
 - Appropriate labor market information base for MOLVT
 - Development of relevant enterprise links in every training institution
- (ii) **Expansion of capacity and access**
 - Upgrading of five PTCs to regional centres with certificate and/or diploma courses, and residential facilities in selected locations
 - More intensive use of existing capacity for increased TVET programming
 - National expansion of VSTP across all provinces
 - Development of wider options for rural based activities under PTBs
- (iii) **Improvement of quality of system delivery**
 - Adoption of national skills standards including standards for overseas workers
 - Introduction of competency based training, skills testing and RPL
 - Development of more effective trainer training capacity
 - Development of regular inservice upgrading and work placements for all trainers
 - Upgrading of facilities, including digital centres
 - Introduction of work placements within all TVET long course programs
 - Training for planning, management and entrepreneurship
 - Development of public-private training links

3. Assistance to DGTVET

243. **Review of the operation of the directorate** drew attention to the fact that the MOLVT has now been in operation for just three years. Most of its officers came from the former Office of Technical and Vocational Training of the MOEYS, and these have been assigned over the three departments within the new directorate. A small number of additional appointments have been made and integrated into these departments.

244. As a new directorate within a new ministry, with substantially enhanced responsibilities, the directorate has had to develop new working procedures. These have been required for both its general administrative functions, and in regard to the professional management and development of the TVET and associated technical and supporting areas of its functions (TVET management, national competency standards and labor market information).

245. Officers within the MOLVT are generally assigned on a long-term career basis and will, in general, remain assigned within the ministry for the majority of their service. Some staff have had previous service or some professional experience in training or training management within TVET institutions, or experience in other education areas. The majority have not had actual TVET experience.

246. **Specialist training for DTVE officers:** There is awareness within the directorate of the urgent need for staff development and training for its officers. There is awareness too of the need for a systematic long-term staff development plan based on training needs analysis of the defined tasks of the directorate and the assessed needs of individuals.

247. **Development and agreement of detailed job descriptions** with defined tasks, outputs and schedules will be essential for all officers as a precondition for detailed training needs analysis and development of individual training programs and planning of training implementation. Ideally such training provision should involve ongoing review and opportunities for further development.

248. **Scope of duties:** As part of the development of detailed job descriptions, clear understanding must be established of the scope of each position. Almost without exception, the directorate positions are not for technical or professional specialists. The duties of those in the competency standards department is not to actually develop competency standards: it is to support, facilitate and administer procedures where teams of relevant specialists are brought together for specified and agreed tasks. Similarly for the development of curriculum based on the established skills standards. In both cases processes are developed and managed through NTTI with resourcing, support, assistance and monitoring through the relevant department officers. In the same manner, the role of the officers of department of LMI cannot be to develop a labor market information system. They must work through established experts and organizations to establish systems for the gathering and provision of the necessary data for TVET decision making.⁷⁸

⁷⁸ It is proposed that detailed job descriptions, training needs analyses and training profiles will be developed with PPTA assistance as a basis for future implementation.

249. **Directorate training needs:** initial analysis of directorate training needs would indicate need for the following major categories of training. Recurring schedules of training will be required for all categories of personnel:

- (i) Administration and Management
- (ii) Personnel and HRD
- (iii) Supervision, Monitoring and Evaluation of Institutions
- (iv) System Review, Planning and Development
- (v) Technical and Professional Services and Development
- (vi) Finance and Budget under MOLVT Direct Budget Allocations
- (vii) Program Based Budget Systems

250. **Training institute personnel** will require recurring training to ensure that they are familiar with changing needs, requirements and new technical and instructional processes and approaches. Training needs will include:

- (i) Management of TVET training institutes
 - Development of TVET links with local authorities, employers and industry, community and graduates
 - Financial management of TVET institutes and diversification of funding sources
 - Development of training plans for short-term programs
 - Development of long-term training program proposals
 - HR management and development
 - Planning of TVET training provision to meet local labor market needs and opportunities.
 - Analysis of specialist training needs and development/adaptation of training programs
 - Evaluation of program implementation
- (ii) Monitoring and developing training implementation
 - Upgrading training methods
 - Competency based training and skills standards
 - Technical skills upgrading

VI. TRAINING PROVISION

A. Non-Formal (Track 1) Skills Training

1. The Voucher Skills Training Program under ESDP II

251. A pilot Voucher Skills Training Program (VSTP) was designed and implemented during the Bank assisted ESDP II. It involved 7 provinces, 210 communes and over 150,000 trainees.

252. The term *voucher* was used in ESDP II to identify a document informing communes that a fixed amount of money had been set aside for them to implement a training plan, which they designed with the assistance of a Community Development Specialist (CDS) working at the Provincial Training Center (PTC). The objective of this process for the commune was to alleviate poverty and improve its economic future within the context of a national and provincial economic strategy. The intent of the voucher system was to enable villagers with access to good local economic information to make informed decisions about the future of their community and the skills they need to achieve these goals.

253. VSTP was market demand, rather than training supply driven. As such, it was also a training mechanism for the PTCs to move from a supply driven TVET to a more community responsive, demand driven system. Traditionally, PTCs had offered standard TVET short courses such as electronics, motorbike repair, barbering, tailoring and pig raising, regardless of the needs of the province or the availability of employment.

254. VSTP was piloted in seven provinces (Battambang, Kampong, Chhang, Siem Reap, Stung Treng, Svay Rieng and Takeo), 2006-2009. Programs were either commune based (the majority), training centre based or enterprise based. A total of 107,772 were trained over all programs (57 percent women) were women. Details of programs are shown in Appendix 8.

255. Two continuous monitoring survey processes were undertaken to determine the effectiveness and impact of the program, especially in terms of poverty alleviation; the first three months and the second six months after program completion. Overall, the surveys indicated positive effects on family income.

256. Overall, the results of the introduction of the VSTP under ESDP II were sufficiently encouraging to support the expansion of the pilot, adjusted from feedback, graduate data and experience, across all 24 provinces.

2. The TENA Methodology

257. **TENA refers to** the training needs analysis process developed by the ILO and used in Cambodia between 1993 and 2000 in the *Basic Skills Project*.⁷⁹ More generally, TENA has subsequently been developed into a participative rural planning mechanism which involves the communes and commune councils in designing a training plan linked to an economic development plan for their commune (5 to 7 villages). The process includes a village map and an identification of skills which may lead to improved family income and then the recruitment and training of suitable trainees in those skills.

258. The strengths of the approach have been generally recognized as (i) ownership of the outcomes by the commune, (ii) the inclusiveness and the transparency of the selection process for trainees, and (iii) the linking of training to the needs of the community rather than the training capacity of a training institution.

⁷⁹ UNDP/ILO Cambodia Basic Skills Project, 1993-2000

259. **Under ESDP II**, the TENA methodology was selected for application for the VSTP for local, commune-based training needs analysis. The initial applications revealed weaknesses that needed to be considered in future expansion. A review of the first phase of the VSTP showed: (i) that villagers needed much more information on the opportunities for employment and on products in local and provincial markets, (ii) commune members, especially in rural areas, had little idea of the range of possible skills available for training or of the career paths to which these might lead, (iii) micro credit was not adequately linked to training, and (iv) there were no linkages with sources of input, logistics planning and related costing estimates.

260. **Strengthening TENA:** The earlier use of the TENA methodology showed the need to substantiate the selection of training with market analysis techniques. It also showed the need for recruitment of training providers, development of microcredit provision, and microenterprise development. More specific training in participative planning process with an emphasis on patience, questioning and listening skills, training planning (timing, location, absorptive capacity) monitoring of training and reporting were also needed.

261. For those CDS involved with enterprise based training, a specific program was required in working with small employers, supporting informal apprenticeships and monitoring on-the- job training. More time was required for helping develop a very simple economic plan for each commune.

262. Effort was made to address these findings in implementing the second phase of the VSTP involving five more PTCs. The final study under SESDP II, however, showed that as of May 2008 not all implementation issues had been resolved.

3. Micro-Credit and Post-Training Support

263. The survey document, *Improving the Effectiveness and Efficiency of The Voucher Skills Training Program 2008*⁸⁰, had major recommendations from both training participants and PTC managers on the provision of micro-credit and the need for follow up with participants after training. The participant survey revealed that most villagers borrowed money from relatives and did not use formal micro-credit sources. Nevertheless, the Self Employment Generation Fund (SEGF) of MOLVT has been expanded (February 2009) and is now available to trainees. More training is required for CDS in micro credit administration to increase the effective management of the SEGF.

264. Micro-credit is now also available from banks and NGOs⁸¹ However, the communes often lack information and have no access to availability of microcredit. They also lack skills in assessing and comparing micro-credit providers and in approaching these for loans.

265. The participant survey and post training interviews (February, 2009) revealed that many trainers followed-up after training to support the implementation of their new skills. Graduates of center based training returned to the PTC for advice when required. However, formalizing this follow-up is required and will be a necessary integral element in the training provider agreements under any expansion of VSTP. Adjustments to budget provision will also be required to support follow-up activities.

⁸⁰ ADB 2008, Loan 2122-CAM, ESDP II-TVET

⁸¹ NTDP, 2006

4. Training and Advisory Services to the Urban Informal Sector

266. A traditional form of training categorized as *informal apprenticeship* has young people working at the job site next to a master craftsman, gradually learning the skills required to do the job. While it does not address higher level skills including engineering, it continues to be an important form of skills acquisition in much of Cambodia, and perhaps the most common form of basic skills training.

267. At the time of the preparation of VSTP (May 2004) discussions were conducted with a sample of urban small enterprises which resulted in the inclusion of informal apprenticeships and employer based training as part of the VSTP. Such inclusion has provided the pilot PTCs some experience in working with informal education sector providers. As more experience is gained and as TVET institutions and staff gain more technical skills and experience in working with informal education providers, MOLVT will be able to offer training and advisory services to this sector.

268. Training of CDS in this enterprise based, informal apprenticeship process should be a stronger part of the NTTI trainer training and associated programs. See VII-D Section 11 below for a review of this provision.

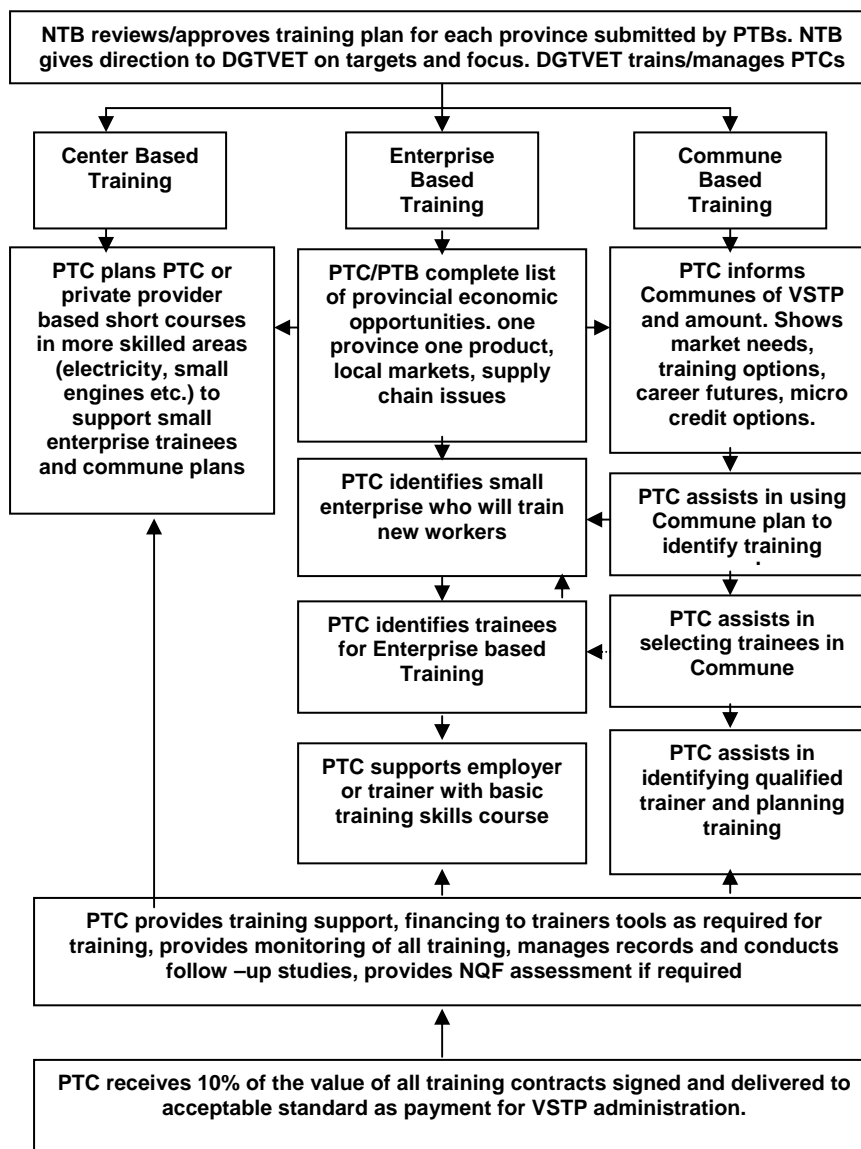
5. Proposals for Expansion of the Voucher Program

269. Based on the survey results and pilot experience of seven PTCs, the VSTP has now been recommended for expansion to other provinces. Such expansion will incorporate the lessons learned from the pilot phase of the program. A detailed proposal for the modification of the VSTP is under development.

a. Revisions to the VSTP Process

270. The pilot experience showed revisions that need to be made to the process to improve VSTP implementation. A revised VSTP process is outlined in Figure 14 below:

Figure 14: Revised Voucher Skills Training Program



b. Training Targets

271. It is proposed that a second phase of the VSTP should provide training for 72,000 persons. Each of the 480 selected communes will train a minimum of 150 community members of whom 20 per cent will receive employer based, informal apprenticeship training, 20 percent will receive center based training and 60 per cent community based training.

272. The target population for center based and employer based training will be out-of-school youth between the ages of 15 and 24, with target participation of at least 50 per cent of women.

273. Previous implementation experience has shown that women need support mechanisms to engage in non-traditional courses such as the center based and enterprise based training programs under the VSTP. In some PTCs and other TVET institutions, basic dormitory facilities may encourage more women to register for some of the programs.

274. PTCs also need to gather more information on women entrepreneurs owning businesses where women can undertake apprenticeship more comfortably. Provision of easy access to career guidance for women may assist in information provision and choice of wider options. Extensive NGO experience in Cambodia also offers lessons in encouraging women, and the disadvantaged, into non-traditional career paths and twinning arrangements with suitable, experienced local NGOs should be investigated where possible.

275. The level of rural poverty and the general pressure to improve farm productivity continue to support the significant allocation of VSTP training to community based options. Over time, wider access to other agricultural training may make it possible for MOLVT to gradually shift the emphasis from community based to more enterprise and centre based training, targeting a broader range of vocational skills. It is suggested that for this planning period only 60 percent of training be targeted at community based training and that with each succeeding planning period, the ratios be adjusted to reflect not only the needs in the communes, but the competence, availability and cost of agricultural training from other providers. The ratios can also be shifted to a higher proportion of enterprise based training if the communes are close to an urban center.

c. Proposed Phasing for Expansion of VSTP, Financing and Financial Management

276. All 24 provinces should be included in the revised VSTP program. The unit cost is estimated to be will be \$100,000 per province per year. A recommended phasing model has been developed. The model assumes loan funding support for implementation in each province for three years of operation, followed by phased replacement of donor funding by MOLVT-PB, NTF budget funds.

277. MOLVT, supported by the ESDP II, developed a system of financial management for the VSTP which has been revised during the pilot implementation and has been accepted by the Bank, well understood within the PTCs and the MOLVT. It is recommended that this system be continued without amendment. However, it is unlikely that this system can be used in the NTF replacement activity. A new format consistent with MEF requirements will be needed to achieve this by the completion of Year 3.

d. VSTP Management

278. A key purpose of the VSTP is to encourage and train the PTCs for the planning, provision and management of more effective demand driven TVET based on community needs and opportunities for income generation.

279. Implementation experience has shown, however, that the VSTP has been too isolated from regular PTC training activities which, almost without exception, remain supply driven and unresponsive to community needs. Training for PTC directors is required to enable them to guide and support PTC staff and be responsible for monitoring the training so that VSTP becomes a regular part of TVET and not an isolated project activity.

280. The ESDP II experience indicates that training for the PTC directors should include:

- (i) market analysis techniques
- (ii) processes and sources for recruitment of training providers
- (iii) micro-credit provision inventories
- (iv) involvement of commune councils in VSTP operations
- (v) TENA processes
- (vi) Regular administrative procedures.

281. Strengthening of the TENA process will engage communities further in taking responsibility for their own futures. It will also expand the understanding of the role of PTCs as managers and promoters of training rather than as the exclusive providers. Training in TENA for the PTC directors and CDS should be planned at least four months before the PTC is assigned to begin the VSTP process. This will allow time for DGTVET visits to each PTC for preliminary contact with commune councils involved, office of the Governor and to ensure that training provider and micro credit provider inventories are in place.

282. Review is also needed of the basic support mechanisms and provisions for VSTP implementation on the basis of the experience of the pilot program. This includes the nomination and training of CDS in each PTC, and the provision of transport and fuel to ensure adequate visits to commune councils, TENA surveys, for appropriate monitoring of training and the evaluation of trainees.

283. For the proposed national extension of the VSTP, it is recommended that each PTC nominate two staff members as trainees for CDS positions and that upon their successful completion of training, the PTC be allocated one moto for each of the trained CDS.

e. Additional PTCs within the VSTP

284. To enable effective implementation, it is recommended that newly participating PTCs be introduced into the VSTP in phases over time. It is proposed that 7 additional PTCs be added as Phase 1; an additional 6 as Phase 2, an additional 3 as Phase 3, and the remaining 4 as Phase 4.

285. Establishment and construction of new PTCs is proposed, one in each of the two provinces where there is currently no PTC provision -- Preah Vihear and Mondulhiri.

B. The Provincial Training Centers

1. Function and Effectiveness of the PTCs

286. PTCs provide short term (3 to 6 month) skills training at the entry level under finance through the National Training Fund (NTF). These programs are planned each year based on the capabilities of the PTC, not the needs of the province.

287. As described in Section A above, seven PTCs were involved 2006-2009 in the pilot VSTP initiative under the Bank supported ESDP II.

288. Participation in the pilot program expanded the role of the involved PTCs. Each PTC was required to work with the Provincial Training Board (PTB) to develop a provincial training development plan, and to work with the commune council to develop to analyze commune training needs. They were also required to organize, manage and monitor training and follow-up of graduates to ensure the application of training, and to prepare reports and acceptable financial and performance records. Contacts with banks and other stakeholders, and recruiting, assessing and contracting trainers were also required.

289. While performance varied between the participating PTCs, it is clear that the involvement in VSTP reoriented the involved PTCs in their role in skills development. All learned to respond to the training requirements of the communes in their province and to connect their training development plan to the overall economic development of their area.

290. A survey of the PTCs was undertaken under the PPTA between March 1 and March 28, 2009 to determine the level of performance of each of the 22 PTCs. Follow-up contact was made as required to validate data. Survey results were scanned by Ministry staff to ensure consistency with existing data. All PTCs responded including the two recently upgraded to post-secondary status.

291. What is clear from the data is that some PTCs have shown remarkable progress in responding to the needs of their communities. Those involved in VSTP activity have begun to develop the entrepreneurial skills required to respond to the market as a source of funding. Some have developed training partnerships with community technical specialists that show a growing awareness of the need to expand provision of TVET through the private sector.

292. The data also clearly identifies “moribund” PTCs: those that offer three or four NTF funded short courses per year in traditional subject areas, regardless of demand, and virtually close down in the interim periods.

293. On the basis of the survey data, all PTCs were categorized into three levels of effectiveness in terms of their normal expected activities: Category 1: performing effectively; Category 2: improved but requires some assistance, and Category 3: substantially below acceptable minimum performance. Figure 15 summarizes the survey outcomes for all PTCs.⁸²

Figure 15: Effectiveness Categories of PTCs in Existing Mandate (As Survey and Interviews March 2009)

#	Category 1:	Category 2: Improvement over past 2 years but needs coaching to meet minimum PTC performance	Category 3: Requires significant support to meet minimum PTC performance
1	Battambang	Kratchie	Pailin
2	Kampot	Pursat	Kampong Speu
3	Siem Reap	Kampong Cham	Kandal
4	Takeo	Kampong Thom	Rattanakiri
5	Svei Rieng	Sihanoukville	Beanty Meanchey
6	Stung Treng	Prey Veng	Odor Meanchy
7	Kampong Chhnang	Koh Kong	Kep

Source: PPTA survey, 2009

294. It is important to stress, that many factors can affect PTC performance and in determining support strategies, all need to be considered. Major factors identified included:

- Competence, experience and energy of the director
- Support provided to the director by DGTVE
- Clarity of annual performance objectives
- Monitoring of achievement
- Financial provision
- Match between staff numbers, skills and requirements of the PTC
- Understanding of the PTC mandate
- Direction and support provided by Provincial Director of MOLVT
- Support from Provincial Governor and PTB.
- Demand for TVET in the province.

⁸² Allocations across the three categories of effectiveness were based on: i), level of activity, ii), understanding of PTC mandate, (iii) number and quality of applications for NTF funding, (iv) effort of PTC director to develop and market training, (v) involvement of provincial director, (vi) capacity to report activities as seen in accuracy and timeliness of reports, physical condition of the PTC, (vii), access of staff to written curriculum, (viii) community network and activities held at PTC, (ix) revenue generation activities including knowledge of and links with training NGOs (x) state of campus, facilities and equipment

2. Staffing, Facilities and Equipment

295. The 2009 survey of the PTCs also showed extremely wide variation in teacher to student ratios -- from 1:1.7 to 1:180. There appeared to be no link between trainer provision in the PTCs and actual student numbers.

296. Most PTCs had basic facilities and equipment which are put to good use. Some however apparently made no use of the specialist training facilities which remain closed. While there is a need to improve the PTC facilities, this must be linked to student number and programs offered. Some PTCs were using classrooms as student dormitories and even staff dormitories. This reduces training space but is reported to be unavoidable.

3. Needs for Improvement and Expansion of Role and Capacity

297. For the future, the planning processes directed by the NTB foresee an expanded role for the PTCs beyond the direct delivery of training. They are envisaged as acting as the province center for skills development. In this, they will assist the PTB with planning and executing a provincial TVET strategy within the over-all NTB policy framework. As they become increasingly competent in this expanded role, consideration may be given to the upgrading of some PTCs to institute or polytechnic level with diploma level programs.

298. The functions of the PTCs will continue to evolve. It is estimated that the development of the range of competencies required to enable the carrying out of the proposed functions will take up to two years for the most advanced PTCs. It will require substantially longer for many, and perhaps up to five years or more for category 3 institutions described in Figure 15 above.

299. **Institutional Leadership and Management:** Those few PTCs which have moved well beyond the survival programming of the 1990s and are now offering higher level training in response to community demand, have one factor in common: strong consistent campus-based leadership. The experience of PTC development under ESDP II was that expanding capacity follows a strengthening of competence and confidence. Closer direction, and central monitoring against measurable performance targets are required for the PTCs. DGTVET may require additional resources to undertake more extensive supervision, and assistance to develop an appropriate "coaching model" to address the weaknesses within each underperforming PTC.

300. **Expansion of PTC Capacity:** Several PTCs complain of lack of equipment and facilities. The finding of the 2009 surveys indicated clearly, however, that the supply of additional facilities and/or equipment will not improve the underperforming PTC unless there has been careful planning for implementation including provincial training needs assessment, determination of standards, and skilled trainer availability -- key functions of improved centre management. The program for strengthening the PTCs outlined above targets this priority for capacity building.

301. **Additional PTCs:** Two provinces, Preah Vihear and Monduliri do not have PTCs. Both provinces are remote and relatively poor, and very little private sector provision of TVET occurs, so that training is essentially unobtainable. DGTVET planning is to extend basic skills training opportunities to these regions through the establishment of a PTC in each of the provinces.

302. **Expansion of Selected PTCs as Regional TVET Centers:** Currently, all post-secondary (and post junior secondary formal) TVET provision in Cambodia is in Phnom Penh, Battambang or Kampot, creating a serious issue of access for those unable or unwilling to travel or relocate.

303. A recent, cost-effective, and feasible proposal for addressing this issue has been the upgrading of selected existing PTCs to become regional TVET centers. These would offer higher level NVQ 3 and 4 courses to compliment the PTC activities. Five such centers are proposed in order to ensure equitable and efficient national coverage. Dormitory facilities would be required for female students.

304. Such centers would also offer extended and cost effective options for NTTI in-service program provision for PTC trainers and managers.

305. It is proposed that five centers be designated and upgraded to become regional centers in order to ensure reasonable access nationwide.

306. The functions of the proposed regional centers would include:

- All existing functions of the existing PTCs
- Program provision at NVQ levels 3, 4 and 5 as approved by DGTVET, using approved competency standards and curriculum
- Provision of venues and support services for in-service upgrading programs for TVET trainers
- Assistance to PTCs in the region for program development
- Competency assessment services and RPL for PTC graduates and others without formal qualifications;
- Development of linkages with medium size industry in the region and determination of training needs.

307. A proposed five-year plan for implementation assistance for the development of TVET regional centers has been prepared.

C. Post-Secondary Technical Institutes and Vocational Training Centers⁸³

1. Institutional Review

308. There are currently 10 post-secondary TVET institutions under the DGTVET. PPTA visits were undertaken to all institutions March - April 2009. These supplemented extensive data gathering through questionnaire and visits by DGTVET officers in May 2008.

309. The visits and data show a generally modern group of institutions, especially in Phnom Penh. All were built or modernized within the last 10 years. With the expansion of the NTTI site to include other institutions, available and accessible space appears to be in reasonable supply. In the survey, none of the institutions identified space or equipment as priority issues. All focused on teachers' technical skills, management capacity, and the challenge involved with marketing to recruit more students. *Teachers' skills* was selected by all the post-secondary directors as the most important issue (in contrast to PTC directors who selected *equipment* as their greatest problem).

310. Currently, only two post-secondary TVET institutions exist outside of Phnom Penh: Kampot Institute of Technology and Battambang Polytechnic, both recently (2008) upgraded PTCs.⁸⁴ There is some evidence that an increasing proportion of current diploma students in TVET skills subjects in the Phnom Penh institutions are from the provinces. Two Phnom Penh institute directors noted that the shift to degree study is mainly in Phnom Penh and that rural youth 'have a more practical focus'.

⁸³ Post-secondary is used in official nomenclature and data as programs for trainees who have left the secondary system, with or without graduation, and are not able to return to that system

⁸⁴ A third institution, the former VTC Battambang, has also been promoted but has a narrower program base and mandate

311. Students completing entry level skills training at PTCs have no access to further training. Two roadblocks exist: (i) the absence of bridging program to provide early school leavers with the required levels in basic math, science and Khmer, and (ii) diploma programs (NVQ 5) are not available in the provinces and Phnom Penh TVET post secondary institutions are expanding their degree programs, not their diploma studies.

312. **Student Numbers:** The total enrollment in the post-secondary TVET institutions, 2008, was 5,788 students. Full details of numbers by part-time students, subjects, and of those who are fee paying are not available.

313. The institutional data shows that the number of diploma students in technical TVET programs is shrinking and that real growth is taking place in degree level business and ICT programs. The institution directors identified the reason for this change in the increasing accessibility of degrees, and their high community prestige regardless of not leading to employment. A long-term program to change the image of “career education” would appear to be required.

314. **Space and Programs:** With few exceptions (the National Institute of Business(NIB)), space utilization of the technology labs is not at maximum at this time. It appears that revenue producing private students are vital to institutions in raising salaries to a level to keep effective teachers. As a consequence, a great deal of effort is committed to the recruitment of such students. In some cases, courses and programs appear to be offered based on the demand by fee paying students, and not in the nominal areas of specialization of the institutions. The RTI which specializes in Civil Technology, Electrical, Electronics, has a major commitment to business programs which generate revenue. The institutions are certainly demand driven, but not it would appear within their primary mandates.

315. The situation is different in Kampot and Battambang. Both institutions have high demand for diploma programs and this demand appear likely to grow in the future as PTC skills programs become more standardized and widespread with VSTP expansion to all provinces, combined with a stronger emphasis in employer-based training. However, both these institutions have a major constraint of a lack of land on which to expand.

316. **Equipment:** Required training equipment is determined by the competency standards developed with enterprise and the curriculum that is developed on the basis of the standards. Much of the equipment in the institutes and VTCs is quite old, but change must come after the curriculum is set.

317. In general, field visits revealed a high degree of congruency between the equipment in the institutions and the type of equipment graduates would use in the private sector. Visits to the ITI (Russey Keo), which will soon move to the new facilities at the NTTI site, revealed that teaching equipment in mechanical technology, motive power, AC and welding was vintage, unrepaired and often beyond repair. Equipment upgrades will be required in any target technologies proposed for the introduction of competency standards.

318. **Teachers:** As noted above, all the post-secondary directors selected *teachers’ skills* as the most important issue and the institutional surveys confirmed this. There is a very poor fit between the technical skills of the staff in the institutes and centers and the emerging needs of enterprise. Major upgrading of technical competence of teaching staff in selected, target technologies would now appear to be essential if TVET development in terms of the needs of industry is to occur.

319. **Operating Resources:** As in all TVET systems, shortage of resources for operating supplies limits the extent of hands-on time student learning. The inevitable outcome is that hands-on learning is replaced by watching trainers demonstrate actions. Review of such provisions is clearly required, as is the relationship between student tuition fees and the provision of adequate learning resources will also be reviewed.

2. Employment Outcomes for Graduates

320. Graduate employment data is the key indicator of TVET performance: the placement of graduates in jobs in the areas for which they were trained.

321. Graduate data from the major TVET institutes which maintain close links with relevant enterprises indicated very high levels of degree and diploma graduate employment in the civil technology and welding areas.

322. Data from the VTCs and technical institutes was very largely fragmentary. Many directors appeared unaware of their center's graduate employment outcomes, and in some cases perhaps not much concerned. The *Bridging the Gap* survey, July, 2008⁸⁵ showed that only 34 per cent of the sample of graduates was confident that they knew how to find a job and that the sources of job information were few and difficult to find.

323. It would appear that there is a general lack of links between the TVET centers and institutes and enterprises. This not only makes the finding of employment more difficult for graduates, but it results in training institutions which are divorced from the needs and requirements of employers. This further increases the problems of graduate search for employment, and the suitability of the trainees for the work place.

324. Section III E above discusses TVET needs for systems for career guidance for institutes and their students, and for ongoing assistance to the directors to ensure appropriate employed linked training.

D. Quality Audit, Professional Servicing and Strategies for Improvement

325. There is currently no provision for ongoing quality audit of the public TVET institutions. The establishment of an appropriate quality monitoring system is almost certainly a precondition for ensuring and maintaining acceptable performance levels and the further quality development of the present institutions, and thus of an effective and efficient TVET system..

326. This is a major development priority for TVET in Cambodia. Preliminary procedures, materials and training programs to assist the development of such a system were prepared under ESDP II. These could provide a basis for the development of appropriate system monitoring through DGTVET, consistent with and supportive of effective independent institutional management.

327. Associated with this, is the improvement of learning services for the system as a whole, and for each institution. These services must include (i) development of effective links with industry and LMI, (ii) the development of useful modern curriculum based on competency standards, (iii) the upgrading of existing institute management skills, (iv) upgrading of teaching staff skills, and (v) the actual implementation of needs and competency-based curriculum across the system as a whole. Expansion to meet future needs, and upgrading of facilities and equipment, are important but secondary to the major thrust of the improvement of the quality of system performance.

⁸⁵ CAMFEBA/ILO, Youth and Employment: Bridging the Gap, Phnom Penh, 2008

328. Successful experience elsewhere would indicate that effective system performance and continuing development involves the ministry (DGTVET) in concentrating directly on the management of policy, quality assurance, and administrative services. The support and ongoing development of academic, technical, management and financial development, and curriculum and training development services to the institutions and to the system as a whole needs to be through a central structure of permanent professionals closely linked to the key institutions of the system itself.

329. Strengthening DGTVET in its role of policy development, administrative overview, and quality assurance will require consistent and targeted capacity building activities. Strengthening the training system services requires quite a different plan and approach through the most appropriate resources of the system and the most appropriate structures and governance to link those resources.

330. Such development would appear to be a matter of high priority for TVET in Cambodia at the present time.

E. Opportunities for Women and the Disadvantaged

1. Non-formal Training

331. Non-formal (Track 1) training has given women and disadvantaged people in both urban and rural areas the opportunity to enhance their knowledge and specific skills, especially those who would not be able go to school, attend training far from home as they have to take care of their families, and stay at home with jobless.

Table 30: VSTP Data by Province, 2008

PROVINCE	Dist	Com	Community Based Training			Enterprise Based Training			Center Based Training			Total Trainees		
			F	M	Total	F	M	Total	F	M	Total	F	M	Total
Battambang	7	29	1064	7922	18571	133	99	232	322	266	588	11104	8287	19391
Kampot	8	32	11418	8650	20068	96	178	274	94	317	411	11608	9145	20753
Kampong Chhang	8	26	5623	4832	10455	49	53	102	54	182	236	5726	5067	10793
Siem Reap	9	39	11974	4436	16410	143	87	230	145	303	448	12082	4826	16908
Stung Treng	5	14	3518	1603	5121	64	27	91	15	43	58	3597	1673	5270
Svay Rieng	7	31	6597	6543	13140	24	140	164	86	122	208	6707	6805	13512
Takeo	9	39	7983	8397	16380	46	89	135	87	235	322	8116	8721	16837
Grand Total	53	210	57762	42383	100145	555	673	1228	803	1468	2271	58940	44524	103464
Percent			57.67	42.32	96.79	45.19	54.8	1.18	35.4	64.6	2.2	56.96	43.03	100

332. VSTP data reveals that in the VSTP program which made up 70 percent of the training activity in the 7 participating PTCs, 59.96 per cent of the over 100,000 participants were women. As noted, the location of such a high proportion of the training in the Communes made it very accessible for women. However, it should be noted that in the Center based training only 35.4 per cent of participants were women suggesting that the absence of hostels or the perceived gender bias of the programs offered might have been an issue. There is no data available for disadvantaged groups, however, Community development Specialists undertaking the TENA work in Communes were specifically instructed to ensure that y disabled villagers were included in the village mapping to assist in training selection.

333. In the absence of hostels for girls, some PTCs have allowed female students (and staff) to sleep in the classrooms and textile labs. Male students can sleep in the pagoda close by to the Centers. In rural PTCs, women without transport and beyond walking distance from a PTC and without relatives close by, are at a clear disadvantage. However, rural PTCs have the greatest amount of Commune based training, offsetting these disadvantages somewhat. The absence of PTCs in two Provinces in which there are a high proportion of indigenous people (Mondulkiri and Preah Vihear) effectively denies these groups any access to Government TVET.

334. This program, has also given them the personal and employment development such as idea, capability, exposure, social network, spiritual values, self and outside home employment and home management. Moreover, this program has given them the opportunity to earn money for household income generation and careers. In fact, the most recent non-formal training skill and VSTP program showed that female participation exceeded male participation, especially in community based program, since men busy with daily work to earn money for their family. In the center or enterprise based training, female women still tend to for the traditional occupation as sewing and fashion sewing, beauty women for wedding ceremony, silk and cotton weaving skills.

335. There is a need to encourage women to train in some of the non-traditional occupation as masonry and construction skills. In order to encourage women and disadvantaged people to attend the training program, at the center based as well as at the community based, the non-formal or VSTP need to think about specific skills or program which fit to them, in term of time schedule, labour market, and self employment.

2. PTC: Program and Facilities

336. In order to encourage women have more participation, the PTC need to provide/support/have as follow:

- Set up appropriate programs and skills training according to trainees and labour market needs,
- Should conduct training needs analysis on trainees needs during training and post-training period,
- Should have strengthening and monitoring of training activities, follow-up of graduated trainees to ensure the applicable of training,
- Should provide trainees the hostel, food supply, and some basic facilities needs during training period,
- Should improve as modern equipments/facilities to meet market needs,
- Should work closely with department of women affairs, agriculture and NGOs for understanding and integrating program, which suit to women and disadvantaged people,
- Should have specific skills for women trainees,
- Should provide sufficient information about the raining program and skills at local level, including provincial and community level,
- Improve awareness on training program and advantages of it
- Provide micro credit with low interest rate during post-training to buy equipments/facilities, as sewing machine, weaving equipment/facilities and materials.
- Organize study tour in the country, in order to learn and exchange information and experiences
- Provide trainees the information on job opportunity and find a job for them
- Provide market information and find market to trainees for their products

3. Technical Institutes and Vocational Training Centers

337. The technical Institutes and Vocational Training Centers have given women and disadvantaged people the opportunity to upgrade their knowledge and skills, especially those who would not be able to finish high school. Observations in the provincial and technical institutions visited, indicated that there are considerably less females enrolled in all courses of study compared to male.

338. There is a need to encourage women into TVET programs, with appropriate subject areas which attract women and meet labor market needs. The institute also needs to encourage and give strong support during study including in tuition, and accommodation, food supply, and social security.

339. In reviewing the data on NTTI graduates it is clear that almost no women (fewer than 2 percent) train to become TVET teachers. Without role models, it is very difficult to change public attitudes. Aggressive recruiting campaign for female TVET teachers would be a very positive response to the low numbers of female students in the primarily technical courses.

VII. FINANCING TVET - COST, REVENUE, PUBLIC AND PRIVATE EXPENDITURES⁸⁶

A. Financial and Related Statistical Data for TVET

340. From the outset some general observations need to be made about the availability and accessibility of statistical data in the MOLVT, specifically within the Directorate General of TVET (DGTVET), and in some other related Royal Government of Cambodia (RGC) Ministries, in relation to the financing of what is broadly defined as TVET in Cambodia. Throughout the Initial Sub-Sector Assessment of TVET in Cambodia⁸⁷ reference is frequently made to “the unavailability of data”, “data unable to be located”, and the “non-collection of data” – particularly in relation to financial information.

341. In many instances, important statistical data and particularly financial data which would permit the development of numerous useful indicators, often readily available in other regional countries at least of comparable size if not level of development, are currently not collected. There are several explanations offered for this situation.

342. One reason offered is the fact that MOLVT is a very recent creation, only established in 2005, and with the extrication of TVET from under the Ministry of Education, Youth and Sport (MOEYS) substantial data relevant to the performance of TVET in the past decade has been left behind or in some cases lost within that Ministry. However, it is also clear that when TVET was still part of MOEYS, there were also significant problems with the collection, collation, and analysis of discrete TVET-related data as evidenced by the scarcity of such data in the databases of major relevant multilateral agencies such as the World Bank, ADB, UNESCO and UNDP. The education statistical databases of these organisations often contain annotations with reference to this fact.

343. Other reasons alluded to include the lack of a functioning data collection system and a dearth of staff with the skills to re-establish one and maintain it. However, more importantly, there is strong agreement in the Directorate General of Finance and Administration (DGFA) that this scarcity of statistical data seriously impedes their ability to monitor the quantity and quality of TVET provision as well as preventing the more detailed financial analysis that could lead to more efficient and effective deployment of available resourcing and increased system productivity.

344. Johanson⁸⁸ refers frequently to this situation not only in his analysis in that section of his Initial Sub-Sector Analysis dealing with public and private TVET financing but as well in several other sections. In response, he recommended that additional studies be undertaken with the implication that, given time, the required raw data could be ‘discovered’ and processed. In most cases it now seems the reality is that required data simply does not exist because it has never been collected, thus making it extremely difficult to establish useful baselines or benchmarks with any degree of confidence. This is a critical deficiency as the DGFA in collaboration with DGTVET has been selected to participate in the initial piloting of a new approach to financing called program budgeting (PB). The situation is further exacerbated by the fact that DGTVET is the only Directorate within MOLVT within which PB is being implemented for the time being.

⁸⁶ All financial data is expressed in USD. Currency conversions have been calculated at an exchange rate of USD\$1.00=KHR4,100

⁸⁷ Johanson, R 2009, TVET in Cambodia: An Initial Sub-Sector Assessment (ADB, Manila)

⁸⁸ Ibid., p.29

345. Another related challenge concerns the reliability of data, even in that minority of cases where financial and other related statistical data does exist. For example, with regard to TVET short-course programming, principally financed by the National Training Fund (NTF) and the Voucher System Training Project (VSTP), at least three sets of data exist within MOLVT for enrolments/graduations in 2008 and in a large number of instances these data sets are in marked variance with one another. These sets have all been constructed within DGTVE but by different units – the Directorate of Labor Market Information (DLMI), the Directorate of TVET Management (DTVETM), and the special unit managing the implementation of VSTP. Again, variations of a similar magnitude exist between data sets for TVET short-course programming in 2007. These variations are described as marked simply because they can involve differences in total numbers of the order of thousands of enrollees/graduates or in percentage terms, differences approaching 100 percent.

346. In compiling an analysis of the public financing of TVET, the twin problems of the unavailability of data and, where it does exist, its integrity, have been addressed in the following manner. In the case of the former, when they can be utilised to fill gaps, assumptions have been formulated – sometimes based on the best “guesstimates” of MOLVT officers with some familiarity with the area in question; and, sometimes based on the benchmarks in other nearby regional countries. For example, MOLVT has no knowledge of the personnel costs within its TVET system because salaries are paid directly by the Ministry of Economics and Finance (MOEF) and in the past, MOLVT has seen no reason to construct and maintain records on this matter⁸⁹. Hence an assumption of between 80 and 90 percent has been made as the personnel cost within the recurrent budget reflecting the range most prevalent in S.E Asian TVET systems. Where these assumptions have been employed in analysing data, they have been declared transparently with the appropriate caveats.

347. Where marked differences between several data sets purporting to report the same information have been uncovered, then whenever possible all original data returns have been located and new system-wide data recompiled. This activity has been extremely time-consuming and has only been employed when it was considered that the required data was crucial to decisions regarding the future design of the downstream loan project. In most cases where the data was considered marginally useful but not crucial, it was ignored, as was the temptation to take the mean of the two or three sets simply because the differences were so significant as to make subsequent averages meaningless. Examples of where all original data returns were examined and recompiled can be found in the Appendixes 9a and 9b on the basis that an expansion of VSTP has been proposed by the RGC as a potentially major component of the downstream loan project and no analysis had been undertaken to date on the unit training costs of the program. Similarly, detailed data was recompiled in relation to the NTF in 2008 in order that a better picture might be able to be gained on ways by which it might be expanded and revitalised.

B. Public Expenditure on Education and Government Tax Revenues

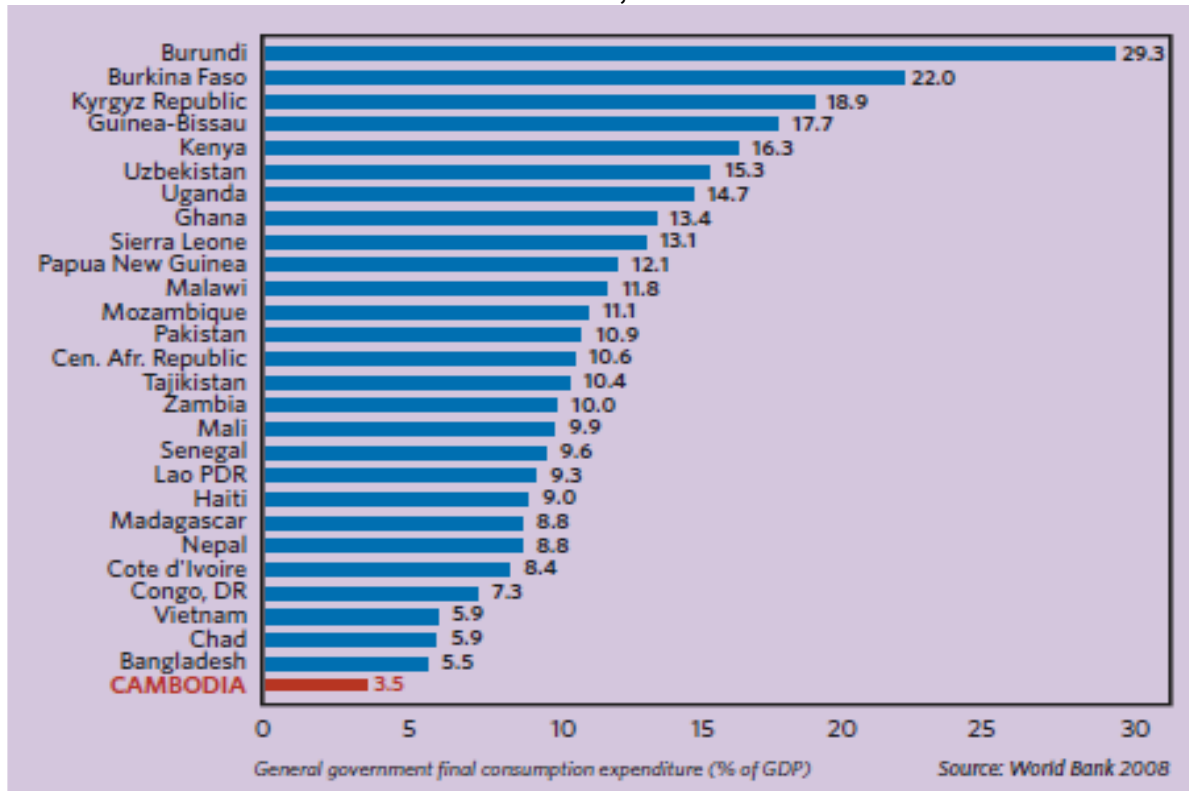
1. Government Expenditure on Education

348. At a macro level, total RGC recurrent expenditure as a percentage of GDP is low even in comparison with a selection of similar low income countries, as can be seen from World Bank data sourced from 2006 and reproduced in Figure 16. This relatively low level of overall government expenditure is replicated in the specific figures for education where, as illustrated in Figure 17. it can be seen that Cambodia expended only 1.9% of GDP between 2002 and 2005, greater than Myanmar (1.3%) and Indonesia (0.9%) but less than Lao PDR (2.3%).

⁸⁹ Moreover, when it was suggested that a direct approach be made to the MOEF for the information, it was suggested that more reliable data on these costs could be ascertained by directly contacting all MOLVT managed institutions, MOLVT Provincial Offices, and the Director of Finance within

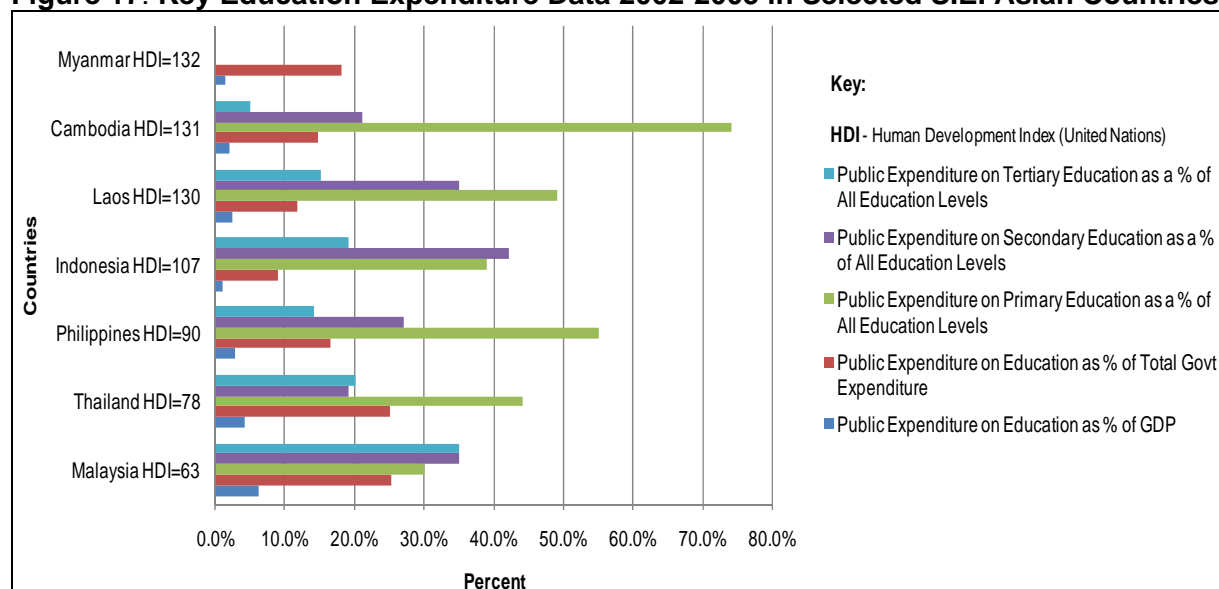
349. Public education expenditure as a percentage of all government expenditure was similarly quite low at 14.6%, again greater than Indonesia (9%), and Lao PDR (11%) but less than the Philippines at (16.4%) and Myanmar (18.1%). Importantly, it was also well behind some of its important regional neighbours such as Thailand and Malaysia, each allocating around a quarter of all government recurrent expenditure to education outlays. The World Bank has argued strongly in recent times that from its experience in all developing countries it is only with expenditures of this magnitude that international benchmarks such as the education related MDGs will be met by 2015.

Figure 16: Government Recurrent Expenditure as a Percentage of GDP in Low Income Countries, 2006⁹⁰



⁹⁰ World Bank 2008 - World Bank Development Indicators

Figure 17: Key Education Expenditure Data 2002-2005 in Selected S.E. Asian Countries



	Malaysia HDI=63	Thailand HDI=78	Philippines HDI=90	Indonesia HDI=107	Laos HDI=130	Cambodia HDI=131	Myanmar HDI=132
Public Expenditure on Education as % of GDP	6.2%	4.2%	2.7%	0.9%	2.3%	1.9%	1.3%
Public Expenditure on Education as % of Total Govt Expenditure	25.2%	25.0%	16.4%	9.0%	11.7%	14.6%	18.1%
Public Expenditure on Primary Education as a % of All Education Levels	30.0%	44.0%	55.0%	39.0%	49.0%	74.0%	N/A
Public Expenditure on Secondary Education as a % of All Education Levels	35.0%	19.0%	27.0%	42.0%	35.0%	21.0%	N/A
Public Expenditure on Tertiary Education as a % of All Education Levels	35.0%	20.0%	14.0%	19.0%	15.0%	5.0%	N/A

2. Income, Corporate and Capital Gains Tax Revenues

350. At the same time that the RGC would seem to be a low spending government both in terms of its recurrent expenditure as a percentage of GDP and in comparison to many of its ASEAN neighbors, there nevertheless appears to be room to increase government revenues, particularly in the areas of personal and corporate taxation.

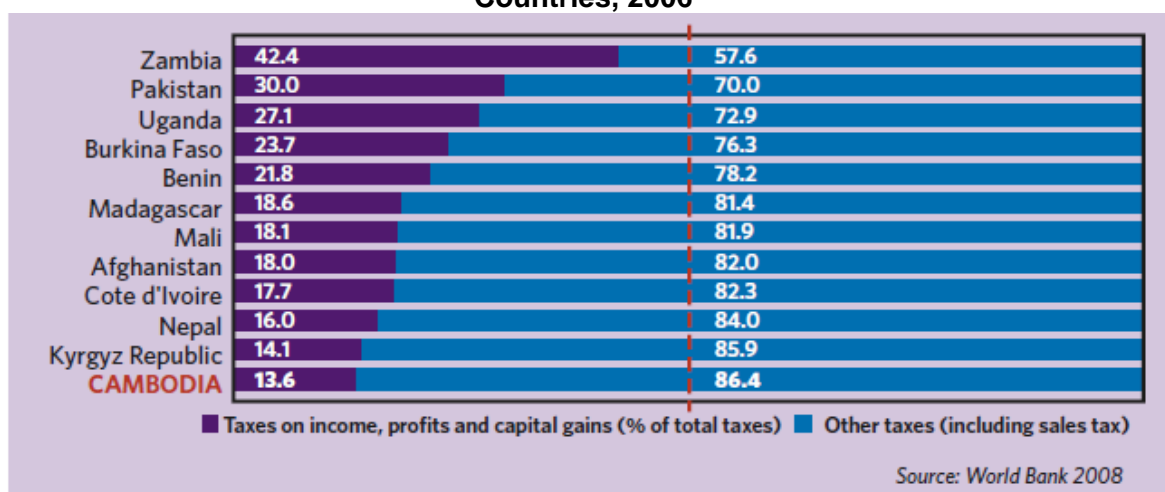
351. As recent World Bank data has indicated, Cambodia's tax base is less than nine percent of GDP⁹¹, and less than 14 percent of all tax revenues come from direct income taxes (see Figure 18 below), the lowest rate of any low-income country for which the Bank has available data. While some direct taxes have shown small increases in recent years, taxes on exports have declined from 12 percent of tax revenue in 2003 to below 5 percent in 2006⁹², and overall, government revenue generation has become increasingly dependent on indirect taxes such as VAT. These indirect taxes have the potential given the regressive nature of broad based consumption taxes, to place greater financial burden on the poor.

352. In comparison to direct taxes, government apparatus for collection of indirect consumption taxes such as VAT are generally different and on the whole simpler. This fact has relevance to a discussion of the capacity of any government to collect additional levies, and in the specific case of TVET a national training levy, from selected employers above a predetermined threshold. This is discussed in more detail later.

⁹¹ Ibid

⁹² Ibid

Figure 18: Taxes on Income, Profits and Gains (as a % of total taxes) in Low Income Countries, 2006⁹³



353. Moreover, expected substantial growth in oil and gas revenues while on the one hand presenting “the single largest emerging opportunity facing Cambodia” could well prove to be “the single biggest threat to the country’s well being and longer-term stability”⁹⁴, according to research by Cambodia’s Supreme National Economic Council (SNEC) and the Cambodian National Petroleum Authority (CNPA). The so-called “resource curse”⁹⁵ has been demonstrated by the long term growth rates of oil- and mineral-rich developing countries which have been 30 to 50 percent lower than the growth rates for oil- and mineral poor developing countries. It is alleged that the resource curse is far more likely to occur in those countries “with a weak and narrow tax base, lack of financial transparency and, weak financial governance” among others⁹⁶.

C. Sources of TVET Funding

352. Introducing the specific issue of TVET financing in 1999 in *Higher Education in Cambodia*, the authors asserted that “...the financial context (of TVET) is as complex as the sector itself”⁹⁷. Although at that point in time, TVET management and delivery was still under the control of the Ministry of Education, Youth and Sports (MOEYS), in a number of respects the same complexity is as true ten years later as it was then, although importantly, in the past 12 to 18 months, new approaches to improve the situation have been identified and, in some cases, have commenced implementation. The most important of these new approaches currently being implemented is program budgeting (PB) which is discussed below.

353. Furthermore, the current principal sources of financing for TVET are also much the same as they were in 1999 albeit with changed ratios – government recurrent budgets, international funding, and private sources which, in the main, consist of student fees.

⁹³ Ibid

⁹⁴ UNDP 2007 Cambodia Human Development Report, p.108

⁹⁵ The ‘resource curse’ is defined as a phenomenon whereby a country with an export-driven natural resource sector, generating large revenues for government, leads paradoxically to economic stagnation from overvalued exchange rates, which undermine the competitiveness of the non-resource sector, particularly agriculture and manufacturing

⁹⁶ Cambodia Human Development Report 2007, op.cit. p109

⁹⁷ Trewavas, R and Daroesman, P “Technical and Vocational Education and Training in Cambodia” in *Higher Education in Cambodia – the Social and Educational Context for Reconstruction*, Sloper, D (Ed) UNESCO (1999), p.208

354. Figure 19 below presents a matrix outlining the principal sources of TVET financing within public and private TVET provision, although it should be made clear from the outset that throughout this section discussion of TVET is confined to the vocational training system under the direct management control and/or regulation of the Ministry of Labor and Vocational Training (MOLVT).

355. While it is understood that there has been some rationalization since the creation of MOLVT in 2005, training that generally meets definitional criteria for TVET is also delivered under the auspices of a number of other government ministries as well as in private sector enterprises through in-house training. By and large, the vast majority of vocationally oriented training delivered within *private* enterprises is neither regulated nor certified by MOLVT. Moreover, at least some major private TVET providers remain registered with their relevant provincial or municipal department of education office under MOEYS in terms of their regulation and monitoring; continue to issue trainee certification with the official logo of MOEYS; and, profess to having had no contact with MOLVT since TVET management was transferred to the Ministry in 2005, despite their indicating knowledge of the reorganization.

Figure 19: Principal Sources of Funding by Type of TVET Provision

		TVET Provision	
		Public	Private
Funding	Public	<ul style="list-style-type: none"> Direct budgetary support to DGTVET (Central and Provincial offices) and public training institutions for salaries and other recurrent costs; for programs through facilities such as the National Training Fund (NTF) and Program Budgets (PBs); and for some student assistance through government scholarships 	<ul style="list-style-type: none"> NTF funding to NGOs
	International	<ul style="list-style-type: none"> Grants and concessional loans to Government of Cambodia including some direct funding of programs (e.g. Voucher System Training Project, VSTP) from a variety of sources – ADB, Govts. of Korea, India, Japan, Germany 	<ul style="list-style-type: none"> Concessional loans (e.g. Govt. of France - Garment Manufacturers Association in Cambodia for establishment and operation of a Garment Industry Training Centre
	Private	<ul style="list-style-type: none"> Student Fees Voluntary Industry Levies Donations/Scholarships 	Private Training Market <ul style="list-style-type: none"> Student Fees Voluntary Industry Levies Donations In-house training

356. Some clarifications are required of annotations within Figure 19. The *National Training Fund* (NTF) was established in 1997 under the ADB Basic Skills Program to provide short-term employment focused training (up to 6 months in duration) to assist with livelihood development in the rural areas and thus alleviate poverty. It is open to competitive bidding by a range of both public and private providers for resourcing their proposed programs. Government recurrent financing provides the source of the funds. All Provincial Training Centers (PTCs) in 22 of the 24 provinces receive funding under the NTF as do some ‘long-course’ institutes⁹⁸ but in addition, a significant number of NGOs also receive support. In turn, some of these NGOs then contract both public and private providers to deliver the actual training, if they are unable to deliver it themselves. Resourcing for the NTF is met from the MOLVT’s annual recurrent budget.

⁹⁸ ‘Long-course institutes’ is the nomenclature used by MOLVT to refer to those of its institutions offering formal certificate, diploma, degree and higher degree programs in excess of 6 months in duration. There are currently 9 such institutes under the umbrella of MOLVT.

357. The *Voucher System Training Project* (VSTP) established in 2006 under the ADB supported Education Sector Development Project (ESDP) II has a primary objective identical to that of the NTF. It differs principally in that it operates in the 210 poorest communes in 7 provinces only; has identified performance outcomes to be achieved; and, is managed by the relevant PTC in each of the provinces. The other significant difference from NTF supported training is that under VSTP sponsored training specific needs are identified by each of the Communes in collaboration with a community development specialist and the PTC, as indeed is the training response.

358. VSTP is presently funded in total from a specific allocation under the ESDP II loan – in other words, there is no resourcing from MOLVT’s annual recurrent budget.

359. *Voluntary industry levies* are used by a few industries to support specific training for their sectors. As far as can be ascertained, the construction industry has had such a levy operating for some time but it is understood that only the largest companies in the sector are requested to subscribe. The garment industry has indicated that it shortly intends to develop a similar voluntary levy system among those companies that are members of the Garment Manufacturers Association in Cambodia (GMAC), but specifically in order to secure and repay a USD\$5 million concessional loan from the French Government for the development of a Garment Industry Training Centre (GITC). Details of how this levy will operate and whether it will continue after its principal objective has been achieved have yet to be clarified.

360. While voluntary industry levies, in-house company training, and industry donations of funds and equipment all represent various levels of financial or in-kind commitment by the private sector towards the cost of middle-level skill formation in Cambodia, by far the single biggest *private contribution* to the cost of training in long course institutes⁹⁹ is made by the trainees themselves (or by their households) by way of *tuition fees*. Tuition fees, while by no means equating to full cost recovery, are utilised for a number of purposes but principally it seems to supplement teachers’ salaries, to purchase equipment and resource materials for the institute, for small capital works, and in some instances to cross-subsidise the provision of short courses. In the MOLVT’s long course institutes it is estimated that private contributions to the cost of training by way of student fees are at the least sufficient to cover somewhere between 70% to 90% of recurrent institute costs. However, the fact that it is as broad a range as this is indicative of how little information exists in the public domain with regard to the quantum of fees collected across the public system¹⁰⁰. The view in the Ministry appears to be that fee income is an internal institute matter, both in terms of how much is collected and to the specific purposes to which it is put.

361. Officially, all MOLVT institutions, with the exception of NPIC, are “not-for-profit” organizations. In effect, this means that any “surpluses” generated by the institutions that cannot be legitimately earmarked for institutional projects and/or programs should be returned to Consolidated Revenue through MOLVT. Not surprisingly, given the extent to which it would seem that at least long course institutes are dependent on privately sourced revenue, funds are rarely returned, if at all.

362. The remaining 10% to 30% is met from the MOLVT’s recurrent budget in the shape of payment of teachers’ ‘base’ salaries and institutional utility costs (electricity, water, telecommunications, etc.), program budget both for long and a limited number of short courses, and the provision of some scholarships for financially disadvantaged students. It is

⁹⁹ There are 8 long course institutes in addition to the National Polytechnic Institute of Cambodia (NPIC). The governance and financing of NPIC is quite different from the other 8. Indeed, it proposed as a new model for public –private partnerships (PPPs). Hence discussion in this section of financing arrangements in long course institutes does not apply to NPIC.

¹⁰⁰ It is suspected that the range of the estimates is also in part due to the variation in the cost structures between institutes

understood that these scholarships which cover both course fees and make a small contribution to living expenses, are relatively few in number and are generally offered for the pursuit of shorter courses targeted at disadvantaged students, such as those at certificate level.

363. With teachers' salaries comprised of a 'base' paid for by government and then supplemented by specific allowances originating from other institute income including but not limited to fees¹⁰¹, it is impossible to develop an accurate estimate of personnel costs within the TVET system as a percentage of total system costs. Indeed, with fee income the unknown factor, it is impossible to calculate the recurrent cost of an institute, let alone the entire TVET system. What can be calculated with a reasonable degree of accuracy is the direct government contribution to personnel costs as a percentage of the DGTVET recurrent budget. The percentage that emerges is a little under 38% which is abnormally low for education and training systems anywhere in the world. However, anecdotal evidence, if credible, would suggest that this percentage might well double if salary supplements are added, albeit that an increase of this scale would be much more likely to occur in a long-course institute than a PTC. Notwithstanding, the resulting figure of 70% to 75% of recurrent outlays being expended on personnel would be commensurate with efficiency benchmarks in comparable TVET systems.

364. In a limited survey of Ministry salary data covering four PTCs over a five month period from October 2008 to February 2009¹⁰², the average payment to teachers from the government (in other words, the base salary) was USD\$74/month, and ranged from \$69 to \$78 across the 85 teachers' salaries surveyed.

365. Given their focus on the provision of short-course livelihood training for rural poverty alleviation, PTCs have few if any fee-paying trainees. In a March 2009 survey of 20 PTCs and 4 Vocational Training Schools (VTSs), only seven institutions reported any fee income and, of these, six reported it at less than 5% of their funding and the seventh at between 5% and 10%¹⁰³. Indeed, the bulk of these institutions' *program* revenues are derived from training delivered under support from PB (within which NTF represents the largest component) and VSTP, respectively. However, in a very small number of cases it is understood that some more entrepreneurial PTCs do offer fee-for-service training either to individuals who otherwise may not have access to programs under NTF or VSTP, and to some small enterprises.

D. MOLVT and DGTVET Budgets

1. Recurrent and Capital Outlays

366. In 2009, the Royal Government of Cambodia's (RGC's) recurrent budget for MOLVT has been set at USD\$12.735 million, of which \$9.22 million has been earmarked for central administration and \$3.515 million for provinces and cities. In addition, a triennium capital expenditure budget (2009-2011) has been set at \$8.167 million of which \$1.24 million has been set down for expenditure in the 2009 financial year¹⁰⁴. Figures 20(a) and 20(b) provide the FY2009 DGTVET budget in Riel and equivalent USD by each of the eight sub-programs and the estimated budget outlays for Personnel and Utilities, respectively. Figure 21 shows the capital outlay by specific project for MOLVT for the triennium.

¹⁰¹ For example, within program transfers to institutes and PTCs there are often some performance incentive or administration/management allowances, part of which will also be used in some cases to supplement teachers' incomes.

¹⁰² Financial Survey April 2009 undertaken by ADB PPTA 7116-CAM

¹⁰³ PTC Survey March 2009 undertaken by ADB PPTA 7116-CAM

¹⁰⁴ RGC Budget Papers 2009

Figure 20(a): Recurrent Budget Outlays for DGTVET for Financial Year (FY) 2009 by Sub-Program

Program	Management Responsibility within DGTVET	Description	Annual Budget	
			Riels	Equivalent USD USD1 = KHR4100
Sub-program #1	TVET Secretariat	National Training Board	185,000,000	\$45,122
Sub-program #2	TVET Management	Technical Management Service	672,500,000	\$164,024
Sub-program #3		Program Budget (Long-Courses)	656,000,000	\$160,000
Sub-program #4		Program Budget (Short-Courses)	1,687,000,000	\$411,463
Sub-program #5		National Training Fund	2,560,000,000	\$624,390
Sub-program #6	National Competency Standards	Quality Assurance	279,100,000	\$68,073
Sub-program #7	Labour Market Information	Labour Market Information	164,800,000	\$40,195
Sub-program #8		Special Training - Apprenticeship, Handicapped, etc	88,300,000	\$21,537
TOTAL			6,292,700,000	\$1,534,805

Figure 20(b): Estimated Recurrent Budget Outlays for DGTVET for FY2009 for Personnel and Utilities

Item Description	Riels	Equivalent USD USD1 = KHR4100
Estimated DGTVET Outlay for Central and Long-Course Institute Staff	1,985,637,636	\$484,302
Estimated DGTVET Outlay for PTC Staff	1,937,139,600	\$472,473
Estimated DGTVET Outlay for Utility Costs	103,922,940	\$25,347
TOTAL STAFF & UTILITIES	4,026,700,176	\$982,122
TOTAL RECURRENT OUTLAYS	10,319,400,176	\$2,516,927

Figure 21: Capital Budget Outlays for MOLVT for FY2009-20011

Project No.	Project Description	2009 Estimated Cost of Projects in '000 USD	Year on Year Investment Allocation in '000 USD			Total 2009-2011
			2009	2010	2011	
597	Construction of poly treatment and laboratories	\$706	\$320	\$100	\$100	\$520
894	Creation of job information system	\$197	\$75	\$71	\$51	\$197
983	Equity access to education, technical and vocational trainings	\$6,000	\$500	\$2,500	\$3,000	\$6,000
984	Construction of labor and vocational training in provinces and cities	\$2,880	\$200	\$200	\$200	\$600
985	Construction of school building at national institute of business	\$600	\$100	\$150	\$350	\$600
1298	Gender mainstreaming into labor and vocational trainings	\$250	\$45	\$110	\$95	\$250
TOTAL		\$10,633	\$1,240	\$3,131	\$3,796	\$8,167

367. On the basis of the figures provided from within DGTVET and some assumptions provided by the Directorate of Finance and Administration¹⁰⁵, the estimated percentage of the *recurrent budget* (both central and provincial/municipal) expended specifically on TVET is twenty percent (20%)¹⁰⁶. However, it is clear from the identification of quite specific projects in the *capital expenditure budget* that all of it is allocated during the 2009-2011 triennium to TVET- related infrastructure¹⁰⁷.

¹⁰⁵ Specifically, the apportionment of utility and salary outlays between MOLVT Provincial Offices and PTCs in a ratio of 67% to 33%.

¹⁰⁶ MOLVT confirms that this a reasonable approximation

¹⁰⁷ RGC Budget Papers 2009

368. MOLVT's 2009 budget represents an increase of 43.4% on that of 2008 which in turn was an increase of almost 25% on 2007. Since its creation in 2005 with a budget of \$2.949 million MOLVT's recurrent funding has increased nearly 350 percent over the five year period or on average just over 45% year on year.

2. Comparison of TVET and Higher Education Outlays

369. Figure 22 below illustrates the increases in the TVET budget and compares them to the specific budget outlay for higher education, the sub-sector of education and training with which it is usually most in competition for government resourcing, over the same years.

Figure 22: MOLVT Compared with Higher Education Annual Recurrent Budgets, 2005-2009
(000's USD)

	2005	2006	2007	2008	2009
MOLVT Budget	\$2,948	\$5,109	\$7,143	\$8,883	\$12,735
Directorate General of TVET's Share @ 20% approx ^y	\$590	\$1,022	\$1,429	\$1,777	\$2,547
Year on Year Increase		73.3%	39.8%	24.4%	43.4%
Higher Education Budget	\$3,678	\$3,924	\$4,665	\$4,305	\$8,089
Year on Year Increase		6.7%	18.9%	-7.7%	87.9%

It is estimated that the remaining 80% of the budget appropriation is allocated to the operation of the employment and labour regulation, finance and administration, provincial office, and the inspectorate general functions of MOLVT.

Figure 23: Comparison of Recurrent Per Capita TVET and Higher Education Budget Outlays by Adjusted Numbers of Enrollees in Academic Year 2007/08 in USD

Public TVET Enrolment	2008 TVET Academic Yr	2008 H.Ed Academic Yr	Public Higher Education Enrolment
Short Course Enrollees (Sourced from Johanson op. cit.p. 19)	79,546		
Calculated as "equivalent" long course enrollees	6,324		
Long Course Enrollees	6,119	35,000	Degree & Higher Degree Enrollees - 2007/08 Estimate
Total "Equivalent" Long Course Enrollees	12,443	35,000	Total Degree & Higher Degree Enrollees
National Budget Outlay for TVET	1,777,000	4,305,000	National Budget Outlay for Higher Education
Indicative per capita funding as a function of the total TVET budget	143	123	Indicative per capita funding as a function of the total HE budget
Per capita GDP in USD (2005 latest available figures)	440	440	
Per capita recurrent funding as a % of per capita 2005 nominal GDP	32.46%	27.95%	Per capita recurrent funding as a % of per capita 2005 nominal GDP
Per capita GDP (PPP) in USD (2005 latest available figures)	2,727	2,727	
Per capita recurrent funding as a % per capita 2005 GDP (PPP)	5.20%	4.50%	Per capita recurrent funding as a % of per capita 2005 GDP (PPP)

Note: Higher education enrolments in public institutions are based on an estimate by the World Bank in 2008 in its Cambodia Country Summary - Higher Education. However, it is important to note that there are significant variations between this estimate and others provided in Ford, David "Cambodian Higher Education – Growing Pains", in International Higher Education, Number 44, Summer Edition 2006, where the figure was already estimated at around 50,000+, and in the Phnom Penh Post - October 5, 2008 in an article entitled "Cambodian Higher Education", where the estimate was well over 120,000 but where it was not made clear whether this included enrolments in private HEIs as well.

370. At a superficial level, the table indicates that TVET has fared comparatively well in recurrent budget outlays. Indeed, when the same recurrent budget outlays are calculated on a per capita basis this view is strongly reinforced as Figure 23 indicates (accepting the underlying assumptions), producing a ratio¹⁰⁸ between recurrent per capita TVET and higher education outlays quite unusual in most countries and of which most TVET educators would be envious. On one level it clearly demonstrates the strength of the resourcing commitment to promoting livelihood development and poverty reduction in rural areas, as outlined by the RGC in the 2006 National TVET Development Plan (NTDP) and its 2007 Plan update, through short-course financing facilities such as the NTF and VSTP with their clear focus on training content overwhelmingly related to crop and animal production.

371. In undertaking this relatively simple comparison of per capita spending on TVET c.f. higher education some adjustment has had to be made for the heavy preponderance of enrollees in short-courses under TVET as against those in longer programs. According to Johanson¹⁰⁹, there were 85,665 individuals enrolled in TVET programs in the 2007/2008 academic year. Of these, some 79,546 were enrolled in short-courses of between 1 week and 4 months with just over 44,033 or 51% in one week programs or 0.23 months; 33,847 (42.6%) in programs of one month; and the balance of 1,666 in programs of an average 3.97 months duration¹¹⁰.

372. On that basis the average MOLVT short-course has been determined at 0.64 months. Hence it can be further reasoned that with average long course enrolments being of approximately 8 months¹¹¹ duration in any given year (12.6 times the duration of an average short-course), 79,546 short course enrollees equates to 7.95% of that figure in “equivalent” long course enrollees, or 6,324 persons.

373. The final caveat on comparisons between these two education sub-sectors in terms of respective RGC budget outlays is, as Johanson noted, that “...budget allocations and actual outlays (expenditures) differ dramatically”¹¹². As a general point, this was raised in the Inception Workshop and subsequently reiterated in stakeholder meetings. A specific case in point was the 2008 DGTNET budget outlay which is discussed in more detail below.

374. While recognising these caveats, the comparative data in Figure 8 does raise some important issues for the Government and in particular for TVET system managers. Perhaps the most important concerns the quality and quantity of the outcomes it wants to get and is getting from relatively significant investments being made in TVET in a what is otherwise a comparatively low resourced public finance environment as Figures 16 and 17 demonstrated.

¹⁰⁸ The per capita ratio is estimated at a little over USD\$1.16 recurrent outlay on TVET for every corresponding USD\$1.00 outlay on Higher Education. This might be explained by the fact that in the higher education context in Cambodia individuals are expected to make a major personal contribution to their education which may be later offset by increased earning capacity relative to the non-tertiary educated workforce. It may also indicate that in a resource scarce environment, the RGC has made a strategic policy decision to focus post compulsory education spending on TVET, somewhat at the expense of higher education, as a means to facilitate national development goals such as poverty alleviation in the rural population.

¹⁰⁹ Johanson, R., op.cit. p.19

¹¹⁰ This data has been drawn from Appendices 1(a) – VSTP (Voucher System) – Scope of Implementation, Costs and Revenues in 2008 and 1(b) NTF – Scope of Implementation and Expenditure in 2008

¹¹¹ The average duration of the academic year in Cambodia

¹¹² Johanson, R., op.cit. p.29

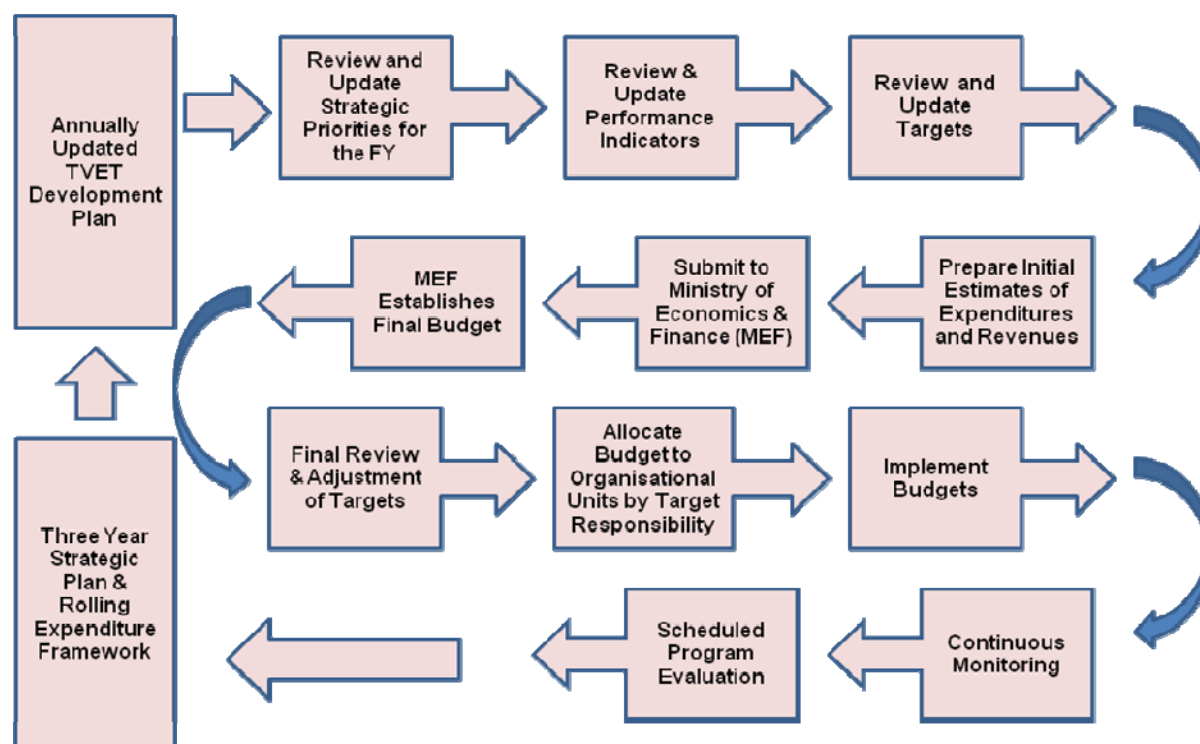
E. The Budget Process and Financial Transfers

1. Program Budgeting

375. Implementation of a Program Budgeting (PB) approach to the formulation of various RGC Ministry budgets commenced in MOLVT in 2007. PB is currently being piloted within 9 selected RGC ministries but within a restricted framework. In the case of MOLVT, PB is only being piloted within the three divisions of DGTVET– TVET Management, Labour Market Information, and National Competency Standards. At present the Directorates General of Employment (DGE) and Finance and Administration (DGFA), and the Inspectorate General have not been involved but over time these Directorates will also be inducted into the approach¹¹³.

376. It is understood that each pilot site has a phased implementation plan. In the case of MOLVT and specifically DGTVET, this has resulted in the development of a TVET Development Plan, which has undergone two annual updates (2007 and 2008) where the strategic priorities underpinning TVET policies have been reviewed and updated. The clearest example of this has been the new emphasis emerging in the 2008 update on formal TVET training (“Track 2”) as a complement to the strong focus on rural poverty alleviation through Track 1 training (non-formal) in the first TVET Development Plan in 2006 and its subsequent update in 2007. However, the next phases are still to be addressed. Figure 24 illustrates the annual program budgeting (PB) process for DGTVET.

Figure 24: Proposed Approach to Program Budgeting Following Full Implementation



¹¹³ In one sense restricting PB piloting to DGTVET is consistent with the current capacity of the DGFA to develop and manage the new process effectively yet, ironically, the fact that DGFA is thus required to run two financial management /reporting systems within the same Ministry does place added burdens on the capacity of the DGFA.

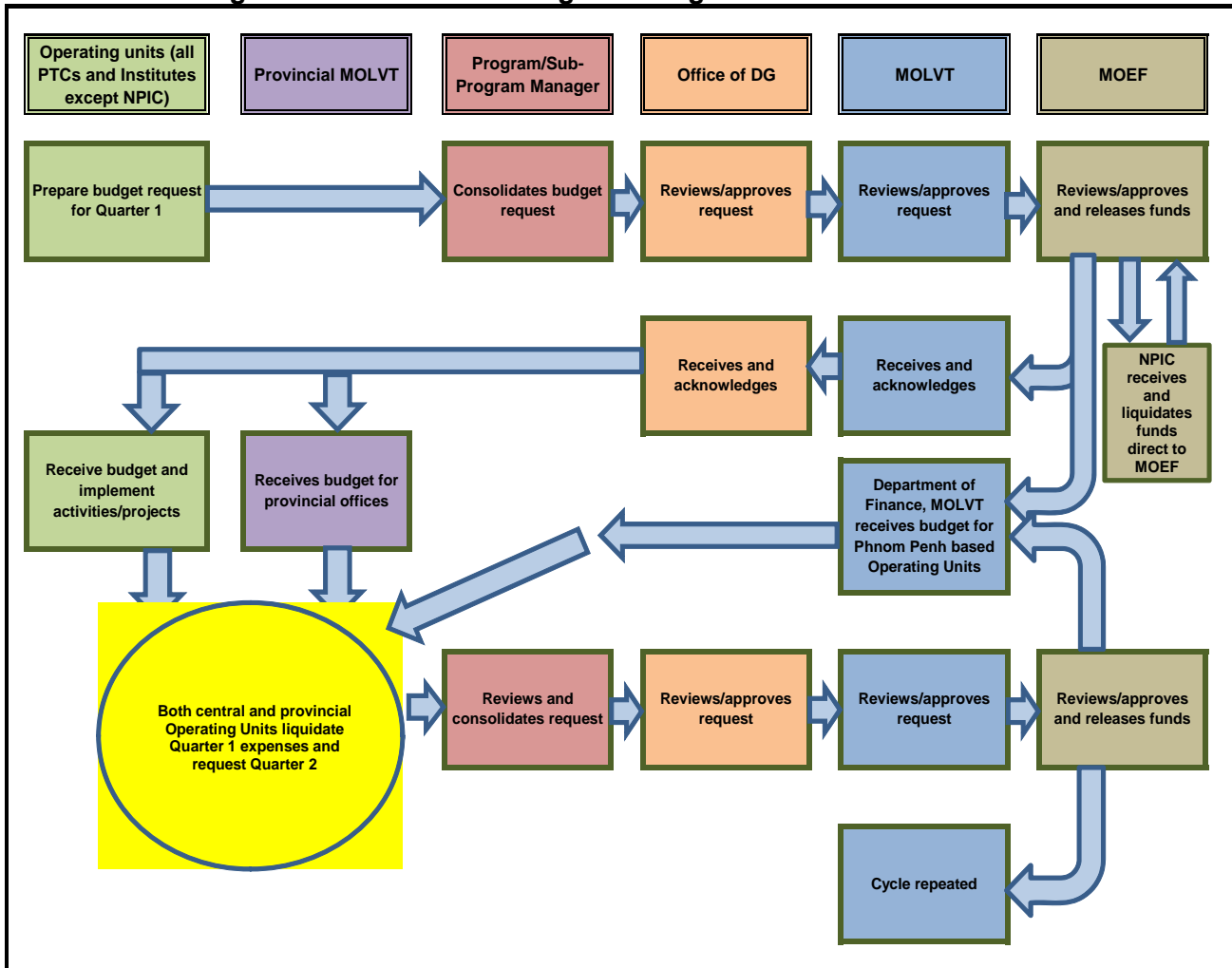
377. For example, it is acknowledged within DGTVET that considerable work remains to be done on setting specific targets and indicators for rolling three year periods (the rolling triennium approach), as well as in data collection against indicators, continuous monitoring of progress against targets (although some monitoring of target achievement does take place currently, e.g. under VSTP), and in undertaking specific program evaluation. In addition, while capital outlays are already being developed on a triennial basis, the same development approach needs to be undertaken for programming. Indeed, a case could also be made for reviewing the organisational structure of TVET particularly in terms of the functional responsibilities of its operational units, including their management of specific budgets and financial delegations.

378. Implementation of these requirements will take time but within the senior management of DGFA, there is already an acknowledgement of this and an understanding of what needs to be done, although there are concerns regarding the current capacity of the various central and decentralised operational units (provincial MOLVT offices) to do so without a range of training inputs. DGFA believes this is also true for both Institutes and PTCs. At all levels public financial management related training inputs pertinent to the management and delivery of TVET are being proposed for attention under ADB loan assistance.

2. Financial Disbursement, Delegations and Accountability

379. Under PB, financial disbursement has improved a little but is still slow by the standards of a modern bureaucracy. Indeed, the PB approval and disbursement process as outlined in Figure 25 has undoubtedly contributed to greater transparency in terms of exactly which specific offices within MOLVT are required to approve budget requests and eventual funds disbursement, there is nothing evident in the PB process which, of itself, would necessarily reduce the turnaround time between the request for funding and the receipt of funds by the operational end-users. As an adjunct to PB there has been a reduction in the number of approvals required hence the relative improvement in the time taken for disbursements but nonetheless there is still considerable room for improvement.

Figure 25: Overview of Program Budget Disbursement Process



380. Once a budget has been agreed between MOLVT and MOEF based on the consolidated and agreed programs of each of the funded operational units, it should be a relatively simple matter of disbursing money directly into the “treasury function” of those units by bank transfer. This system already works well with the disbursement of VSTP funds under the ESDP II project which, because of specific arrangements at the time of its establishment in 2006 relating to financial transfers within the scheme, effectively sits outside the RGC’s normal public financial regulations and requirements. If the PB process did work as efficiently as the VSTP then the strategy as outlined in the PB manual whereby operational units receive their first quarterly advance at the commencement of the calendar year with subsequent quarterly advances “topping up” expended funds would be being realised. Instead, at the moment, this appears to be not the case.

381. In 2008, there were reportedly significant delays in PB funds reaching operational units leaving DGT VET in a position of being substantially under spent against budget at the end of the financial year. It could be reasonably argued that as 2008 was effectively the first year of implementation of the PB approach, there were bound to be initial difficulties. According to the DGFA on the one hand, many institutions, lacking appropriate financial management and reporting experience, struggled to understand the information and documentation that was required of them centrally in order that subsequent advances could be disbursed. On the other hand, there appears to be compelling evidence that there are still too many levels of approval required in the central administration of both MOLVT and MOEF for funds to be released and disbursed even after specific program budgets have

been agreed. In some cases, it is understood that delays in the required approvals can still result in months of delays in funds actually reaching their final destination – the operational units. This seems to in part result from the size and scope of formal financial delegations permitted under existing financial regulations which, in turn, have often been developed within a framework of very traditional and bureaucratic notions of accountability.

382. With regard to recent difficulties within operational units, there is a belief within DGFA that by the mid to end of 2009 many of these initial ‘teething problems’ will have been resolved, and this may well prove to be the case as the year progresses. Nonetheless, the financial management capacity within operational units is still relatively weak and a great deal more training needs to be undertaken at this level if DGFA’s optimism is to be rewarded. The basis for this prognosis lies in the fact that as they currently stand, the central financial reporting requirements of operational units are not particularly onerous. On the whole, they revolve around reporting on how much of the advance was spent within the quarter; whether the programs were delivered as planned; and supplemented by some basic data on the gender, and number of enrollees and graduates. These requirements focus entirely on very basic measures of efficiency. In time, DGT VET management should reasonably expect that more sophisticated measures of both efficiency and effectiveness would be instituted in order that real value for money purchasing can be attained.

383. For example, a more detailed examination of unit costs by trainee per training hour under VSTP demonstrates that there are very significant price differentials between institutions delivering identical programs, both in content and duration. In a few cases this has been explained away by the provision of additional training resources to participants in a program delivered under the auspices of one PTC in comparison to an apparent identical program delivered under the auspices of another; but in the majority of cases no rationale is evident. At the moment no data on unit costs lower than the level of a course are required to be reported centrally, although the data that could generate this information is available. This is discussed later when the financial aspects of both long and short course programs are considered in more detail, but nevertheless what seems to be generally ‘driving’ the cost of delivering programs is simply the amount of funding provided. In other words, if an institute is provided “x” amount of dollars to deliver a specific program, then that is determined to be the “cost” of the program and it is delivered for that precise amount. However, how “x” is determined is unclear. This is particularly true in the funding for NTF programs as can be seen by the tables provided in Appendix 9(b) – NTF – Scope of Implementation and Expenditure in 2008, where the cost of a course for 30 participants, no matter what the specific content, is USD\$0.17 per trainee/training hour¹¹⁴, and all courses are approximately 173 hours in duration.

384. Similarly no indicators and measures of effectiveness are apparent. For example, VSTP was designed to train participants either for employment or self-employment, focusing particularly on livelihood training for 15-25 year olds and especially women. An evaluation in late 2008 of its implementation, undertaken by ESDP II in conjunction with the MOLVT at a 3 month and 6 month interval post-training, has provided some evidence of increased household income among up to half the participants in some communes. Notwithstanding, a great deal more needs to be done in terms of evaluating its effectiveness against the significant budget outlays provided for it, in terms of value for money procurement. The same can be said of NTF which was also designed with expected employment outcomes.

385. In terms of the performance of central MOLVT’s working with the new PB process, there is also room for improvement but the challenge will be in designing and effecting improvements to the extent possible within the constraints imposed by the overall RGC public finance system with which MOLVT is required to comply. For example, it is highly

¹¹⁴ Alternatively, USD\$29.27 per trainee per course.

unlikely that MOLVT will be accorded the unilateral authority to revamp the current system or levels of financial delegations and approvals. However, MOLVT has been designated a “pilot site” for public sector financial reform and this augurs well for a continued role in the trialing of the current reforms. The majority of these reforms are emanating from a major public sector reform program being implemented across government with assistance from the ADB. With MOLVT the recipient of a proposed new TVET loan, it would make considerable sense for the status of MOLVT as a pilot site to continue and perhaps be expanded.

386. However, compliance with existing public sector financial regulations should not necessarily interfere with an increasing delegation to operational units of greater responsibility for the delivery of better quality and more effective program offerings. As with many traditional bureaucracies, the Cambodian TVET system appears to direct greater attention towards improving the efficiency of the system as opposed to equally ensuring its effectiveness. At the risk of oversimplifying, it might well be described as an over-emphasis on “doing things right”, often at the expense of “doing the right things”. In the context of the Cambodian TVET system and its financing there is a need to achieve a better balance between procedural accountability for the expenditure of public funds and accountability for how effectively those funds are expended.

387. Responsibility or accountability for the effectiveness of programs must be borne system-wide and at all levels. Central TVET management has a responsibility to establish the operational framework within which the training system better interfaces with industry and commerce to ensure at the very least that:

- (i) the specific skilled labour requirements and overall demand for the various economic sectors are both regularly identified and updated;
- (ii) training standards commensurate with industry requirements are developed and being utilised; and,
- (iii) training is being properly and formally assessed against those standards, with successful graduates certified as having attained a meaningful qualification that has national recognition and credibility, particularly among employers, whether public or private.

388. At the training delivery level, providers need to accept greater accountability for establishing an on-going and effective dialogue regarding the on-going skill formation needs of both their local employers and community in order to improve the effectiveness and relevance of the design and delivery of their programs. Local accountability should also translate into quality assessment practices against agreed standards, and in time assistance to graduates with employment placement

F. An Examination of Specific Program Funding

1. Voucher System Training Project

389. VSTP has proved to be an extremely important development in Cambodian TVET in terms of both its funding arrangements and the new ground it has broken through improved accountability to local communities. The program deserves to be expanded but it can also be improved.

390. Funding under the project for 2007 and 2008 to each of the 210 poorest communes in seven provinces was set at a limit of USD\$5,000¹¹⁵. In return, PTCs acting as both training organisations and/or training brokers, working in conjunction with their Provincial Training Board (PTB) and the relevant Communes, and assisted by community development specialists, were required to establish the specific training needs of the community and deliver training to a minimum of 222 individuals with a clear focus on improving their livelihood and employment outcomes. The target groups within each Commune were 15-25 year olds and women, and training was to be delivered utilising each of three modalities depending on the need – commune based (or field based) training usually spread over a week and with a duration of between 40 and 56 hours; placements in enterprises (a sort of small-scale ‘apprenticeship’ with a duration of around 4 months; and PTC based training (again usually of between 3-4 months in duration).

391. Figure 26 provides a brief summary of the detailed data in Appendix 9(a)¹¹⁶. It shows the gross income received from VSTP in 2008 by each PTC and the 10% margin¹¹⁷ each was permitted to retain as a performance bonus for achieving the target of 222 trainees per commune. This feature of VSTP proved important not only as an incentive to PTCs to perform to the required standard (in fact all PTCs earned the bonus in 2008) but also because it provided each institution with some discretionary resourcing for the first time in their relatively short histories. Each institution has utilised their bonuses in different ways – for example, using it to supplement teachers’ salaries, purchase new equipment, rehabilitate or construct new facilities; and, in a few cases, it is understood to have been ‘invested’ in the development and underwriting of new revenue generating activities for the PTC – for example mounting new programs on a fee-for-service basis.

392. At the outset of the project a ratio of 60 percent to 30 percent to 10 percent was set for the spread of training between commune, enterprise and centre-based training respectively. However, a more detailed analysis of the project has produced some interesting data. While in all seven provinces the target of producing 222 ‘graduates’ was met, by simply counting ‘raw’ numbers of trainees rather than training hours, achievement of the desired ratio between training modalities was seen as a failure when it seemed to demonstrate that 97% of training had been delivered in the field (commune-based); 1% through enterprise placements and 2% in PTC (or centre) based training. Alternatively, by looking at the ratio between each of the modalities by training hours delivered and by the cost of training, a quite different picture emerges as Figure 27 illustrates.

¹¹⁵ It should be noted that not all Communes applied for the full grant of \$5,000.

¹¹⁶ Appendix 1(a) – op.cit.

¹¹⁷ This performance bonus is called the Performance Incentive Fund (PIF)

Figure 26: Summary of Gross and Performance Incentive Fund (PIF) Revenue by Training Modality in the 7 VSTP Participating PTCs in 2008 in USD

Institute	Training Modality	Gross Revenue/Training Modality	PIF Revenue/Training Modality
Polytechnic Institute of Battambang Province	Community-based Training	\$67,840	\$8,480
	Enterprise-based Placements	\$14,500	\$2,175
	Centre-based Training	\$32,480	\$3,988
		\$114,820	\$14,643
Polytechnic Institute of Kampot Province	Community-based Training	\$83,390	\$10,424
	Enterprise-based Placements	\$26,400	\$3,300
	Centre-based Training	\$17,880	\$2,235
		\$127,670	\$15,959
Kampong Chhnang PTC	Community-based Training	\$75,553	\$9,444
	Enterprise-based Placements	\$8,692	\$1,087
	Centre-based Training	\$19,402	\$2,425
		\$103,647	\$12,956
Siem Reap PTC	Community-based Training	\$103,654	\$12,957
	Enterprise-based Placements	\$24,940	\$3,118
	Centre-based Training	\$27,391	\$3,424
		\$155,985	\$19,498
Steoung Treng PTC	Community-based Training	\$44,495	\$5,562
	Enterprise-based Placements	\$7,659	\$957
	Centre-based Training	\$1,485	\$186
		\$53,639	\$6,705
Svay Reing PTC	Community-based Training	\$93,270	\$11,659
	Enterprise-based Placements	\$12,240	\$1,530
	Centre-based Training	\$19,960	\$2,495
		\$125,470	\$15,684
Takeo PTC	Community-based Training	\$116,695	\$14,587
	Enterprise-based Placements	\$11,490	\$1,436
	Centre-based Training	\$19,440	\$2,430
		\$147,625	\$18,453

Figure 27: Quantum of VSTP Training by Training Hours and Training Cost by Training Modality

	Training Hours/Training Modality (in Hours)	Training Hours/Training Modality (as % of total hours)	Training Cost/Training Modality (in USD)	Training Cost/Training Modality (as % of total cost)
Battambang				
Commune-based	249,400	58.66%	\$67,840	59.08%
Enterprise Placement	50,228	11.81%	\$14,500	12.63%
Centre-based	125,570	29.53%	\$32,480	28.29%
	425,198	100.00%	\$114,820	100.00%
Kampot				
Commune-based	270,200	57.26%	\$83,390	65.32%
Enterprise Placement	103,942	22.03%	\$26,400	20.68%
Centre-based	97,717	20.71%	\$17,880	14.00%
	471,859	100.00%	\$127,670	100.00%
Kampong Chhang				
Commune-based	223,600	65.75%	\$75,553	72.89%
Enterprise Placement	35,840	10.54%	\$8,692	8.39%
Centre-based	80,640	23.71%	\$19,402	18.72%
	340,080	100.00%	\$103,647	100.00%
Siem Reap				
Commune-based	529,775	66.53%	\$103,654	66.45%
Enterprise Placement	108,480	13.62%	\$24,940	15.99%
Centre-based	158,080	19.85%	\$27,391	17.56%
	796,335	100.00%	\$155,985	100.00%
Steoung Streng				
Commune-based	172,032	77.52%	\$44,495	82.95%
Enterprise Placement	42,273	19.05%	\$7,659	14.28%
Centre-based	7,623	3.43%	\$1,485	2.77%
	221,928	100.00%	\$53,639	100.00%
Svay Rieng				
Commune-based	267,840	66.47%	\$93,270	74.34%
Enterprise Placement	54,054	13.41%	\$12,240	9.76%
Centre-based	81,081	20.12%	\$19,960	15.91%
	402,975	100.00%	\$125,470	100.00%
Takeo				
Commune-based	342,720	70.39%	\$116,695	79.05%
Enterprise Placement	47,817	9.82%	\$11,490	7.78%
Centre-based	96,341	19.79%	\$19,440	13.17%
	486,878	100.00%	\$147,625	100.00%
Total Commune-based	2,055,567	65.35%	\$584,897	70.57%
Total Enterprise Placement	442,634	14.07%	\$105,921	12.78%
Total Centre-based	647,052	20.57%	\$138,038	16.65%
Total	3,145,253	100.00%	\$828,856	100.00%

393. As can be seen from Figure 27, by using training hours as the unit measure (in fact a far more realistic measure in comparison to using numbers of trainees), commune based training on average was only slightly in excess of the 60% originally targeted. In relation to enterprise based placements and centre-based training, targets were more clearly missed with training hours delivered by the latter modality almost double the desired target and the former less than half the hours originally desired. Nevertheless, whether calculated using training hours as the measure or even training cost, the ratio between the three delivery modes is not nearly as skewed as the simple trainee count would suggest.

394. Of course, the answer as to whether this matters greatly comes down to considerations of effectiveness and accountability. There can be little doubt that while organising field-based training was relatively the easiest way by which PTCs and communes could most *efficiently* achieve their target of training a minimum 222 per commune, actual observation of some of the training suggested that it was probably the least *effective* of the three modalities. As can be seen from the tables in Appendix 9(a), group sizes in commune based training were extremely large and averaged between 30 and 40 persons per course, often averaging over 70 persons (51 courses), and even over 100 persons on 8 occasions. In terms of duration, commune based training courses were also the shortest and most intensive.

Figure 28: Average Cost of VSTP Training Courses by Province/PTC & Training Delivery Modality & Generic Course Type (2008) in USD

	Agriculture	Technical Trades	Garments	Handicrafts & Jewellery	Hairdressing & Beauty	Computing	Tourism & Hospitality	Business	Misc.
Battambang									
Community based	\$396	\$400							\$395
Enterprise based			\$300		\$200				
Centre based		\$460	\$200			\$460			
Kampot									
Community based	\$430								
Enterprise based		\$255	\$238		\$150				
Centre based	\$245	\$226	\$189			\$73			
Kampong Chhnang									
Community based	\$487								
Enterprise based		\$183	\$240		\$302	\$216			
Centre based		\$247	\$244		\$233	\$275			
Siem Riep									
Community based	\$578								
Enterprise based		\$332	\$290	\$700	\$194				
Centre based		\$436	\$322			\$356	\$251		
Steoung Treng									
Community based	\$701								
Enterprise based		\$167	\$325		\$178				\$222
Centre based		\$248							
Svay Reing									
Community based	\$499								
Enterprise based		\$180	\$180			\$80			
Centre based		\$180	\$180			\$80			
Takeo									
Community based	\$494								
Enterprise based		\$258	\$213		\$260				
Centre based	\$150	\$226	\$183			\$189			

395. In contrast, enterprise based placements by their nature were far more difficult to organise; were, with very few exceptions, usually arranged for an average of one to two persons per enterprise; were of substantially longer duration (usually 2-4 months); and with training delivered on the basis of one trainer to one or two trainees, undoubtedly were more effective. Centre-based training fell somewhere in between the other two. In a large number of cases, centre-based training seems to have been delivered by adding one or two VSTP funded trainees to an existing PTC short-course on the assumption that it is highly unlikely that any of the seven PTCs would have designed and delivered a special course for only one to two trainees (the average per course area).

396. Operating on the basis of the somewhat misleading data that purported to show the highly skewed ratio of 97%:1%:2%, at the beginning of 2009 the grant per commune has been increased from USD\$5,000 to USD\$6,300 for five of the seven pilot provinces, and to USD\$7,000 for Battambang and Kampot. The rationale for this increase was that it was to be used to fund additional enterprise-based placements in each commune for the calendar year in order to go some way to rectifying the imbalance in the desired ratio between training modalities. Nonetheless, as Figure 28 demonstrates, with an average cost of almost USD\$250 per enterprise placement across all technical course types the additional USD\$2,000 per commune received by Battambang and Kampot would have only purchased 8 more enterprise placements and 5 in the remaining 7 provinces, assuming they were able to be identified. The impact of these additional enterprise placements if calculated by training hour¹¹⁸ as per Figure 26 would have only marginally improved the real ratio between the three modalities. It would have added a total of 145,530 training hours to the enterprise placement modality thereby changing the ratio between each of the modalities from approximately 65%:14%:21% to approximately 62%:18%:20% for commune-based, enterprise-based, and centre-based training respectively.

397. If genuine concerns with the effectiveness of VSTP and its relative value for money are to be addressed prior to an expansion of the program under a new ADB loan, then serious consideration needs to be given to formulating some additional conditions both financial and otherwise for at least the 7 PTCs involved in the first pilot.

398. VSTP and NTF, which will be discussed in more detail later, were both developed in response to a TVET policy framework that has prevailed for the last decade and focused strongly on poverty alleviation through what has been subsequently labelled Track 1 training to improve livelihood and employment outcomes in rural areas. This TVET policy was and still is entirely consistent with the RGC's current National Strategic Development Plan (NSDP) 2006-2010 and was detailed in the 2006 National TVET Development Plan (NTDP) and its 2007 update. A revamped NTF and VSTP were the largest (but not the only) concrete manifestations of a financial commitment to that policy and when details are reviewed of how each funding facility was implemented in the years 2006-2008, it explains the fact that in each year an average of 75%¹¹⁹ of all training conducted across all MOLVT institutions (both long- and short-course institutions) was agriculture sector focused, with only 5%-8% focused on the manufacturing (overwhelmingly garment manufacture) and service sectors. On that basis alone, VSTP and NTF must be considered extremely successful irrespective of concerns with the effectiveness of that training.

399. The other aspect these figures highlight is the significant impact that can be achieved in what is a low expenditure public sector environment with what are, in absolute dollar terms, relatively small financing facilities.

400. Importantly, the 2008 update to the NTDP signalled for the first time that while "...there will be proposals to add to our growing strength in community based skills development" (Track 1), there will also be "a new emphasis on institution based TVET" (Track 2)¹²⁰. This has been interpreted as an increasing focus on formal TVET, particularly certificate levels 2 and 3 and level 4 (diploma), to support more diversified national development. Notwithstanding, there has of yet been no significant commitment of government funds in the shape of specific financing facilities like VSTP or NTF either to "kick-start" or provide longer term stable funding to meet this new goal.

¹¹⁸ Using an average of duration of 693 hours (4 calendar months) per enterprise placement and an average of 30 communes per province

¹¹⁹ In fact, looked at year by year, the figures are even more dramatic – with agriculture training showing an increase from 65% of all training in 2006 to 99% in 2007, before settling at 74% in 2008

¹²⁰ The National TVET Development Plan – 2008 Update, Directorate General of TVET for the National Training Board, December 2007, p.2

401. Indeed, in the past month the RGC has announced the creation of an important new fund to assist Cambodian workers retrenched as a result of the current global financial downturn. Funds worth USD\$8 million will be managed by DGT VET to spend on providing retraining for retrenched workers in anticipation of an eventual upturn in the economy. Although the World Bank has indicated to the RGC that it believes a significant proportion of those funds should be expended on retraining provision in the major urban areas (and by implication, on training in non-agricultural fields), the RGC is of the belief that most retrenched workers will return to their home provinces and try to return to subsistence agriculture. It therefore believes that the funds will be better utilised in supporting further agriculture based training and, to this end, will presumably employ its existing network of PTCs to deliver that training through short-courses similar to those already being delivered through VSTP and NTF.

402. In this situation of substantially increased short-course funding, a strong case could be made for introducing some new conditions to an expanded VSTP (and/or NTF) that redirected a proportion (and arguably a sizeable proportion) of those funds towards the delivery of formal certificate and possibly diploma level programs in non-agricultural fields to address the policy direction of the NTDP 2008 update. In effect, this would mean less commune or field-based training delivery but increased enterprise placements and where feasible, more centre-based training (or a structured mix of both). If resistance was experienced from those PTCs due to participate for the first time in VSTP (assuming it will be extended and expanded under the new loan) then at least consideration should be given to imposing this condition on those funds earmarked for the seven PTCs/institutes that have been involved in VSTP's implementation from the outset.

403. Increased formal vocational education and training programming in non-agricultural areas would in effect mean that most would have to be delivered and assessed under enterprise based attachments (in some cases supported by a theory component delivered within the PTC)¹²¹. A new target ratio between the three training delivery modalities – say 40%:30%:30% should be set for at least the initial seven piloting PTCs, with new PTC entrants to VSTP having to meet a similar ratio but only after an agreed period of time.

404. The VSTP pilot has demonstrated that enterprise-based attachments are relatively more difficult to organise than field or centre-based training, hence some dispensation or compensation would need to be negotiated. This could take the form of an overall reduction in the target numbers of trainees per commune.

405. Performance Incentive Fund (PIF) bonuses could also be adjusted over time. For example, 10% of training cost might remain as the minimum bonus for meeting minimum performance criteria (i.e. trainee output) but an additional bonus or remuneration could be paid where a PTC has successfully placed a graduate of VSTP training in full time employment. And where a graduate, so placed, remained in full time employment for a defined period of time, a further bonus could be paid to the relevant PTC. The details of these incentives would have to be developed carefully during ADB loan implementation but in effect they should be designed and monitored to ensure to the extent possible that:

- (i) the importance of formal technical training to the development of a more diversified Cambodian economy is adequately recognised by rectifying the current imbalance within short course provision i.e. the comparative overshadowing of formal certificate level skill training for service delivery and industrial production by informal non-certified skill training for agricultural production. The imbalance represents a significant structural issue within the TVET system at present that is undermining its credibility with the emerging industrial and service sectors in the national economy;

¹²¹ Simply in recognition of the current lack of industry relevant equipment and facilities in most PTCs

- (ii) PTCs are encouraged to undertake the new role of provincial employment centres or agencies ascribed to them under latest TVET policy. A National Employment Agency (NEA) is likely to be far more successful in meeting national performance goals if it can be established on a foundation of regionally networked employment centres operating from PTCs; and,
- (iii) there is a significant re-focusing in the delivery of all training under VSTP on its *effectiveness* to counterbalance the emphasis on measures of *efficiency* – i.e. all funds are expended and properly accounted for and 222 participants complete training in each of 210 communes. In a scheme with the objective of improved livelihood and employment outcomes for young people effectiveness must be defined and measured by the development of appropriate indicators and the setting of realistic target outcomes in these two areas. This will also have to mean more attention is devoted under an expanded VSTP to the monitoring and evaluation (M&E) role undertaken by PTCs in the pilot scheme and for which they were remunerated.

406. There can be little doubt though that the risk in this strategy is that it could undermine one of the key features of VSTP – that training demand and the subsequent response are determined principally by Communes assisted by community development specialists (CDSs) on the basis that they are in the best position to understand local needs. Nonetheless, it is a risk that can be mitigated through appropriate consultation and can be at least partially offset by the availability of new funds for training in agricultural production for workers made redundant by the economic downturn.

407. It is unfortunate that the foregoing discussion of the *effectiveness* of VSTP training may have tended to downplay its *efficiency*. Funds disbursement under VSTP has set a new benchmark within MOLVT in terms of facility and timeliness and in these two important respects every effort should be made to adopt it as a model for all future program budgeting. Nonetheless, Figure 29 demonstrates that there is a need to establish benchmarks for training costs by training modality and study area. Costs have clearly varied significantly between provinces and providers for ostensibly the same courses delivered utilising the same delivery mode. These differentials only become obvious when all training delivery is reduced to the basic unit of a trainee training hour, calculations that eventually must become the basis for more effective PTC monitoring and evaluation of their respective programs.

Figure 29: VSTP Training Courses - Average Unit Cost per Trainee per Training Hour by Province/PTC & Training Delivery Mode & Generic Course Type (2008) in USD

	Agriculture	Technical Trades	Garments	Handicrafts & Jewellery	Hairdressing & Beauty	Computing	Tourism & Hospitality	Business	Misc.
Battambang									
Community based	\$0.31	\$0.29							\$0.27
Enterprise based			\$0.35		\$0.23				
Centre based		\$0.27	\$0.23			\$0.27			
Kampot									
Community based	\$0.31								
Enterprise based		\$0.31	\$0.16		\$0.19				
Centre based	\$0.19	\$0.21	\$0.18			\$0.10			
Kampong Chhnang									
Community based	\$0.38								
Enterprise based		\$0.25	\$0.19		\$0.31	\$0.19			
Centre based		\$0.25	\$0.23		\$0.23	\$0.23			
Siem Riep									
Community based	\$0.30								
Enterprise based		\$0.40	\$0.19	\$0.07	\$0.23				
Centre based		\$0.38	\$0.27			\$0.07	\$0.08		
Steoung Treng									
Community based	\$0.27								
Enterprise based		\$0.22	\$0.16		\$0.19				\$0.32
Centre based		\$0.19							
Svay Reing									
Community based	\$0.33								
Enterprise based		\$0.26	\$0.26			\$0.12			
Centre based		\$0.26	\$0.26			\$0.12			
Takeo									
Community based	\$0.34								
Enterprise based		\$0.31	\$0.15		\$0.08				
Centre based	\$0.13	\$0.26	\$0.11			\$0.31			
Averages									
Community based	\$0.32								
Enterprise based		\$0.29	\$0.21		\$0.20	\$0.15			
Centre based	\$0.16	\$0.26	\$0.21			\$0.18			

408. For example, training in agricultural production under VSTP delivered in 2008 through the field- or commune-based modality was able to be provided at a cost of US\$0.27 per trainee per training hour in one province but at the other end of the scale, it cost US\$0.38 for the same program delivered over the same timeframe. At first glance this differential may seem insignificant but the dearer program represents a premium of 41 percent (USD\$0.11) over the cheaper of the two. Translated into dollars for the average total number of trainee training hours (approximately 294,000¹²²) delivered in each province in agricultural production using the field based modality it equates to a premium of almost USD\$32,500.

409. In part, this differential might be explained by the fact that the cheaper of the two programs delivered to the greatest number of trainees (while the dearest delivered to the fewest) –in effect reducing the unit cost of trainee training hours in the first case and increasing it in the second. However, even if we assume this to be true and there is little empirical evidence to support this assertion, when the two extremes are removed we still find a differential of USD\$0.04 per trainee training hour between the next highest and lowest cost programs. Using the same average total number of trainee training hours, this still equates to a significant premium of approximately USD\$11,700 representing approximately 60% of the highest PTC Performance Incentive bonus paid across the entire VSTP in 2008.

410. The differentials also persist in enterprise-based placements and centre-based training where it is known that the numbers in and duration of programs in specific study fields in both training modalities across all provinces and communes were extremely similar. Thus no adequate explanation can be constructed for why in one province the average cost of a trainee training hour in an enterprise based placement in garment production should be 43% more expensive than an average trainee training hour in another. Similarly, why do trainee training hours in a centre-based program in computing in two provinces cost between USD\$0.07 and USD\$0.12, yet in another two provinces the same program delivered over the same duration to the same numbers costs between USD\$0.27 and USD\$0.31 per trainee training hour?

411. With performance targets under the VSTP pilot set in terms of a minimum number of trainees per Commune to be trained, and with a choice of three different training modalities to be utilised for delivery (but with the same budgetary allocation for each Commune), program pricing seems to have been driven solely by the available budget. In more simple terms, it has gravitated to the lowest common denominator – the required number of trained trainees. In other words, the overall cost of training has been determined to be USD\$5,000 or thereabouts - the budget each Commune was provided, as long as the minimum number of trained trainees was attained. In most cases the most *efficient* way to achieve this quantum was through commune-based training delivered to groups in many cases so large that the *effectiveness* of training must be questionable. There was no hidden profit motive behind this - rather it was being driven purely by the *efficiency* motive at the potential expense of *effectiveness*.

412. The solution for an expanded VSTP lies in setting target benchmarks that encourage providers to address issues of effectiveness – i.e. by reducing target numbers of trainees by training modality, specifically in community-based training (we know that training delivered in groups exceeding 20-25 may be efficient use of resources but is outweighed by an exponential drop in impact); by increasing the duration of some programs (we know that time is a variable that has a major impact on the success of skill transfer); and, by utilising wherever possible more individualised approaches to training delivery (we know that the opportunity for each trainee to practise a skill and to receive individualised feedback on performance enhances the success of skill acquisition).

¹²² This data can be derived from Appendix 1(a) – VSTP (Voucher System) – Scope of Implementation, Costs and Revenues in 2008

413. Furthermore, until some better cost benchmarks are developed, a chart of benchmark costs which reflect the current average cost per trainee training hour by generic study area and by training modality as per Figure 14 should be developed and adopted by both VSTP and NTF. To recognise the need for some flexibility in response to the specific circumstances in each province (and as an adjunct to the reservations cited in paragraph 74 as to how they may have been arrived at), these unit training costs might well be expressed as a range around the current average, with a final figure negotiated and contractually fixed for each Commune's budget when they submit their annual training plan.

2. National Training Fund

414. With virtually all NTF programming in 2008 focused on agricultural production as per the plans put forward in the 23 provinces and the Municipality of Phnom Penh¹²³, the calculated budget of USD\$0.17 per trainee training hour is very close to the average cost of a centre-delivered trainee training hour in the same study area under VSTP (USD\$0.16). Although with agricultural production training more effectively delivered at least partially in the field, it would seem that benchmark costs for this NTF study field need to be increased to approximate the average USD\$0.32 unit cost of commune-based delivery under VSTP. Moreover, at the pre-current rate of USD\$0.23 per trainee training hour for NTF technical training they would need to be increased by 15% to 26% if the focus of NTF is to be turned more to formal technical training as per the thrust of the 2008 NTDP update, using 2008 VSTP unit cost calculations as a guide. Technical training under VSTP has been costing in the vicinity of USD\$0.26 to USD\$0.29 per trainee training hour for centre-based and enterprise based training respectively.

417. At the moment, all NTF monies are tendered but there is no formal documentation required that demonstrates that there has been any attempt by a tendering organisation to determine training needs or demand as there is under VSTP. In general the only requirement in this regard is that proposed training programs are aligned to 'sector' goals. The availability and/or accessibility of sector goal statements and how critically the so-called alignment between these goals and proposed programs is tested can only be surmised.

418. As can be seen from Appendix 9(b) all providers in 2008 were public sector training institutions or NGOs. According to the implementing rules and regulations under which NTF operates legally incorporated private sector organisations, whether enterprises or training providers, are not specifically excluded from tendering for NTF financing but the requirements they must meet to participate could be fairly described as onerous. In so saying, there is no suggestion there is any policy, implicit or otherwise to prevent them from tendering – rather that they are less well positioned to do so in comparison to others who have been successful in securing NTF financing. This seems to be borne out by evidence that in the years that NTF has been operating, less than 5% of successful tenders have been submitted by private sector organisations, whether training providers or not.

419. All tenderers for NTF must be registered as training providers with either MOLVT or, it is understood, MOEYS. Moreover, they must have been operating as a training provider for a minimum of 3 years to be eligible. Public providers are not required to register as a training provider; in fact there is no provision for them to do so for whatever purpose given their provenance. In effect, this requirement precludes all private sector organisations other than private training providers because their primary business registration is other than as a training provider. Indeed, an example has been cited of a private sector organisation registered as a Human Resource Development (HRD) company being precluded on this basis. The extent of the ramifications of this preclusion need to be appreciated. If the same provisions applied to eligibility for VSTP funding, then most, if not all, enterprises offering enterprise-based training under VSTP would be ineligible to participate. They are simply not registered as training providers.

¹²³ See Appendix 1(b) – National Training Fund – Scope of Implementation and Planned Expenditure in 2008

420. Nevertheless, some private training providers are registered with either MOLVT or with MOEYS but it is understood that large numbers are not. The reason for this appears to be simply that the registration process of MOLVT is neither well-known nor particularly accessible. In addition, MOLVT registration does not appear to be a strictly enforced requirement as evidenced by the fact that there is no clear set of sanctions for non-registration, nor does it seem to offer any opportunity for registered private providers to differentiate themselves in the private training market from non-registrants by way of MOLVT endorsement. In the absence of clear benefits and/or incentives to do so, many training providers decline to pursue registration.

421. Those that do, however, must then submit to what some have described as a well-intentioned but often perfunctory, relatively unstructured, and sometimes arbitrary audit process. It is understood that the audit to discover in effect the 'fitness' of a training provider to deliver NTF financed programs can take up to a month or more to organise and another month or so after that to be informed of the result. If certified as up to the required standard, a training provider seeking to participate in NTF for the first time, whether public, private or IO/NGO will usually be approved to deliver one or two courses only until such time as they are 'proven'. How this 'proving' is assessed is not understood. All NTF funds must be acquitted but otherwise there appears to be no qualitative evaluation of the offerings of any NTF providers, experienced, inexperienced, public or private.

422. Systems to facilitate efficient financial transfers within NTF have also been found wanting with the result that many government institutions which have received their pre-determined advance¹²⁴ to mobilise the program(s), albeit sometimes late, have had to wait as long as the following year for the balance. As has been indicated before, it is unreasonable to blame this situation solely on central MOLVT; often it is the case that providers themselves are either incapable of understanding the requirements for release of the outstanding tranche of funds or simply overlook or ignore the need for compliance. That said however, NTF financial transfers within MOLVT are reported as moving significantly more slowly than corresponding transfers within VSTP.

423. The impact of this tardiness in NTF financial transfers can be profound. It certainly hurts public providers, in particular the teachers who will often wait months to receive additional allowances payable to them over and above their base salaries but nonetheless on which they depend for their basic day to day livelihood. In the case of private training providers and local NGOs, it has the capacity to bankrupt them depending on their level of engagement with the Fund.

424. Some private providers also report the lack of publicity and promotion accompanying NTF as a factor in their lack of interest and non-participation. While in 2008 invitations to tender were posted at central MOLVT and in provincial offices, it is reported that only one newspaper advertisement was run in one issue of "Koh Santepheap", a local newspaper. Importantly, in interviews with private providers, remuneration paid under NTF to providers for training provision was not generally indicated as an impediment to participation in the scheme although this may be a result of the quite drastic cuts many have already recently made to their own fee structures.

425. Clearly, there are a number of challenges facing NTF over the forthcoming three to five years not least its relevance to a more diversified industrial development agenda and corresponding new policy directions outlined in the 2008 update of the NTDP. These issues have been referred to frequently in other parts of this Section on the financing of TVET. NTF is certainly in need of revitalisation but perhaps more importantly, it is capable of being

¹²⁴ This advance is usually around 50% of the specific program budget

revitalised. The private sector, perhaps more so enterprises and to a slightly lesser extent training providers, are pivotal to that revitalisation. However, there are a number of explicit constraints to effective participation by the private sector and it would seem that now is an appropriate time to revamp the funding scheme. With the world-wide economic downturn and the subsequent industrial slow down in Cambodia, enterprises have potentially more time and capacity to engage with government in a partnership to address the relevant skill needs of the country. At the same time may be more willing to do so, if the terms of that engagement are made more amenable to them, and if strategic incentives are developed. On that basis there is a compelling case to investigate in more detail how the constraints outlined above can be mitigated, if not completely removed. That can be achieved, at least in part, by aligning many of the key features of NTF with those that have proven both efficient and effective under VSTP.

G. Public Private Partnerships (PPPs) and Private Contributions to Training

1. Skill Development Funds – International Trends, Experiences and Learning

426. Skill Development Funds have been established in a number of both developed and developing countries, mainly in the past 20 to 25 years. The details of their operation vary considerably from country to country, and their success has largely depended on the degree to which they have been able to continue to meet specific but often changing economic policies and strategies of the countries that established them¹²⁵ as their governments attempt to respond to the demands of the globalised economy. While all have some common fundamental features, those that have been carefully designed to meet the very specific skill formation and labour market requirements of their country of origin have been overall the most successful, but even then there are cases where they have been phased out completely over time. Conversely, where schemes have been basically picked up from one economy and transplanted to another, even when the respective development indices of each roughly equate, results have generally been more disappointing. Thirdly, there are a few cases where training funds have been designed to meet the unique circumstances and requirements of particular economies yet still have proved unsuccessful. For Cambodia, all these cases can be instructive, and strategic utilisation of funds under the proposed loan to conduct a relatively detailed study of some selected regional examples would represent a sound investment.

427. Generally, the introduction of fees and/or the use of general or earmarked taxation, i.e. a training levy to support the establishment of a training fund, represent various possible market or state instruments (or a collaboration of both) to diversify resources for TVET. The purpose is usually to shift financing towards a more market-driven pattern and/or to change workers' and employers' traditional attitudes to TVET financing at times when shrinking public budgets are forcing a the need for rethinking and adjustment. Interestingly, in Cambodia this situation does not really prevail. As indicated earlier, although the RGC has been to date a relatively low spending, low direct-taxing government, the DGTVET budget has increased at an average rate of around 45% over the past 5 years. Moreover, with the exception of publicly financed training directed at improving the livelihood and employment outcomes of the rural poor (Track 1), the notion that individuals will be required to make a relatively substantial financial contribution through fees to meet their skill development needs, seems to meet with reasonable acceptance.

¹²⁵ For example, the shift over time that has occurred in many national economies, both developed and developing, from state intervention and regulation of markets to a much greater "laissez-faire" approach of allowing "free market forces" to prevail.

428. In most examples, the Training Fund is incorporated within the ambit of a National Training Board (such as that which Cambodia has already established) or an organisation with similar nomenclature. The Board not only plays a central role in the allocation of resources, raised to varying degrees by a payroll tax, but it can also constitute a useful interface between the different enterprises and the training system. Additionally, it can also play a key role in correcting market imbalances in training access.

429. The Training Fund usually performs three functions – banking, mutual funding and insurance. As in a bank, enterprises can withdraw from their account funds required to cover their training expenditures: this constitutes the basic function of Training Funds. The redistributive function, present in many systems, made possible by the constitution of mutual funds, contributes towards tackling the needs of disadvantaged workers, enterprises or regions/provinces. Finally, enterprises facing sudden technological change may be able to benefit from the Funds' accumulated savings to finance emergency training programs. To this extent, the payroll tax can represent a form of mandatory savings account, which can offer additional protection to enterprises requiring greater training-related financial support at certain stages of their development.

430. Over and above administrative and financial aspects, the shaping of National Training Funds as indicated above is the result of a complex mixture of economic, social and political forces. A major difference can be distinguished between institutions of a purely financial nature and those also involved in training provision, while another distinction can be made between mandatory but privately managed Funds and publicly managed, earmarked tax funded bodies such as those in Korea and Singapore. However, while the precise nature of these Funds varies, they undoubtedly perform a decisive role in allocating resources for training. Nevertheless, the extent to which they contribute to the effectiveness and efficiency of training provision remains less clear.

431. In those instances where the Fund's activities go beyond financing training and sometimes training provision, such as in Singapore, it can be argued that their effectiveness increases substantially. In Singapore, the Industrial and Vocational Training Board (IVTB), which administers the training fund, performs a range of other services such as labour market analysis, skill certification, accreditation or registration of private training providers, and provision of advisory services to enterprises. There can be little doubt that a formal system for the recognition and certification of skills contributes markedly to the availability of relevant and quality information concerning the labour market. Similarly, supporting and monitoring the establishment of a market for training introduces demand-driven mechanisms for training provision. Some of these functions are implemented on a cost-recovery basis and have thus contributed to broadening the financial resources of training institutions; others are done on a cost-sharing basis thus contributing to the building of closer relationships between the Funds, providers and enterprises. These closer relationships can over time often develop into fully fledged partnerships, thereby enhancing the principal of investing in human capital formation and emphasising its importance to productive national development.

432. However, partnerships developed too early and between actors perceived by each other as 'unequal' or less than committed present some very real risks - for example, in government established Funds/Boards where the private sector may perceive government financial management or public sector training provision as unsatisfactory; where, conversely, government perceives the private sector as perhaps equivocal with regard to its commitment to national development goals and strategies; or where both government and the private sector are distrusting of or feel threatened by perceived agendas of organised labour.

433. Successful schemes for financing national training systems are as dependent on a variety of factors such as the country's administrative 'culture' and current circumstances, as the training system itself is a product of factors such as its historical and cultural context. Hence the appropriate mix of instruments will not and should not be the same at all times and all places. In seeking to analyse the feasibility of establishing a National Training Fund based on a levy-grant system, world-wide experience suggests the following key variables need to be examined carefully and weighed appropriately.

434. *The structure and size of the economy.* The extent to which the State can share the cost of training with other partners is directly linked to the structure of the economy, its size and diversity. If the possibilities of introducing and operating a payroll tax funded system are high in middle-income and high-income countries, whether or not desirable, it is certainly more problematic in a low-income economy where systems for direct tax collections can be underdeveloped, and employment in the formal sector is considerably less than that in the informal economy. Similarly, where the formal sector is dominated by one or two industries, such as in Cambodia with the garment and tourism/hospitality industries, an across-the-board training levy-grant system results in either:

- (i) cross subsidisation of emerging sectors by established industry sectors and the obvious risks that implies for long term compliance by the established sectors; or alternatively,
- (ii) a very skewed scheme that has little to offer in terms of its potential to assist new industrial development.

435. It must be underlined that the pay-roll-tax system is tailored to address the needs of a modern, diversified economy.

436. *Institutional capacity to enforce, manage and control the system.* In order to be effective, diversification of TVET financing policies and strategies must benefit from a strong institutional framework. This is especially the case for payroll tax that requires a reliable administrative machinery to ensure that tax recovery is effective. Payroll taxes are usually collected by the Income Tax Department of the Ministry of Finance, together with other company taxes, or by the national insurance scheme, which already raises social contributions. In both cases, a sound institutional capacity to collect an additional tax is required. In the Cambodian situation, not enough information has been able to be gathered under the PPTA to make comment on the capacity of the RGC to collect direct taxes but the WB statistics cited earlier which show that direct taxes on income, corporate profits and capital gains constitute only 13.6% of the total tax base may be instructive in this regard.

437. The performance of a Training Fund also depends in part on its administrative cost. The experiences of many countries have indicated that the operation of a tax rebate or reimbursement schemes requires extensive processing for grant or exemption applications. Often, malfunctioning bureaucracy leads to delayed payment and to a loss of confidence in the system. Moreover, in the case of Namibia, which decided in the early 2000s not to proceed with the full design of a national levy-grant system to fund training, a feasibility study determined that the cost of collecting the levy would have been only marginally less than the funds it estimated it would collect.

438. In reality though, the true administrative cost is practically never measured by countries. Hence, costs incurred by collecting taxes are not accounted for, the job being done by the Ministry of Finance or the national insurance or pension scheme, if it exists. Depending on the magnitude of economies of scale, the average cost would be relatively lower for large systems, given the number of contributing enterprises. In smaller, low-income countries, lacking strong taxing and regulatory capabilities, a simple financing

system would minimise collection, record-keeping, pay-out and other administrative costs. Although there are exceptions to the rule, and there is no established link between legal status and administrative efficiency, experience across many countries has shown that, in certain environments, publicly managed Funds run a higher risk of encouraging wasteful and inefficient spending. Evidence for this is cited from the Office National de Formation Professionnelle (ONFP) in Senegal and from Cote d'Ivoire.¹²⁶

439. *National economic policy.* Under certain circumstances, financing strategies for training may contradict economic policies. Indeed, taxation becomes a sensitive issue in a process of economic liberalisation, when resource allocation is increasingly meant to be driven by market signals. A very good example can be found in Cambodia with the situation of the garment industry, which has been a major beneficiary of generally reduced taxes on exports. The imposition of a new payroll tax to fund training would run counter to an important government liberalisation measure introduced to increase the competitiveness of the most important manufacturing industry in the country.

440. Furthermore, although a great deal of empirical, macro-economic evidence is still lacking with regard to training levies, common sense would suggest that high payroll taxes mean fewer jobs. In many developed and some developing countries, taxes for pensions and other social security benefits and general salary on-costs are already over 25% of gross wages. Adding additional taxation to this already major burden can be a decided disincentive to employment creation. Indeed, in many countries, it is argued that the growth of the informal sector labour force (or the 'black' economy) is due partly to excessive payroll taxes. Hence, evasion not only undermines the sustainability of the Fund but also can affect the structure and competitiveness of the economy, given that the informal sector is generally characterised by lower labour productivity.

441. *The maturity of partners in regard to investment in skills formation.* The performance of any given financing system will very much depend on the attitude to training of individuals and employers. The introduction of a payroll levy may be viewed by employers as just another tax. Making them aware of the associated incentives and of the potential impact of training on labour productivity may call for intensive and long periods of consultation. Introducing fees often requires similar preparatory work in order to convince individuals, and sometimes heads of institutions, that cost-sharing is necessary and, under certain conditions, equitable.

442. Incentive structures for investing in training are based upon the assumption that the willingness and strategy of firms and individuals depend largely on the cost factor. This premise can be challenged. When making investment decisions in training, enterprises may take into account a number of elements, including the business cycle, technological change and also the state of industrial relations. Nevertheless, reforming the financing system can certainly constitute a way of changing the attitude of the various actors, and sometimes vice versa. In some countries, for example South Africa, the development of more sophisticated medium and long-term national perspectives on the critical importance of human resource development strategies for national development¹²⁷ have reflected the evolution of investment strategies in training, much of it probably resulting from the implementation of their national levy-grant financing system for middle level skill formation. Reforming the financing principles can therefore also be part of a proactive long-term government strategy.

¹²⁶ UNDP 1996 – Financing Education – Modalities and Experiences, p.64

¹²⁷ South Africa has developed a comprehensive national human resource development (HRD) strategy and has accorded HRD a senior ministerial portfolio, in addition to the respective Ministries of Education and Labour

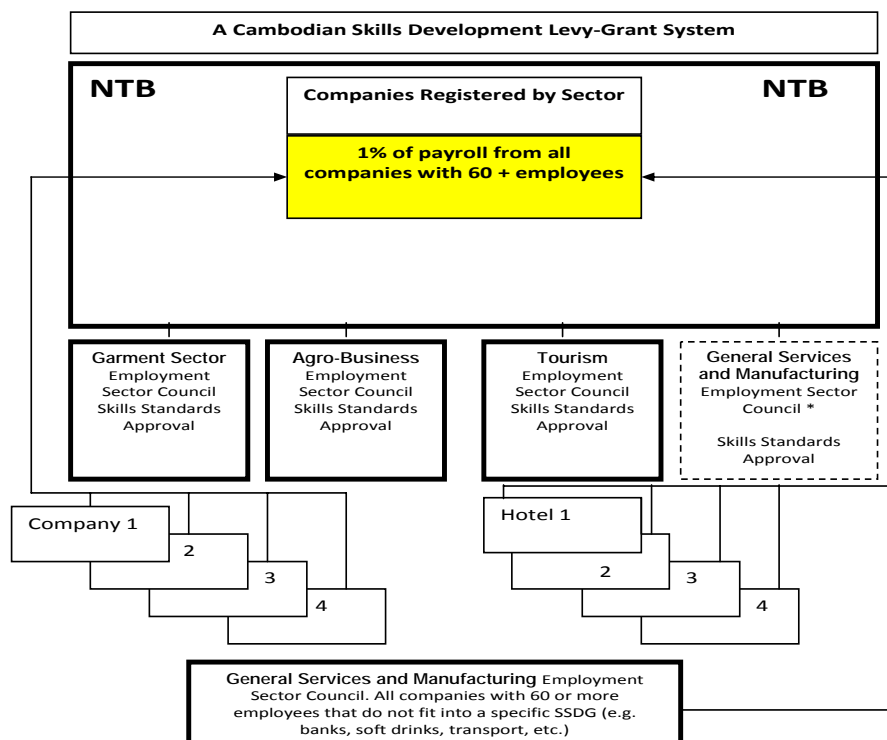
443. *Diversion of resources.* Training Funds, especially when they enjoy substantial financial surpluses, constitute a hidden and exclusive source of income. In some cases, these surpluses often result from the efficiency with which they are collected versus the bureaucracy through which they are disbursed; or in others, it reflects the limited capacity of the training sector to utilise them at a pace approaching, if not commensurate with their accumulation. As such, they represent a tempting prey for a government budget under pressure, especially when they are publicly managed. If jointly managed by the private sector, employers often tend to treat them as private funds. Part of the problem lies in the dualistic nature of payroll taxes. Their fiscal origin justifies considering them as public money. Yet, their earmarked destination and the fact that they are being paid and perhaps partly managed by employers tend to lead to their assimilation as private funds.

444. As the concept of earmarked taxation is inconsistent with orthodox fiscal doctrine and often contradictory to fundamental public finance principles, it is difficult to establish a legitimate and complete separation between payroll-generated income and all other revenue generated to meet the demands of national budgets. The only relevant response may be that, at establishment, laws protecting the Fund's autonomy must be drafted in combination with appropriate implementing rules and regulations that reduce the control of the government's collection apparatus over the resources collected.

2. The Cambodian Situation

445. A proposal for the establishment of a training Levy-Grant system and the creation of a National Skill Development Fund was first put forward in the early 2000s. It is understood that once the first draft was completed and socialisation of the document was being undertaken, feedback suggested that far too great an emphasis had been placed on penalties and sanctions for non-compliance with the requirements of the levy and too little on incentives for industry to embrace its objectives and provisions. Shortly thereafter it was shelved.

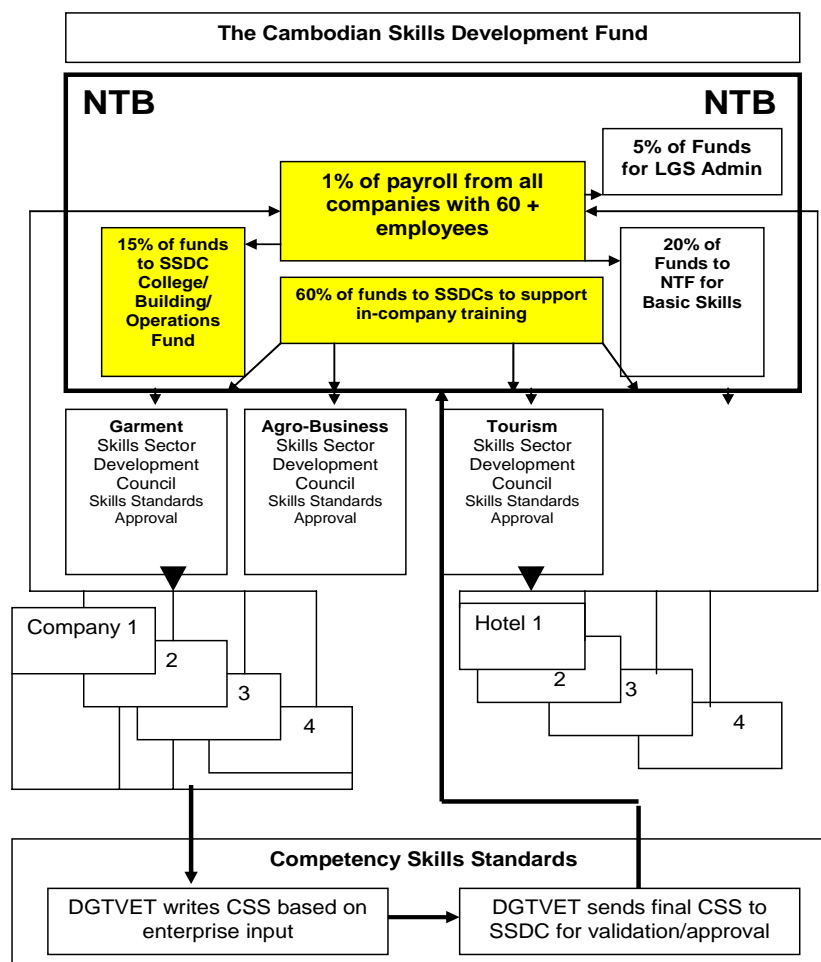
Figure 30: The Proposed Revenue Model for a Cambodian Skills Development Levy-Grant System



* New Employment Sector Councils (ESCs) will be appointed by NTB when there are a sufficient number of companies in a Sector to justify a dedicated SSDG

446. It has been through several iterations since but on each of two known occasions when it has been submitted to the National Training Board for approval it has been vetoed by at least the employer representatives, if not others as well. Certainly, incentives in subsequent drafts have been strengthened and sanctions softened but basically the position of employers in Cambodia has been clear. On the last occasion it was rejected, the point was made strongly that support might be forthcoming in the future if a far greater role was accorded to industry and commerce in the determination of when, how and under what circumstances funds would be disbursed. Put simply, it seemed that from the industry standpoint the price of agreement to participate and comply with the requirements of a levy had to be the ceding of control to the private sector.

Figure 31: The Proposed Funds Disbursement and National Skills Standards Approval Model



447. The most recent draft of the National Skill Development Fund’s supporting legislation can be found in project documentation related to the implementation of the ADB Education Sector Development Project: Phase II held by the MOLVT. Figures 30 and 31 illustrate respectively the proposed operation of the revenue model – the levy component; and the banking/disbursement model – the grant component (National Skill Development Fund).

448. The position of peak employer bodies in Cambodia in response to a proposed levy-grants scheme continues to evolve. In recent discussions with these bodies, for example the Garment Manufacturers' Association of Cambodia (GMAC) and the Cambodian Federation of Employers and Business Associations (CAMFEBA), there is a clear, unequivocal, and cogently argued view that:

- (i) within the private sector there is strong recognition of the need to work together with government and other potential stakeholders (e.g. donors) in a cooperative manner to strengthen middle level skill formation in Cambodia;
- (ii) at this stage, the most appropriate response to the achievement of improved middle level skill formation in the country is on an industry by industry basis that addresses the specific and often unique needs of each industry sector and the economic context within which it operates;
- (iii) these skill development initiatives have generally proved to be most effective when designed, initiated, and managed by the relevant industry sector itself; and,
- (iv) as a consequence of (ii) and (iii), a scheme based on the levying of a comprehensive national skill "tax" to support middle-level skill formation, with its disbursement and application managed by government, is not only for the time being inappropriate but potentially counterproductive.

449. The evidence offered in support of this view is compelling. The major players in Cambodian industry (garments, industrial construction, and hospitality/tourism), who between them dominate the manufacturing, construction, and service sectors of the economy, believe they can easily demonstrate that they currently deliver the majority of employment-relevant vocational training in the country in the required quantity and at a quality and price that government cannot at this stage match. The overwhelming majority of this training is delivered within individual enterprises to the existing workforce and, in its delivery, enterprises already spend significantly more in training provision than a national levy could be expected to raise at the level that has been proposed. Indeed, they strongly espouse the view that in many, if not most economic sectors in the country, public sector providers simply do not have the capacity (training staff, equipment, resources) to deliver the training that industry requires. Moreover, they indicate that with the scale of the current gap, this situation will prevail for some considerable time.

450. While they acknowledge that the government is attempting to address this issue by strengthening the system, there seems to be general agreement among industry respondents that:

- (i) this process of upgrading public training provision will take considerable time which, with the challenges they face (e.g. international competition in the garment industry), they believe cannot afford;
- (ii) strengthening of public providers is primarily a responsibility of government from existing revenue sources, such as the corporate taxes they already pay;
- (iii) a new levy in the form of a "payroll tax" would be counterproductive given recent reductions in government export taxes to assist the country's industrial exporting base to be more cost competitive;
- (iv) the capacity of government to achieve high levels of compliance with the collection of a new specific tax, the assessment and granting of exemptions, and the management and efficient disbursement of those funds is questionable;
- (v) there is a lack of a clear primary objective on the part of government for instituting a levy to support a National Training Fund. Is it principally to promote enterprise-based training; to strengthen public provision; to influence

the labour policies of enterprises (e.g. as in Singapore where it is levied on only those salaries of employees below a pre-determined level to encourage employers to upgrade the skills of the least skilled and lowest paid workers); or to assist with regulation of the national labour market;

- (vi) despite the relatively low cost of labour, Cambodia already suffers from the lowest productivity amongst its closest competitors¹²⁸ as well as from a number of other structural challenges such as the cost and unreliability of electricity supply and the state of transportation infrastructure and most importantly;
- (vii) where an industry sector has seen benefit in establishing an institutionalised, across-the-sector approach to training provision, and instituted a levy on itself to finance that provision, it has moved quickly to do so. GMAC is cited as the example but it is understood the construction industry also has operated a voluntary levy system among its major members in the past, if not now.

451. A balanced assessment of the evidence presented, including but not limited to:

- (i) the Cambodian economic context;
- (ii) the decided lack of enthusiasm from Cambodian industry for the introduction of a training levy and the cogent arguments it can mount against its instigation at this time;
- (iii) the current capacity of government to collect, manage and disburse funds; and,
- (iv) the weight of learning and other evidence from similar countries,

would suggest that it is simply not feasible to proceed with the establishment of a national training levy-grant scheme now or in the foreseeable future.

3. Public Private Partnerships – The Garment Manufacturers Association of Cambodia (GMAC)

452. Since late 2007, the Agence Française de Développement (AFD, the French Development Agency) has been in discussions with a number of parties in Cambodia, including the RGC, examining ways by which the Agency might become involved in the vocational training sector through the ‘vehicle’ of a public-private partnership (PPP).

453. Several avenues were explored by the Agency, including:

- (i) the establishment of a National Garment Training Institute (NGTI), supported by GMAC and involving the RGC in the context of a PPP; and,
- (ii) the development of a national vocational training centre for the hotel and tourism industry, based on the model of the Paul Debrule School of Hotel and Tourism (École d’Hôtellerie et de Tourisme Paul Debrule) in Siem Reap¹²⁹.

454. An identification mission was conducted in early 2009 and the resulting Aide Memoire¹³⁰ not only documented a rationale for opting for an NGTI over an intervention in the tourism sector but also presented a number of options for how this might operate in the context of a PPP, including the specific details of each option in terms of the respective contributions of each partner. Intensive discussions have continued since the completion of the identification mission and as of the end of April 2009, it appears that the details of the PPP have now been finalised between all partners and a formal agreement is imminent. Subsequently, an independent legal entity with a public service mission will be established, with GMAC and RGC as co-investors.

¹²⁸ See Table 14 in Section 3

¹²⁹ AFD 2009, Aide Memoire – Pre-identification Mission for the Vocational Training Projects – Cambodia, p.3

¹³⁰ Ibid

455. The agreement between GMAC and RGC defines the respective roles and responsibilities of each party in establishing and operating NGTI and indicates the assets to be provided by each. NGTI will be legally independent and managed by a Board of Directors with membership currently proposed as – four (4) directors nominated as representatives of GMAC; four (4) nominated by the RGC (probably representatives of MOLVT, MOEF, Ministry of Commerce (MOC), and the Council of Ministers (COM)); and two (2) qualified independent directors. The Director of the Institute will be appointed by the Board of Directors and all employees will be hired and remunerated under employment contracts.

456. In reality, the NGTI proposal details the first genuine PPP to be established for the provision of technical vocational education and training in Cambodia¹³¹. In many ways the approach that has been employed to getting this PPP proposal to the stage at which it currently stands with the traction it possesses in both government and the industry sector, demonstrates well the wisdom of government dealing with industry on a sector by sector basis when addressing the issue of private contributions to national skill formation. It stands as a stark alternative to the current status of the proposed national levy-grant scheme. Interestingly, GMAC sees the establishment of NGTI as sufficient reason for its members to be exempted from any mandatory contributions they may be required to make to a levy-grant scheme, if it was eventually to proceed.

457. NGTI has three objectives¹³²:

- (i) *Skills training for access to employment.* Currently demand has been estimated at 160 young people per year. The cost of this training will be met by the trainees themselves, RGC and GMAC. The entry level training will be open to young people who have finished secondary education and completed three years of a Bachelor's Degree. The target occupation for this training will be set at a supervisory assistant level with the aim of localising skilled jobs that are predominantly held by non-Cambodians.
- (ii) *Professional Development.* A 1,160 trainee throughput is expected each year. The cost of this training will be borne by the garment companies.
- (iii) *Advice and Technical Assistance.* This involves additional activities and services that can be offered to GMAC and potentially to its members. There is no current intention to set revenue goals for this aspect of NGTI at least until some assessment of the capacity of the Institute to generate service provision opportunities can be ascertained.

¹³¹ There is no intention to be contentious with this statement. In MOLVT, the National Polytechnic Institute of Cambodia (NPIC) which has been operating for several years now is presented as a PPP and a model for others. In many ways it can be described as a PPP if the fee contribution to the recurrent costs of the Polytechnic are credited as the "private" side of the PPP, however additional private sector contributions to the institution are limited. The other main partners in NPIC are the RGC which provided the land for the institution and contributes to its recurrent budget needs, and the Government of South Korea which provided the funding for its construction. However, in aspects other than its status as a PPP, it is a useful future model for TVET in Cambodia, specifically with regard to its governance. It operates with a degree of autonomy in terms of its control over budgets, staffing and programming that is unique within the network of long course institutes under the umbrella of MOLVT. This autonomy gives it substantial flexibility in the manner in which it can respond to its customers.

¹³² AFD 2009, Aide Memoire, op.cit. p.4

458. The financial arrangements between the parties are understood to be as follows¹³³:

- (i) The cost of the total investment in the PPP has been estimated at around €3.8 million Euros (approx. USD\$5 million) excluding the cost of land which was to be provided by the RGC. The land that has been offered subsequently by the RGC has been determined to be in an unsuitable location and consequently this overall budget may need to increase to cover both the cost of leasing an appropriate site and the provision of secure accommodation for young women recruited from outside of Phnom Penh. This latter need has arisen in recent discussions as a result of concern for the living conditions of young women whom, it must be remembered, comprise the majority of the workforce.
- (ii) The annual operating budget has been estimated at USD\$0.75 million per year and this would be met by –
 - revenue collected from tuition fees paid by trainees. Fees would be set at levels commensurate with those in the training market in Phnom Penh;
 - revenue collected from training services provided to companies;
 - an on-going contribution from RGC to sponsor some trainees – perhaps those with special needs. It is understood this money would come directly from MOEF;
 - an on-going contribution from GMAC
- (iii) The financial commitment from RGC will be a real commitment not an “in-kind” contribution and will not be raised from a specific corporate tax.
- (iv) GMAC will be bound to NGTI under a sub-agreement to provide equipment and services, for which it will receive remuneration from the Institute.
- (v) GMAC’s contribution of about €3 million will be covered by a concessional non-sovereign loan from AFD. *Of critical importance, it will be repaid through a mandatory levy on its members*¹³⁴.

459. While it will need to be monitored and evaluated over time, as it is presently presented it has all the attributes of being a sustainable model for a specific industry aligned, training focused PPP and as such represents a potentially exciting development for the delivery of high quality¹³⁵, industry relevant TVET for the largest manufacturing industry in Cambodia. While care has to be exercised to avoid the immediate temptation simply to transplant the scheme to one of the other major industry sectors in the country, e.g. the construction or the hotel/tourism sectors, a compelling case could be made for commitment of at least some of the proposed ADB loan to at least initiating and supporting a similar consultation process between one of the peak bodies covering these two sectors with a view to providing similar non-sovereign loan financing if the right set of conditions are found to be present.

¹³³ Ibid, pp.7-9

¹³⁴ According to its Articles of Association, GMAC is an organisation of employers which levies on-going, mandatory contributions on its members in order to pay for its activities such as its participation in projects (e.g. the ILO’s Better Factories Cambodia, ILO-BFC), lobbying in the US market, etc. Membership of GMAC is dependent on the timely payment of its dues and levies; and, membership of GMAC is a mandatory requirement for the grant of an export license.

¹³⁵ It is important to note that training will be delivered and assessed according to industry relevant standards by qualified instructors with an appropriate mix of current industry experience and qualifications as well as pedagogical skills

460. According to AFD the context, conditions and timing were deemed to be right because:

- (i) there was already a history of engagement between the Agency and the relevant Cambodian authorities which had resulted in the creation of another PPP providing a social security and workers' compensation scheme for those employed in the garment industry. The creation of this PPP and AFD's involvement could be seen as a logical continuation of its commitment to the sector;
- (ii) the specific proposal met a high priority need of the garment industry and the government as a whole. The garment sector's competitiveness is closely aligned to the qualifications and experience of its production staff and middle management, who are for the most part currently expatriates. The proposal was also consistent with the RGC's policy and plans for partial privatisation of education and training and it addressed structural weaknesses in formal technical training delivered by the public sector;
- (iii) it provided an opportunity for innovation and experimentation, and offered a real alternative model to a government imposed national levy-grant system within the framework of a balanced partnership between the private sector and government authorities; and,
- (iv) the project is characterised by high output and significant socio-economic impact, particularly in relation to improving the extremely low levels of labour productivity in Cambodia¹³⁶.

4. Other Private Contributions to Training

461. Fees still constitute the single largest private contribution to the financing of public TVET provision. As mentioned earlier, they are alleged to account for somewhere between 70 and 90 percent of the recurrent costs of the public training providers where they are levied, in the main the long course institutes. Information on fee levels within public institutions is closely guarded and no information appears to be held centrally within MOLVT, where the view is that fees are a matter for the management of the individual institutions alone.

462. Interviews of private providers indicated that the current economic climate in Cambodia has resulted in substantial reductions in enrolees, particularly from rural areas, apparently the source of the majority of enrolees in at least private providers of technical training, as opposed to computer and language training which constitutes the bulk of private TVET provision in Cambodia. This downturn appears to have begun in late 2008. One large private provider of technical training, the Phnom Penh Polytechnic School (PPPS), reported that in 2008 it had two campuses in Phnom Penh and one each in Battambang and Siem Reap. By the beginning of April this year it had already closed its two provincial campuses and in the two city campuses, which at this time last year were at maximum capacity with 500 students enrolled at each, currently had only around 100 enrolees in each. In line with his competitors, the owner's response has been to cut fees by 50% and to reduce some programming but at the time of interview these actions have apparently had little positive impact. The owner was not sure how much longer the school can continue. It began business in 2002 and in the ensuing six years had trained almost 10,000 students in a range of automotive repair and maintenance programs in six to eight month competency-based certificate level programs.

¹³⁶ AFD 2009, Aide Memoire, op.cit. pp.10-11

463. In terms of actual costs, the current fee prospectus of PPPS places its programs just in excess of similar programs offered in the public sector however public providers have indicated that capital costs – costs of depreciation of their physical assets, e.g. buildings and major equipment are not considered (or for that matter, known) when fee levels are set. With the rounds of fee cutting that have certainly occurred in the private training sector, and have most likely occurred in public institutions, it would seem clear that there is little or no room for public providers to increase private contributions (fees) as a percentage of their total operating costs.

464. Ironically, while fees in private providers persist at their current levels, it would be quite feasible for the government to become a purchaser of training, using PB funds to purchase training for disadvantaged urban and perhaps rural youth in the private institutions. With private providers of technical training already getting the majority of their customers from the rural population, their fees are inclusive of accommodation already, and from what has been observed albeit briefly, the quality of training appears to be superior at the relevant levels to that of public providers. The impact that this might have on the actual and potential customer base of PTCs can only be surmised but notwithstanding, with the overwhelming focus of most PTC training on agricultural production, the effect might be minimal.

VIII. ANALYSIS AND DIRECTIONS FOR DEVELOPMENT

A. Review

465. **Cambodia has an economy in transition** – its modern corporate economy is particularly vulnerable to the current global economic and financial turmoil. And, while its traditional agrarian economy is largely insulated from the downturn, it suffers from low productivity relative to its neighbours and competitors:

- Most labor force participants are employed in the agricultural sector;
- In 2004, 24 percent of labor force participants had either no or only some formal education, and a further 43 percent had not completed primary school;
- Most labor force participants are employed as own account or un-paid family workers;
- Wage employment in the private sector is only a minority form of employment: less than 20 percent;
- There is little detailed information regarding employment in the middle-level occupations (ISCO-08 major occupational groups 3 to 8), for which TVET provides the skills training;
- The modern corporate sector lacks diversity and is relatively very small -- centred on the garment industry, tourism and hospitality and construction, but it has been these sectors that have led the growth in GDP, and non-agricultural employment, over the decade prior to the 2008 downturn; and
- Recovery of economic growth and development in Cambodia to levels achieved prior to 2008 will not occur until the global economy picks up. Cambodia must be ready to take up the opportunities this will bring. The period of downturn is an opportunity to build up its physical and human infrastructure.

466. **The TVET sub-sector should be able to:**

- Contribute to increasing productivity through providing the skills, knowledge and aptitudes to perform existing jobs more effectively;
- Provide the skills, knowledge and aptitudes required to perform more value-adding jobs within the production processes (many of which are currently being filled by foreign workers);
- Provide the skills, knowledge and aptitudes required in the workforces of a wider range of production processes and industries; and
- Provide livelihood training for rural underemployed and displaced factory workers.

467. **The current condition of TVET:**

- The TVET sub-sector is small, although that outside of DGTVET is of unknown size, largely uncoordinated and poorly regulated. The NTB, as the main TVET decision making body, is hampered by a lack of current, appropriate labor market information and effective training management systems. There is inadequate data about training provision outside of the DGTVET
- Training provided by the PTCs, private providers and NGOs, is largely Track 1 training, that is, informal, short-course (less than 10 months' duration). It is rarely subject to formal assessment, accreditation and certification given the absence of operational systems to do so.

- The majority of those completing PTC, VSTP (and NGO) short-courses received training in various aspects of agricultural production that rarely exceeded two weeks duration. Only a very small percentage of this training is in non-agricultural technical and trade skills. Very little of this training prepares for employment but is geared more towards skill upgrading to increase productivity in the rural/agrarian sector. With no system for formal recognition of training achievements, completion fails to provide a pathway to further formal training.
- Anecdotal evidence suggests the majority of private training providers tend to focus on language training, computing and basic business skills.
- The only formal Track 2 training (of 10 months or more in duration) provided is through DGTVET's long-course polytechnics and colleges. There are few private institutes or NGO/IOs offering long-course programs.
- Numbers graduating from these courses are very small. Most students prefer academic courses delivered in Higher Education institutions (HEIs), in spite of the fact that evidence suggests that only about one in ten university and college graduates find employment in their first year after graduation.
- The total core DGTVET output for 2008 – certificate and diplomas (NTQF levels 2 to 4) training in technical and trades skills - was just over one thousand. An output of only one thousand formally trained technical and tradespersons per annum, into a labor force of roughly 7.5 million, would appear to be inadequate, and one that diminishes the capacity of TVET to contribute to either the economic recovery of the country or longer-term national development goals for a more diversified, robust economy.
- There are also significant gaps in provision: in 2008 there were no certificate or diploma level graduates in plumbing, welding and metal fabrication, masonry or carpentry and joinery under DGTVET.
- Large numbers of young people are presumably acquiring technical skills on the job in the informal sector. However, national SME survey assessment, 2008, indicated need for upgrading of the competencies and quality consciousness of skilled labor in the SMEs.
- The CAMFEBA national survey of enterprises, 2008, found that about 77% of employers required skilled workers to have had skills training, most commonly a certificate. However the majority considered that there was a skills gap in the preparation of such workers.
- Apart from the major Phnom Penh institutions there appears to be almost no provision for career guidance and job-finding assistance across the TVET institutions.

468. TVET system management:

- There is a significant lack of current labor market information to guide NTB and DGTVET system planning and decision making. The present Department of Labor Market Information with the DGTVET cannot act as a labor market data collection agency. The establishment of an appropriate LMIS appropriate to the needs and the situation of the department is an urgent priority.
- NTB membership, as originally determined, would appear to under-represent private sector enterprise.
- As a newly established directorate within a newly established ministry, DGTVET personnel require assistance for the development of specialist functions and systems, especially in regard to the supervision and quality monitoring of the TVET institutions and system planning and development.
- There is need for a dedicated specialist Management Information System for DGTVET.

469. **TVET training provision and management:**

- There are serious gaps in the provision of access to DGTVET provision across the country as a whole, and lack of access to women.
- There is a lack of a base for training design, development, implementation and testing (including RPL) because of the continuing lack of national skills standards.
- There is a lack central monitoring for the system as a whole, and a need for central support for TVET EMIS, finance and management.
- There is a current lack of effective, efficient and integrated system services for upgrading the quality of TVET provision: institution management, training curriculum, and the training and regular updating of trainers.
- Each element of the TVET system of provision requires continued support for the system itself to grow in effectiveness.
- Experience in Cambodia shows that a progressive, measured approach to development interventions that heed institutional absorptive capacity while concurrently addressing the immediate priorities and concerns of TVET management, is far more likely to be successful in achieving the longer-term overall system development goals.

470. **Provision of informal and basic level TVET:**

- Significant progress was made under the ADB assisted ESDP II Project in the development of the pilot VSTP as an informal TVET model to deliver basic training to communes and villages in skills through participative community planning and local PTC involvement.
- Lessons learned from the pilot will form the basis for development of a national program with a better balance between agricultural and non-agricultural skills, delivered within the framework of a less formal, enterprise-based apprenticeship supported by appropriate inputs from TVET institutions. Emphasis will be placed on developing systems for formal assessment and certification of training to ensure satisfactory completion can lead to credit for entry at the appropriate level in formal TVET.
- Survey of PTC performance in 2009 showed that one-third were performing effectively; a further third had demonstrated improvement over the previous two years, and with assistance would continue to improve. The remaining third were substantially below minimum acceptable performance level.
- Strengthening in management and responsiveness of the ineffective PTCs will be essential before introduction of any VSTP activities in the concerned provinces.
- Improved training for the Community Development Specialists in each PTC is required.
- Two provinces currently lack a PTC or equivalent training provision. Access for girls in rural areas is constrained by the lack of hostel facilities.

471. **Provision of TVET for middle level skills:**

- Currently, all formal public sector provision of training at the skilled worker-technician level is confined to Phnom Penh, Battambang and Kampot.
- There is no ladderised system for TVET students to advance to skilled worker-technician level training in public sector TVET Institutes, once they have gained basic skills in the PTCs. Moreover, there is an absence of publicly available information on the qualification requirements for technical occupations to permit students to career plan.

- Surveys of the TVET institutes indicated general concern of their directors with teacher skills, in both technical and training skills and knowledge. Very few teachers have had any work exposure to the technical area in which they train.
- Institute directors, particularly in Phnom Penh, reported apparent declines in applicants for technical skills programs. Interestingly, this is not reported by the few private providers delivering technical training.
- With some exceptions, there is in general, a lack of links with enterprises across the TVET institutions as a whole. This applies in institution management, training or work experience, program development, training assessment, trainer upgrading and graduate placement.

472. **System financing:**

- Absence of up-to-date, comprehensive and reliable financial data within MOLVT with regard to major aspects of financial performance of the TVET system is an obstacle to the formulation of well-informed policy, planning and operational decisions by DGTVET senior management.
- Major sources of funding for institutionalized TVET have changed little in the past 16 years -- government recurrent expenditure, international donors, and the private sector. The majority of quantifiable private investments are tuition fees.
- Industry claims to expend very significant amounts on in-company delivered technical and vocational training. While there is no systematic data collection on this matter in DGTVET, anecdotal evidence strongly suggests there is some truth to the assertion.
- Government outlays on TVET for 2009 are approximately USD\$2.52 million, with around USD\$1.2 million earmarked for spending on training programs. Base salary and utility costs are about USD\$1 million. TVET funding since 2005 has increased on average, at about 45% year on year.
- The majority of DGTVET program funding is expended on short-course provision (up to 6 months) directed principally at agriculture. Most of this provision is delivered directly by or under contract to PTCs, utilizing one of two main financing facilities – VSTP (funded through ADB loan funds under ESDP II) and the National Training Fund.
- VST and NTF utilize systems of internal financial transfers that differ from one another, although the differences are narrowing since DGTVET has been selected by MOEF as a pilot site for trialing of Program Budgets (PBs). The efficiency with which cash transfers within VST are effected has contributed significantly to the success of the program, although there are still important improvements which should be designed into any expansion of the scheme.
- Financial transfers and delegations under VST are in part ‘quarantined’ from prevailing RGC financial regulations because of the source of funds and the specific terms of its establishment.
- Internal cash transfer systems under NTF are less efficient, as are similar transfers to “long course” institutes. It would appear that delays in disbursement under NTF and other program funds have been a major contributing factor to DGTVET budget under-spending in the past.
- PB offers real hope for improvement but a great deal more work needs to be done in DGTVET and DGFA on setting specific targets and indicators for rolling trienniums, as well as in systematic data collection against those indicators, continuous monitoring of progress against targets, and in undertaking specific program evaluation.

- The general direction of education and training policy across the entire sector appears to be heading towards privatisation but what this precisely means is open to some interpretation. Its meaning seems to lean more towards privatisation of costs as opposed to that of delivery; nonetheless, there is a robust TVET private provider sector in the country, although mainly delivering computer, business and language training.
- Private contributions to publicly delivered TVET by way of fees are claimed to contribute between 70 and 90 percent of total annual recurrent costs in several long course institutes. Government support through salary support, utility payments and PB provides the balance. However, reliable information on this issue is not available due in major part to the fact that Institutes charging fees and retaining income is officially in contravention of RGC regulations. For the time being this breach is being overlooked.
- In the current economic situation, private providers are reporting significant cuts, up to 50 percent, in their fee schedules to attract students. It is assumed that cuts have also been made by public institutes. In the current climate it seems reasonable to assume there is little room to increase the percentage of private fee contributions in publicly provided TVET.
- There appears to be little likelihood at present of the suggested national levy-grant scheme being implemented as a process for mobilising new financial streams for TVET in the near future.
- A new model of a public private partnership (PPP) has recently been developed for the garment industry with assistance from Agence Française de Développement (AFD). It has substantial appeal to the private sector because it takes a sectoral rather than a comprehensive national approach; it will be managed equally by government and the peak industry body (GMAC) with control in the hands of two independent Directors; and, it involves all members contributing a self-imposed levy set at a level commensurate with the capital loan provided by AFD.
- The PPP will be called the National Garment Training Institute (NGTI). It has considerable potential as a future model for middle-level skill development in a number of other industry sectors critically important to the Cambodian economy such as construction and tourism/hospitality.

B. Analysis of Issues

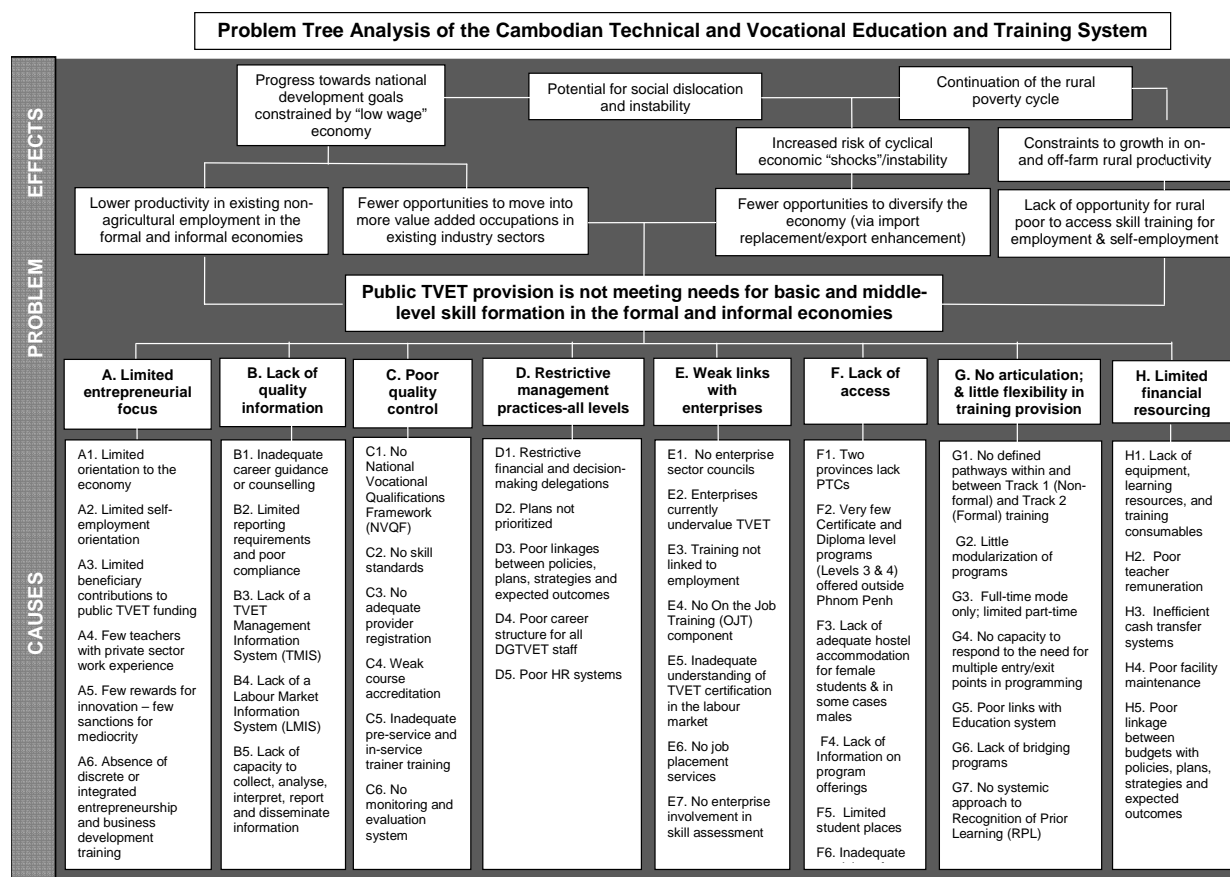
473. Following the PPTA stakeholder Inception Workshop in late March 2009, continuing formal and informal discussions and working sessions have been held with key system stakeholders, both in Phnom Penh and in rural areas. These have resulted in the preliminary identification of a series of system issues summarized above. Analysis of these issues has suggested a core system problem which can be stated as “Public TVET provision is not meeting needs for basic and middle-level skill formation in the formal and informal economies.”

474. This problem is implicitly that underlying the NTB’s current plan for future system development: (i) continuing commitment to poverty alleviation [through mainly rural basic skills programs], and (ii) expansion of access to post-secondary skills training linked to enterprises and to the standards required by enterprises, and (iii) the strengthening of the quality of trainers and curriculum for the upgraded system.¹³⁷

¹³⁷ NTB, Minutes, March 2008, Policy 3

475. Analysis of the identified issues suggest an interconnected set of eight key causes which are the major underlying impediments to effective implementation of the stated NTB planning, and the major causes of the critical central problem. Figure 32 below, *Problem Tree Analysis of the Cambodian TVET System*, shows these causes, the key problem and the major economic and social results of this problem.

Figure 32: Problem Tree Analysis of the Cambodian TVET System



C. Proposed Assistance

475. Figure 33 shows a *Draft Design and Monitoring Framework* for proposed project assistance to address the identified problem as shown in the problem tree analysis. The principal outputs of this proposed assistance would be:

- (1) Improved capacity of DGTNET for planning, management and quality development;
- (2) Improved access to and quality of formal TVET teaching and learning; and
- (3) Enhanced access to and improved quality of non-formal TVET.

476. These three outputs are entirely consistent with the new thrust of the NTDP (2008 Update) and in effect the proposed project provides the means to support its implementation.

Figure 33: Draft Design and Monitoring Framework

Design Summary	Performance Targets/Indicator	Data Sources/ Reporting Mechanisms	Assumptions and Risks
<p>Impact An expanded and employment-ready national middle-level work force in both rural and urban areas</p>	<p>Against a baseline established in 2010 there is evidence of -</p> <ul style="list-style-type: none"> • a minimum 10% increase by year end 2012 in the construction, automotive repair and servicing, and general business services sectors of employees in the formal labour force holding new formal TVET qualifications at Certificate Levels 2 and 3; • and a minimum 25% increase by 2014 	<ul style="list-style-type: none"> • A series of labour force studies (perhaps externally commissioned) in the 3 identified industry sectors over the period 2010 to 2014 	<p>Assumptions</p> <ul style="list-style-type: none"> • Within the medium term (2-3 years) the Cambodian economy recovers in line with a world-wide economic upturn resulting in both FDI and local investment, and GDP growth returning to 2007/2008 levels • RGC policy and budgetary support to improved employment outcomes for both rural and urban poor through strategic investments in basic and middle-level skill formation continues as a high priority <p>Risks</p> <ul style="list-style-type: none"> • RGC policy and regulations place few restrictions on the granting of Work Permits for foreigners; • TVET training and the occupations to which it is aligned are undervalued in the population at large, whether for cultural or economic reasons; • Persistent economic downturn continues to contribute to 'soft' skilled labour demand in the longer term • A more pronounced wage/salary differential in the labour market between semi-skilled and skilled labour in most economic sectors fails to emerge • Industry cooperation and collaboration in the development of national standards and qualifications is not forthcoming
<p>Outcome An expanded, enterprise-endorsed and more integrated public training system better aligned to the basic and middle level skills requirements of the formal and informal economies.</p>	<p>Against a baseline established in 2010 there is evidence of -</p> <ul style="list-style-type: none"> • a minimum increase in enrolments in publicly funded TVET institutions in new Certificate programs at Levels 2,3 and 4 for the 3 identified industry sectors of the following order – <ul style="list-style-type: none"> • 30% in Certificate 2 by 2012; • 20% in Certificate 3 by 2012; • 10% in Certificate 4 by 2012 • a minimum increase in completions in publicly funded TVET institutions of new Certificate programs at Levels 2,3 and 4 for the 3 identified industry sectors of the following order – <ul style="list-style-type: none"> • 30% in Certificate 2 by 2013; • 20% in Certificate 3 by 2013; • 10% in Certificate 4 by 2013; and, • 50% in Certificate 2 by 2014; • 30% in Certificate 3 by 2014; • 15% in Certificate 4 by 2014 • increased employer satisfaction in the same 3 identified industry sectors with 	<ul style="list-style-type: none"> • Enrolment and graduation data from relevant public TVET providers (VETMIS facilitated Monitoring Study) <ul style="list-style-type: none"> • A series of employer satisfaction surveys 	<p>Assumptions</p> <ul style="list-style-type: none"> • RGC policy and budgets reflect a continuing high priority placed on improved employment outcomes for both rural and urban youth and the poor, through strategic investments and other support for basic and middle-level skill formation • Additional financial resourcing will be mobilised by and in some cases sourced from government to replace donor investments over the period 2010-2014 to ensure new investment levels are sustained post-project <p>Risks</p> <ul style="list-style-type: none"> • TVET training and the occupations to which it is aligned are undervalued in the population at large, whether for cultural or economic reasons;

Design Summary	Performance Targets/Indicator	Data Sources/ Reporting Mechanisms	Assumptions and Risks
	<p>the knowledge, skills and attitudes of employees holding new, formal TVET qualifications over the period 2010 to 2014</p> <ul style="list-style-type: none"> an increase of at least 40% in the number of individuals directly articulating into formal TVET certificate programs from non-formal basic skill programs by 2012 	<p>(perhaps externally commissioned)</p> <ul style="list-style-type: none"> Specific interrogatory study of enrolment and graduation data from relevant public TVET providers (VETMIS facilitated Study) focusing on rates of articulation between non-formal basic skill programs and formal TVET qualifications 	<ul style="list-style-type: none"> Industry cooperation and collaboration in the development of national standards and qualifications is not forthcoming
<p>Outputs</p> <p>1. DGTNET demonstrates Improved capacity for planning, management and quality development</p>	<ul style="list-style-type: none"> New Medium Term TVET Development Plan for DGTNET (MTTDP) including medium-term targets and indicators for the period 2011-2015 developed by end 2010, approved by NTB and disseminated no later than end of Quarter 1, 2011; and, independent MTTDP evaluation completed no later than end Quarter 1, 2016 Medium Term Expenditure Framework (2011-2015) developed for TVET by end 2010 consistent with the MTTDP, adjusted in accordance with 2011 MOLVT budget outlay and NTB approved by end of Quarter 1, 2011 and subsequent years 2012-2015 as per the same schedule Annual TVET Development Plans (ATDPs) including specific annual targets and indicators developed for 2010, 2011, 2012, 2013, & 2014 and approved by NTB by end Quarter 4 in each respective preceding year; and, Annual performance reports against targets/indicators completed by no later than Quarter 1 of the relevant succeeding year Computerised VETMIS designed, commissioned and utilised across all sites by module according to the following schedule - <ul style="list-style-type: none"> Module 1: Institutions and their infrastructure (by year end 2010) Module 2: Financial module (by end Quarter 1, 2011) Module 3: Courses offered by VET institutions (year end 2011) Module 4: Courses completed (by end Quarter 1, 2012) Module 5: Staff module (by end Quarter 3, 2012) Module 6: Student Module (by end Quarter 1, 2013) Module 7: Employment of Graduates (results of standardized tracer studies) – by end Quarter 3, 2013) Module 8: Training needs assessments (results of standardized surveys) – by end Quarter 2, 2014) LMIS will be established by Quarter 2, 	<ul style="list-style-type: none"> Published <i>MTTDP</i> as per schedule An independent Evaluation Report of MTTDP achievement Published <i>ATDPs</i> as per schedules Published performance reports on ATDPs NTB records VETMIS/LMIS manual on data standards and standard codes VETMIS/LMIS data mapping VETMIS data reports as specified generated at all sites LMIS data reports as 	<p>Assumptions</p> <ul style="list-style-type: none"> MOLVT and MOEYS will collaborate closely to develop an NQF embracing all post-school qualifications <p>Risks</p> <ul style="list-style-type: none"> A slower, more prolonged recovery in the national economy constrains budget outlays for TVET, resulting in an inability for Government to meet the funding requirements of the MTEF Industry cooperation and collaboration in the development of national standards and qualifications is slow in forthcoming, if at all Proposed decentralization is not matched, at least initially, with clear delegations of authority, thereby creating confusion in roles and responsibilities which impact adversely on the efficiency of both decision-making and internal fund transfers during early project implementation A very narrow base of system staff with the immediate capacity (technically and/or linguistically) to work as key counterparts Without a strong commitment from MOEYS to work collaboratively on NQF development and operation, it may become necessary to limit development to the TVET band of an NQF, or in other words an NVQF only

Design Summary	Performance Targets/Indicator	Data Sources/ Reporting Mechanisms	Assumptions and Risks
	<p>2010 and will generate the following selective reports as per the stated schedules-</p> <ul style="list-style-type: none"> • Industry and job profiles, guidelines for career planning, and analyses of data from censuses and surveys by NIS are published by LMIS (by year end 2011) • Data and information about industry establishments and employments in these industries (by occupations and skill levels) are published by LMIS (by end Quarter 2, 2012) • A WEB enabled module allows employers to post job opportunities and vacancies online, allows job-seekers to search for job opportunities and to post their C.V. for scrutiny by potential employers (by year end 2013) • An NQF constructed and no less than 5 TVET qualifications (reflecting relevant industry sector priorities) at Level 4 (20 qualifications in all) covering a minimum of 3 economic sectors developed according to an agreed set of procedures, formally registered, and approved by MOEYS and NTB according to the following schedule – <ul style="list-style-type: none"> • NQF constructed and approved by MOEYS and NTB by end Quarter 4, 2010; • Qualification registration procedures approved by MOEYS and NTB and operable by end Quarter 4, 2010 • 2 Level 4 qualifications approved by NTB and registered by end Quarter 2, 2011; and, • a further 3 Level 4 qualifications approved by NTB and registered by end Quarter 1, 2012 • A provisional TVET provider registration system (with 3.5 year 'lifespan') designed and in operation by end Quarter 3, 2010 • A provider registration system, including 'scope of registration' accreditation, designed and in operation by end Quarter 1, 2014 with all public providers and a minimum of 25 private providers formally registered as compliant 	<p>specified generated at all required sites</p> <ul style="list-style-type: none"> • A series of employer and job-seeker satisfaction surveys and of other LMIS users • Manual on the <i>Management and Operation of the Cambodian NQF(or NVQF)</i> • Published procedures and requirements for <i>Registration of Training Providers</i> • VETMIS generated list of registered public and private TVET providers and records of audit/compliance testing and results by institution 	
<p>2. Improved access to and quality of formal TVET teaching and learning</p>	<ul style="list-style-type: none"> • Against a baseline established in 2010, an increase of at least 40% in the number of individuals directly articulating into formal TVET certificate programs from non-formal basic skill programs by end 2012 • Against a baseline established in 2010, an increase by end 2012 of at least 10% in the number of Grade 9 high school students directly articulating into new formal TVET certificate programs at levels 2 and 3; and an increase of at least 10% in the number of Grade 12 	<ul style="list-style-type: none"> • Specific interrogatory studies of enrolment and graduation data from relevant public TVET providers (VETMIS facilitated Study) focusing on rates of articulation between (i) non-formal basic skill programs and formal TVET qualifications; and (ii) high school and formal TVET qualifications 	<p>Assumptions</p> <ul style="list-style-type: none"> • Industry recognition of the improved quality of graduates from formal TVET results in better employment outcomes, which in turn results in increases in rates of participation in quality TVET programs <p>Risks</p> <ul style="list-style-type: none"> • There may be insufficient time to see 90% of graduates

Design Summary	Performance Targets/Indicator	Data Sources/ Reporting Mechanisms	Assumptions and Risks
	<p>high school students directly articulating into new formal TVET programs at levels 5 and above;</p> <ul style="list-style-type: none"> by end 2013, an increase of 20% in each over the 2010 baseline; and, by end 2014, an increase of 30% in each over the 2010 baseline <ul style="list-style-type: none"> Using the launch date of a new qualification and its competency-based training and assessment modules as the baseline, no later than 3 years from that point 90% of trainees will be achieving a 90% or better assessment as measured by trained industry assessors against the relevant industry derived standard for that module 5 PTCs to be upgraded to RTC status according to the defined standards for RTCs and according to the following schedule – <ul style="list-style-type: none"> 3 PTCs upgraded by end 2013; and 2 PTCs upgraded by end 2014 	<ul style="list-style-type: none"> Institutional records of attainment of competency reporting by qualification, by module, by year, and by instructor(s) Compliance reports on PTC to RTC upgrades against agreed build and re-equipment standards. Compliance reports on each RTC against its respective Scope of Registration 	<p>achieving 90% competency assessments against the relevant standard (a standard internal measure of the efficiency of a competency based training system) within the 5 year duration of the project, given the complex mix of required development inputs</p>
<p>3. Enhanced access to and improved quality of non-formal TVET</p>	<ul style="list-style-type: none"> VSTP extended to all 24 Provinces as per the following schedule – <ul style="list-style-type: none"> 7 original pilot PTCs from VSTP I by mid-2010; the next 7 designated PTCs by start 2011; the remaining 8 PTCs by start 2012 By mid 2011, at least 50% of all candidates in centre and enterprise based VSTP training will be between 16-24 years of age and unemployed; <ul style="list-style-type: none"> By mid 2012, at least 60%; and, By mid 2013 at least 70%; and, at least 50% of all candidates must be female calculated across the total VSTP program By end 2011, 30% of all participants in either Enterprise or Centre-based VSTP training must be eligible for the award of a formal Certificate Level 1 upon successful completion of training <ul style="list-style-type: none"> By end 2012 – 40%; and, By end 2013 – 50% By end 2012 all Certificate 1 awardees who have desired to articulate into a Certificate II or III program have encountered no barriers to entry 2 new PTCs are constructed in the 2 provinces yet to be serviced by PTCs by year end 2012 All PTCs will have a Career Guidance Officer /Employment Placement Facilitator appointed at the commencement of their participation in VSTP 	<ul style="list-style-type: none"> PTC Training records PTC Records of Award of Certification Survey of VSTP Certificate 1 awardees Certificates of Completion and Occupancy issued for 2 newly constructed PTCs PTC staffing records 	<p>Assumptions</p> <ul style="list-style-type: none"> Continuing development of rural economy e.g. through demand for increased productivity or through new investments in post harvest technology and small to medium scale food processing will lead to increased demand for more complex skill sets <p>Risks</p> <ul style="list-style-type: none"> All PTCs may not prove to have the capacity to establish and deliver VSTP in their respective provinces RGC is unable to provide the land for the construction of 2 new PTCs DGTNET NTF funding insufficient to replace VSTP funding after each PTC completes its 2 year VSTP funding cycle

Core Activities <i>[Detailed sub-activities and milestones to be added]</i>	Inputs
<p>1. Enhanced Capacity of DGTVET for Planning, Management and Quality Development</p> <ul style="list-style-type: none"> 1.1 Strengthen management capacity at training institutions, province and DGTVET 1.2 Improve TVET information systems including VETMIS and LMIS 1.3 Strengthen capacity of DGTVET as Secretariat of NTB 1.4 Develop and implement TVET Qualifications Framework 1.5 Develop and implement national systems for training provider registration and course accreditation 1.6 Develop and implement systems for career information <p>2. Improved Access to and Quality of Formal TVET Teaching and Learning</p> <ul style="list-style-type: none"> 2.1 Upgrade five PTCs to Regional Training Centres 2.2 Develop and introduce skills standards-based training modules in designated training areas at certificate 2, 3 and 4 levels 2.3 Train trainers for standards based training 2.4 Increase industry involvement in development and implementation of training programs 2.5 Strengthen NTTI complex for system upgrading including enterprise endorsed skills standards, upgraded training programs and materials, trainer training, and institutional monitoring and development, and support national implementation <p>3. Enhanced Access to and Improved Quality of non-formal TVET</p> <ul style="list-style-type: none"> 3.1 Establish, construct and equip two remaining PTCs in currently unserved provinces 3.2 Extend VSTP to all provinces including an urban pilot in Phnom Penh, and monitor outcomes by project completion 3.3 Develop, deliver and mentor PTC management training 3.4 Upgraded skills standards based training programs and materials, trainer training, and institutional monitoring and development through NTTI complex <p>4. Project Management</p> <ul style="list-style-type: none"> 4.1 Set up PMU 4.2 Set up steering committee to guide system and training centre development by month 2 4.3 Establish review mechanisms by month 3 4.4 Establish M&E unit and develop M&E by month 4 	<p>Grant:</p> <p>Government:</p>

**APPENDIX 1:
PRAKAS TO ESTABLISH AN NTB SUB-COMMITTEE ON LABOR MARKET
INFORMATION**

Kingdom of Cambodia

Nation Religion King

***Council of Minister
Number: 134***

Prakas

On

The Establishment of Sub Committee of Labor Market Information

* * * *

**Deputy Prime Minister, Minister of Council of Minister and Chairman of National
Training Board**

*Having seen the National Constitution of Kingdom of Cambodia
Having seen Royal Decree No. NS/ RKT/ 0908?1055, 25th September 2008 to
nominate government of Kingdom of Cambodia
Having seen Royal decree No. 02/ NS/ 94, 20th August 1994 to declare using the law
of preparing and processing of Council of Ministers
Having seen Royal Decree No. 65 ANK, 29th April 2005 expressing to establish the
National Training Board
According to decision making of National Training Board, 21st January 2008
According to decision making of government*

Decision

Article 1:

Subcommittee of Labor Market Information established in order to facilitate with ministries, institutions and organisations for the development of TVET in response to the demand of the current and future market circumstance.

Article 2:

The Subcommittee of Labor Market Information comprises the following:

1. Representative of Professional and Micro Enterprise	Chairman
2. Representative of the Ministry of Commerce	Deputy Chairman
3. Representative of the Council for the Development of Cambodia	Deputy Chairman
4. Technical staff from the Ministry of Labor and Vocational Training	Deputy Chairman
5. Representative of the Ministry of Education, Youth and Sport	Member
6. Representative of the Chamber of Commerce	Member
7. Representative of the Employer Community and the Commercial Association Cambodia	Member
8. Representative of the Ministry of Post and Telecommunication	Member
9. Representative of the Ministry of Economy and Finance	Member
10. Representative of the Ministry of Rural Development	Member
11. Representative of the Ministry of Water Resources and Meteorology	Member
12. Five employer member representatives	Member
13. One employee member representative	Member
14. Representative of the Department of Education Affairs of the Ministry of Labor and Vocational Training	Member
15. Representative of the Department of National Standard Competence	Member
16. The Department of Labor Market Information of Ministry of Labor and Vocational Training	Secretariat

Article 3:

The subcommittee on Labor Market Information has duties as follows:

- Preparing the Labor Market Information network from the national level down to the provincial/city level;
- Researching labor market needs to identify and prioritise emerging occupations in the labor market.
- Developing labor market policy which focuses especially on the management of labor forces and local and international supply and demand;

- Preparing policy for labor market information data collection and analysis, and preparation of statistical data to assist planning of technical vocational education and training programs for industry, service and agriculture.
- To limit obviously the demand of TVET for industry, service and agriculture.
- Recommending classification systems for occupations in industry, service and agriculture.
- Preparing a coding system of occupations
- Providing and disseminating labor market information to industry, institutions, companies, DTVET, students and employees
- Developing a Labor Market Information website.
- Monitoring and evaluating the implementation of the labor market information system;
- Preparing activity reports for and working with the National Training Board on related problems;
- Preparing an annual working plan.

Article 4:

- Sub-committee of Labor Market Information has the right to use the stamp of the Council of Ministers.

Article 5:

- Any laws and regulations that are contrary to this Prakas are abrogated.

Article 6:

- Minister of the Ministry of Labor and Vocational Training, Ministers and Secretaries of State of all Ministries and related institutions, Director, Deputy Director, and Members of National Training Board, Director and Deputy Director and Members of the National Training Board and Members of the Labor Market Information sub-committee have implemented this Prakas starting from the date of signing of this Prakas.

Phnom Penh, 10 October 2008

Deputy Prime Minister, Minister of the Council of Ministers and The Chairman of the National Training Board

Signed and Sealed

Sok An

APPENDIX 2:
ROLES AND DUTIES OF THE OFFICES OF LABOR MARKET INFORMATION AND LABOR STATISTICS IN THE DEPARTMENT OF LABOR MARKET INFORMATION OF DGTVET

Office of Labour Market Information

The Office of Labour Market Information led by a chief and a number of vice chiefs as the assistants. It has the following roles and duties:

- To collect and compile available labour market information,
- To analyze collected data of labour market information to balance between training, labour supply and labour demand,
- To conduct survey to identify priority jobs that required by the labour market,
- To provide labour market information service and advisory service to students, persons who seek for work or find training institutions or do business that match the labour market demand,
- To provide labour market information service to employers and investors on the source of recruitment,
- To communicate with National Institute of Statistics (NIS) of the Ministry of Planning and relevant institutions to search for data and indicators of labour market information,
- To communicate with enterprises and establishments to collect the job vacancies and find out the new required skills that meet the modern technology,
- To establish the Website of labour market information,
- To publish and disseminate reports on labour market information,
- To cooperate with relevant departments and institutions,
- To carry out other tasks as assigned by the department.

Office of Labour Statistics

The Office of Labour Statistics led by a chief and a number of vice chiefs as the assistants. It has the following roles and duties:

- To establish a Labour Statistics System within the Labour Administration from Central to Provincial Departments of Labour and Vocational Training to assist the Ministry of Labour and Vocational Training on the management, assessment the productivity and the effectiveness of administrative system which controlled by the Ministry of Labour and Vocational Training, particularly in analyzing regarded as the basic to make plans and policies that relate to employment and manpower and vocational training under the mandate of the Ministry,
- To collect and compile the labour statistics that relate to the size, structure and general criterion of employment and type of enterprises and establishments, job placement, number of foreign manpower, labour inspection, wage, working hours, occupational health, labour dispute, number of professional organizations, vocational training, employment accidents, social security and other related work prepared by central administration. Provincial Departments of Labour and Vocational Training, relevant Ministries and Institutions, and NGOs,
- To classify enterprises, establishments according to economic activities and classify the occupations of workers and employees,
- To conduct establishments survey, if needed,
- To communicate with National Institute of Statistics (NIS) of the Ministry of Planning to find out data and indicators that resulted from population census, labour force surveys, establishment surveys and household surveys including number of total population, number of labour force, labour force participation rate, employment rate, under employment rate, unemployment rate and annual population growth rate etc,
- To study and analyze the compiled labour statistics data,
- To prepare the trimestral and annual reports on labour statistics,
- To publish and disseminate the compiled labour statistics data,
- To cooperate with relevant departments and institutions,
- To carry out other tasks as assigned by the department.

APPENDIX 3: DGTVET SHORT-COURSE COMPLETION FIGURES FOM DLMI, DTVET-M AND PPTA SURVEY COMPARED

Table A3.1 DGTVET short course completions, by province and field of training, 2008: DTVET-M figures

province/municipality	agriculture	tech/trade	textiles and garments	handicrafts	hair and beautician	computing	tourism and hospitality	business	language	arts and design	miscell	total
01 Phnom Penh, Special Municipality of	330	80	-	-	-	20	-	-	-	20	60	570
02 Kep, Special Municipality of	180	-	-	-	-	50	-	-	-	-	-	230
03 Pailin, Special Municipality of	355	-	22	-	-	20	-	-	-	-	-	397
04 Sihanoukville, Special Municipality of	303	41	20	-	-	20	-	-	-	-	-	384
05 Banteay Meanchey	300	20	20	20	-	20	-	-	-	-	-	380
06 Battambang	750	240	62	-	20	172	-	-	111	20	-	1,375
07 Kampong Cham	360	22	25	-	23	-	-	-	-	-	-	430
08 Kampong Chhnang	180	20	20	-	-	20	-	-	-	-	-	240
09 Kampong Speu	180	20	40	-	-	40	-	-	-	-	-	280
10 Kampong Thom	307	-	21	-	41	40	-	-	-	-	-	409
11 Kampot	630	60	40	-	-	40	-	-	-	-	-	770
12 Kandal	180	60	-	-	-	20	-	-	-	-	-	260
13 Koh Kong	300	20	20	-	-	20	-	-	-	-	-	360
14 Kratie	360	20	-	-	20	40	-	-	-	-	-	440
15 Monduliri	-	-	-	-	-	-	-	-	-	-	-	-
16 Oddar Meanchey	210	40	20	-	-	20	-	-	-	-	-	290
17 Preah Vihear	-	-	-	-	-	-	-	-	-	-	-	-
18 Pursat	540	40	60	40	-	20	-	-	-	-	-	700
19 Prey Veng	360	20	40	-	-	40	-	-	-	-	-	460
20 Ratanakiri	300	60	-	-	-	-	-	-	-	-	-	360
21 Siem Reap	180	20	20	-	-	-	20	-	-	-	-	240
22 Stung Treng	270	-	25	-	-	25	-	-	-	-	-	320
23 Svay Rieng	260	20	20	-	-	20	-	-	-	-	-	320
24 Takeo	290	20	40	-	-	20	-	-	-	-	-	370
Total	7,125	823	515	60	104	667	20	60	111	40	60	9,585

* Fields of study and provinces are categorised using the provisional classification and coding system contained in Appendix 4 Attachment A.4.1

**Shaded provinces are VSTP pilot provinces

Source: DTVET-M supplied figures, March 2009

Table A3.2 DGTVET short course completions, by province and field of training, 2008: DLMI figures

province/municipality	agriculture	tech/trade	textiles and garments	handicrafts	hair and beautician	computing	tourism and hospitality	business	language	arts and design	miscell	total
01 Phnom Penh, Special Municipality of												-
02 Kep, Special Municipality of	500											500
03 Pailin, Special Municipality of												-
04 Sihanoukville, Special Municipality of												-
05 Banteay Meanchey	300	20	20	20		20						380
06 Battambang	286		22			22						330
07 Kampong Cham												-
08 Kampong Chhnang												-
09 Kampong Speu												-
10 Kampong Thom	482		20		20							522
11 Kampot	7,431	264	139		30	71						7,935
12 Kandal												-
13 Koh Kong												-
14 Kratie												-
15 Mondulkiri												-
16 Oddar Meanchey												-
17 Preah Vihear												-
18 Pursat		192	83	14		141			84			514
19 Prey Veng	6,865	101	56			29						7,051
20 Ratanakiri												638
21 Siem Reap												-
22 Stung Treng												-
23 Svay Rieng												-
24 Takeo												-
Total	15,864	577	340	34	50	283	-	-	84	-	-	17,870

* Fields of study and provinces are categorised using the provisional classification and coding system contained in Appendix 4 Attachment A.4.1

**Shaded provinces are VSTP pilot provinces

Source: DLMI *Report on Labor Statistics, Year 2008*

Table A3.3 DGTVET short course completions, by province and field of training, 2008: PPTA Survey figures

province/municipality	agriculture	tech/trade	textiles and garments	handicrafts	hair and beautician	computing	tourism and hospitality	business	language	arts and design	miscell	total
01 Phnom Penh, Special Municipality of		-										-
02 Kep, Special Municipality of		-										-
03 Pailin, Special Municipality of	355	20	23	-	-	75	-	-	-	-	-	473
04 Sihanoukville, Special Municipality of	300	40	18	-	-	20	-	-	-	-	-	378
05 Banteay Meanchey	300	20	20	20	-	20	-	-	-	-	-	380
06 Battambang	5,748	1,277	49	-	98	381	988	40	184	20	132	8,917
07 Kampong Cham	360	22	-	-	23	-	-	-	-	-	-	405
08 Kampong Chhnang	5,590	80	46	-	14	26	-	-	-	-	-	5,756
09 Kampong Speu	180	20	40	-	-	40	-	-	-	-	-	280
10 Kampong Thom	434	-	44	-	65	73	-	32	31	-	-	679
11 Kampot	5,935	265	110	-	58	36	-	-	72	-	11	6,487
12 Kandal	180	60	-	-	-	20	-	-	-	-	-	260
13 Koh Kong	-	20	20	-	-	20	-	-	-	-	-	60
14 Kratie	360	20	-	-	20	40	-	-	-	-	-	440
15 Mondulkiri		-										-
16 Oddar Meanchey	210	40	20	-	-	20	-	-	-	-	-	290
17 Preah Vihear		-										-
18 Pursat	540	154	98	54	-	64	-	-	-	-	-	910
19 Prey Veng	360	20	20	-	20	40	-	-	40	-	-	500
20 Ratanakiri	270	60	-	-	-	-	-	-	-	-	-	330
21 Siem Reap	180	20	20	-	-	-	20	-	-	-	8,668	8,908
22 Stung Treng	3,342	17	41	-	32	25	-	-	-	2	-	3,459
23 Svay Rieng	6,047	43	25	-	51	69	-	-	-	-	-	6,235
24 Takeo	8,888	126	95	-	5	46	-	-	-	-	-	9,160
Total	39,579	2,324	689	74	386	1,015	1,008	72	327	22	8,811	54,307

* Fields of study and provinces are categorised using the provisional classification and coding system contained in Appendix 4 Attachment A.4.1

**Shaded provinces are VSTP pilot provinces

Source: PPTA institute survey, March/April 2009

**APPENDIX 4:
A PROPOSAL FOR AN LMIS FOR TVET TO BE LOCATED WITHIN GDTVET**

Why an LMIS for TVET

The proposed LMIS is a management tool. It is a system for the routine collection, assembly and collation, analysis and interpretation and reporting and disseminating of reliable, verifiable, comprehensive and up-to-date information on all aspects of the labor force, employment and the labor market.

NTB and its secretariat, GDTVET, can use the findings of the LMIS to plan more effective and relevant:

- institute numbers and location
- training course offerings
- curriculum design
- staff development programs
- equipment procurement
- career guidance and job-placement services

Components of the proposed TVET LMIS

Figure A4.1 The functions of a TVET LMIS based in DLMI

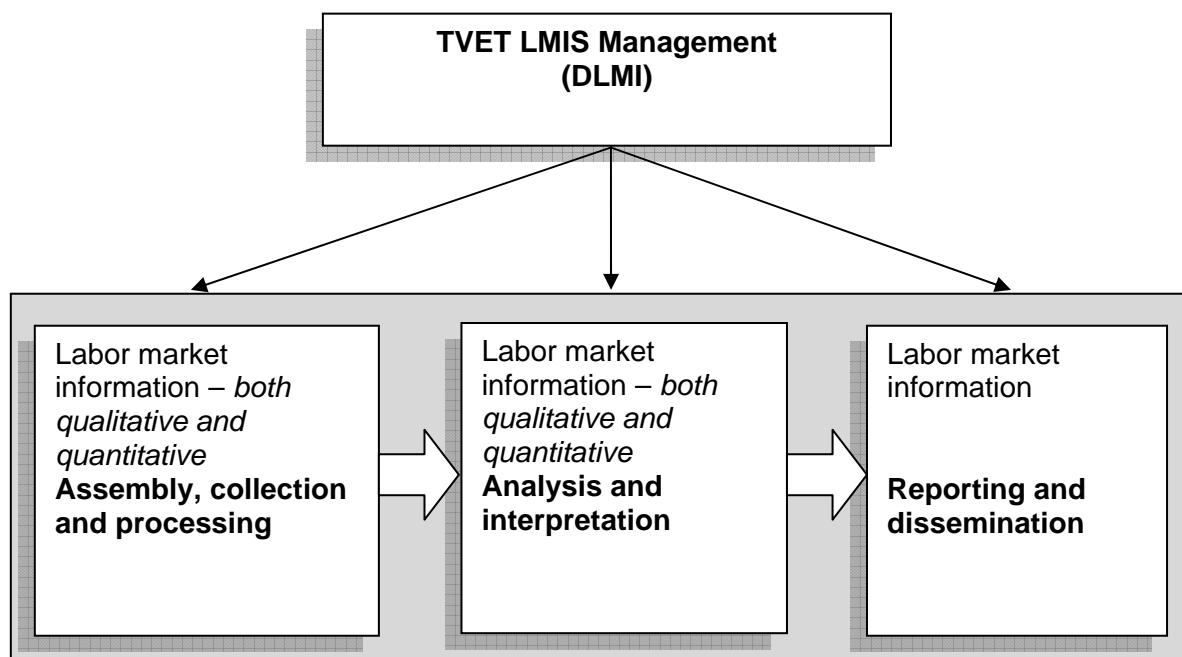
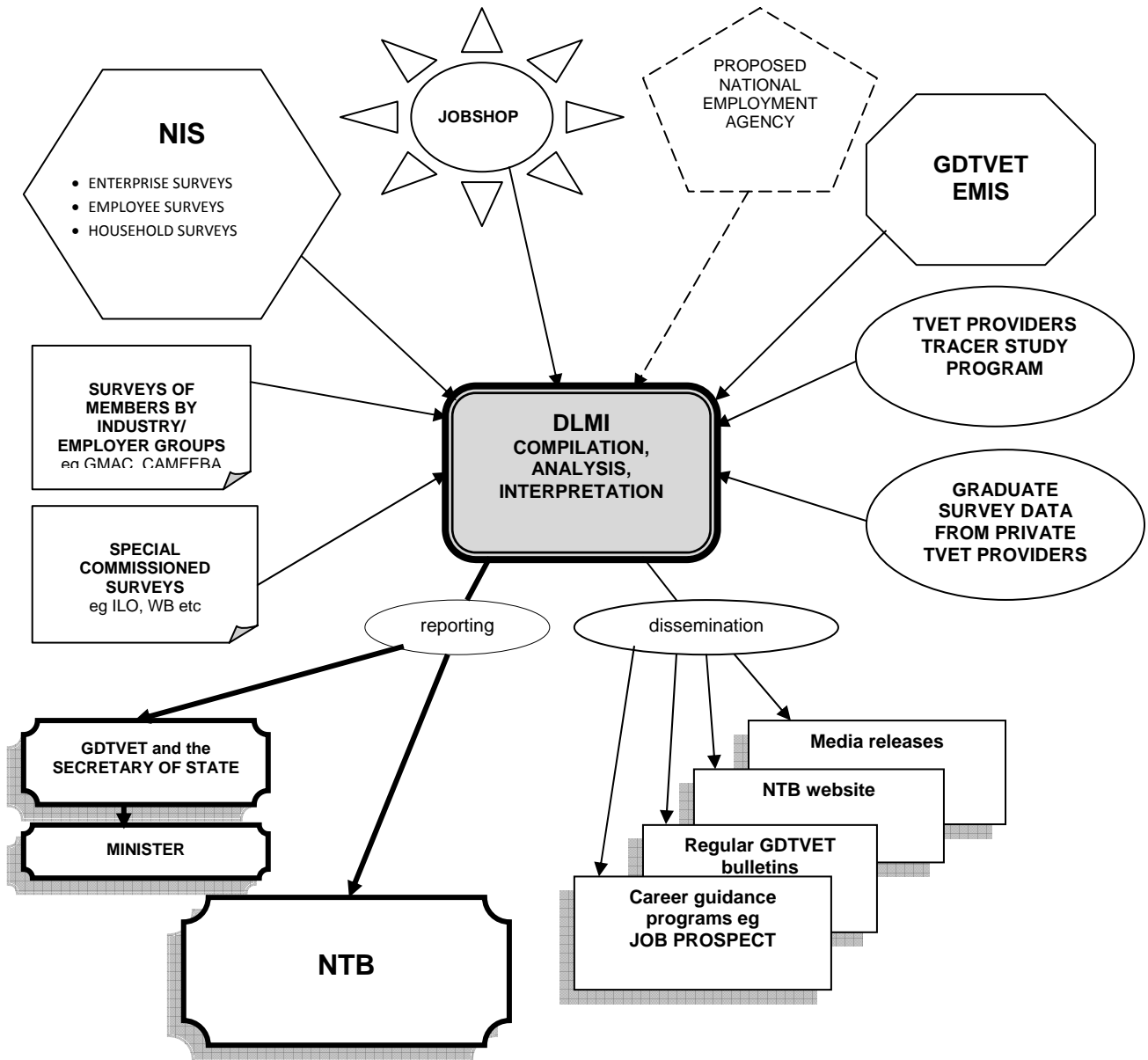


Figure A4.1 shows that the proposed LMIS would have three integrated components, with the DLMI taking the responsibility for overseeing, managing and coordinating the system.

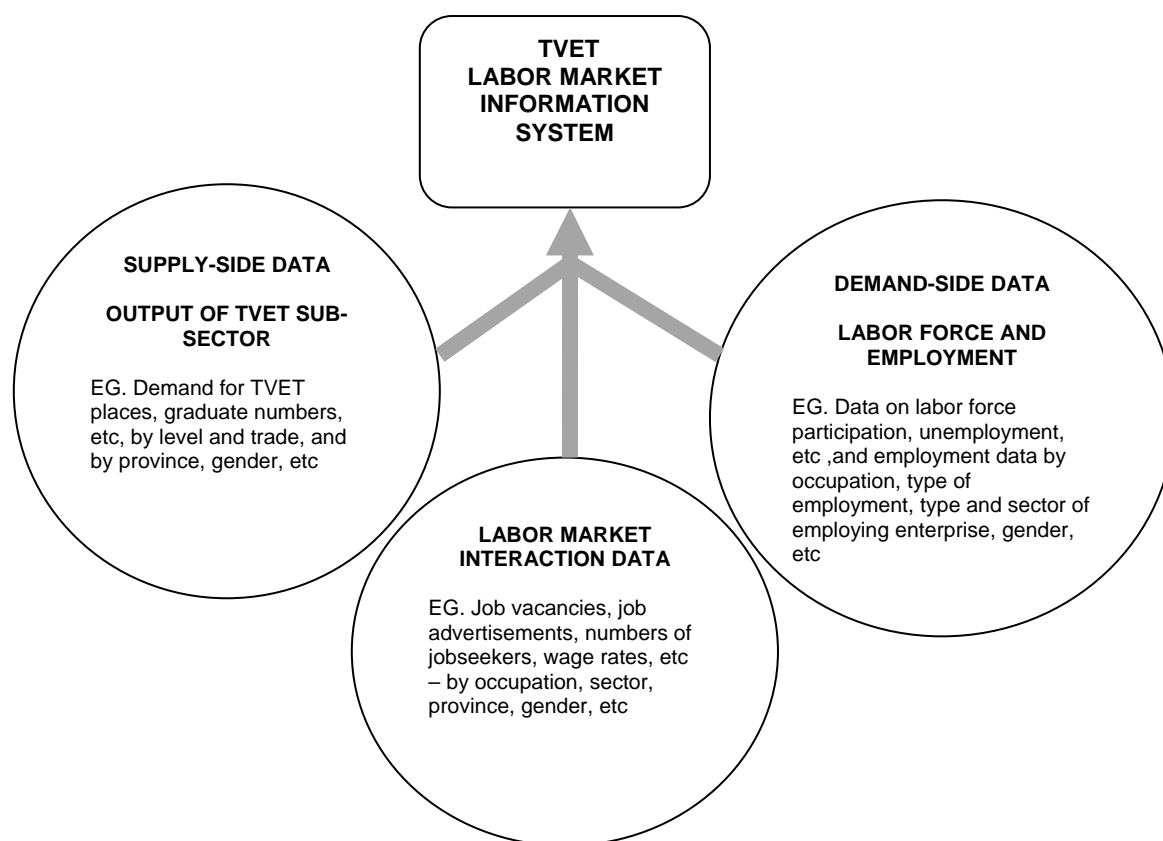
Labor market information is a combination of quantitative data and more informal qualitative information. Analysis and interpretation, that form the basis of labor market reports and publications, need to draw on both sources. Statistical data of the labor market are drawn from surveys and are added to the labor market database. Non-quantitative information is drawn from a variety of sources, usually from the views, opinions, inside knowledge of stakeholders – employers, job-seekers, workers, training institutes, etc – and it too must be filed away in information banks. Figure A4.2 outlines the sources of *input* into the DLMI hub of the TVET LMIS, and its *output* in terms of reporting and dissemination

Figure A4.2 Outline of and interactions within the proposed TVET LMIS



The inputs of labor market information the proposed TVET LMIS requires can be grouped, as in Figure A4.3, into three categories – *supply-side* information, that is, information about the output of the TVET sub-sector; *demand-side* information, that is, information regarding patterns and trends in the labor force and employment; and information regarding labor market interactions, that is, information about labor market shortages and surpluses, vacancies, job seekers, job offers and job placements, and about wage relativities and trends.

Figure A4.3. Categories of information required by the proposed TVET LMIS



Labor market information classification and coding system

For the labor market data and information that are collected by and assembled from a variety of sources to be compatible, the LMIS must have a system of classification and coding that can be comprehensively applied to all sources.

Attachment A.4.1 provides a provisional classification and coding system for the major variables included in the proposed TVET LMIS. Where possible these classifications and codes are either drawn directly from the latest standard international versions or are ones already applied in Cambodia. Others, such as with 'fields of training', are developed here from classification and coding systems applied in other comparable countries.

- Level of training
- Field of training
- Type of training institute
- GDTVET training provider
- Source of finance
- Province
- Economic status (of population age 12 and above)
- Occupation
- Industry
- Product

Sources of labor market information

The sources of labor market information to be developed over time for the proposed TVET LMIS are outlined in Figure A4.4. It shows the information that is required, the collecting agency best able to provide it, but the means of collection, and the preferred frequency of information collection¹³⁸.

Figure A4.4 Proposed sources of labor market information

Collecting Agency	Means of collection	Frequency	Information sought
1. GDTVET	GDTVET's Education Management Information System (EMIS) Information provided by annual statistical returns from GDTVET training institutes	Annual	<ul style="list-style-type: none"> ➤ New enrolment (course starters) and total trainee numbers, drop-outs and graduates, by: <ul style="list-style-type: none"> • course level and field • length of course • gender
2. GDTVET training institutes	Tracer Study and Graduate Survey Programs: regular tracer studies based on samples taken from long-course graduating cohorts	Annual	<ul style="list-style-type: none"> ➤ Graduate post-training experience: <ul style="list-style-type: none"> • further study? • enter labor force? • find employment? • ease of finding employment • how find employment? • where find employment? • type of employment • primary occupation • earnings (hourly, daily, monthly, etc) • how useful was TVET training in finding job and in the job?
3. National Institute of Statistics (NIS)	Enterprise Surveys sample surveys of <i>registered</i> business enterprises, supplemented by periodic sample surveys of <i>unregistered</i> business enterprises (informal sector enterprises)	Annual	<ul style="list-style-type: none"> ➤ Current and previous year's employment in enterprises, cross-classified by size, type, location (province, urban/rural) and industry/ sector, by: <ul style="list-style-type: none"> • occupation (ISCO 3-digit level) • function (eg production line, maintenance, warehousing, office staff, sales force, etc) • level (eg worker, foreman, supervisor, manager, etc) ➤ Vacancy levels, by: <ul style="list-style-type: none"> • occupation • function • level ➤ Training programs <ul style="list-style-type: none"> • enterprise based • external ➤ Employer opinions of TVET training ➤ How recruit employees
4. National Institute of Statistics (NIS)	Employee Surveys sampling of employees of participating enterprises in the Annual Enterprise Surveys	Annual	<ul style="list-style-type: none"> ➤ Employees in enterprises, cross-classified by size type and industry/sector, by: <ul style="list-style-type: none"> • gender • age group • highest education attainment • post-school training • occupation (ISCO 3-digit level) • function • level • wage rate • average weekly hours employed in current job • length of time employed by this enterprise

¹³⁸ What is being proposed here can be contrasted to what is currently the situation for TVET, as shown in **Figure 11** in Section III of the report.

Collecting Agency	Means of collection	Frequency	Information sought
			<ul style="list-style-type: none"> • length of time employed in current job • training received in this enterprise • assessment of the value of any TVET training to current job • how obtained employment with this enterprise • employment previous to this enterprise
<p>5. National Institute of Statistics (NIS)</p>	<p>Household Survey</p>	<p>Quarterly</p>	<ul style="list-style-type: none"> ➢ Individual members of households, cross-classified by location (province, urban/rural), by: <ul style="list-style-type: none"> • gender • age group ➢ Those of working age (12 and above), cross-classified by gender and age group, by whether: <ul style="list-style-type: none"> • participating or not participating in labor force ➢ Those not participating, cross-classified by gender and age group, by reason: <ul style="list-style-type: none"> • full-time education • ill-health and/or infirmity • child-rearing • other ➢ Those not participating, cross-classified by gender and age group, by: <ul style="list-style-type: none"> • source of livelihood when not in labor force ➢ Those participating, cross-classified by gender, age group and highest educational attainment, by whether: <ul style="list-style-type: none"> • employed or unemployed ➢ Those unemployed, cross-classified by gender, age group and highest educational attainment: <ul style="list-style-type: none"> • duration of unemployment • occupation in last employment • source of livelihood when not employed ➢ Those employed, cross-classified by gender, age group and highest educational attainment, by: <ul style="list-style-type: none"> • post-school training received • employment status • type of employer • size of employing enterprise • industry/sector • occupation (ISCO 3-digit level) • average hours of work • earnings (hourly, daily, monthly, etc)
<p>6. GDTVET</p>	<p>Job Advertisement Surveys</p> <p>Routine monitoring of job vacancy advertisements in the print and electronic media</p>	<p>Weekly or fortnightly</p>	<ul style="list-style-type: none"> ➢ Job advertisements, cross classified by size, type, location (province, urban/rural) and industry/ sector, of the advertising enterprise by: <ul style="list-style-type: none"> • occupation • whether part-time or full-time • what minimum education and/or training is required • wage/salary • other stipulations
<p>7. GDTVET</p>	<p>Job Shop</p> <p>An online hub, on the NTB website, for the exchange of labor market information between job seekers, employers and training providers.</p>	<p>Weekly or fortnightly</p>	<ul style="list-style-type: none"> ➢ Current information from registered jobseekers, employers and training providers that points to areas of current shortages and surpluses, by: <ul style="list-style-type: none"> • location • industry/sector • occupation • levels of education and training

Collecting Agency	Means of collection	Frequency	Information sought
8. GDTVET	National Employment Agency A network of job centers established for the exchange of labor market information between job seekers, employers and training providers	Weekly or fortnightly	➤ Current information from registered jobseekers, employers and training providers that points to areas of current shortages and surpluses, by: <ul style="list-style-type: none"> • location • industry/sector • occupation • levels of education and training
9.INDUSTRY BODIES AND EMPLOYER GROUPS	Periodic surveys of member enterprises by such bodies as the Garment Manufacturers' Association of Cambodia (GMAC), the Cambodian Tourist Association (CTA)	At least annually	A range of quantitative and qualitative information related to specific areas of employment
10.INTERNATIONAL AGENCIES	Specially commissioned (generally one-off) surveys by the ILO, UNDP, WB, ADB etc	whenever	A range of quantitative and qualitative information related to specific areas of employment

Key labor market indicators (KLMI)

From the data obtained from the various sources identified in Figure A4.4, the TVET LMIS can produce on a regular basis a range of KLMI. The following are listings of the KLMI that can eventually be produced, and between which LMIS analysts can choose. They are grouped according to the aspects of labor markets for information and analysis that are required. It should be emphasised that these are comprehensive listings of the KLMI options that can be open to LMIS analysts. Not all KLMI are needed for each report or information dissemination exercise the DLMI would be asked to produce. However, what we have here is the full arsenal that could be at the disposal of DLMI and its analysts. More details of their measurement and recommended statistical treatment are contained in Attachment A.4.2.

Table A4.1 major groupings of KLMI

KLMI major group		Number of KLMI
A	Skill supply indicators	10
B	Macro labor force indicators	7
C	Enterprise employment indicators	23
D	Job opportunity indicators	4
E	Job seeker indicators	2
F	Recruitment indicators	15
G	Workplace training indicators	7
H	Track 2 long-course trainee aspirations indicators	5
I	Track 2 long-course graduate destinations	17
J	Track 2 long-course graduate early employment indicators	10
K	Track 2 long-course feedback indicators	7
L	International employment indicators	3
Total KLMI options		110

A. Skill supply indicators

- 1 Person-months of short course (less than 12 months) training
- 2 Numbers completing short course (less than 12 months) training
- 3 Enrolments in NTQF level 1 training courses
- 4 Graduates from NTQF level 1 training courses
- 5 Enrolments in NTQF level 2 training courses
- 6 Graduates from NTQF level 2 training courses
- 7 Enrolments in NTQF level 3 training courses
- 8 Graduates from NTQF level 3 training courses
- 9 Enrolments in NTQF level 4 training courses
- 10 Graduates from NTQF level 4 training courses

B. Macro labor force indicators

- 11 Population of working age (age 12 and over)
- 12 Labor force
- 13 Unemployment
- 14 Total Employment
- 15 Employment in middle-level (ISCO major groups 3 to 8) occupations
- 16 Employment of workers with middle-level skills (NTQF level 1, 2, 3 and 4) training
- 17 Earnings and hours

C. Enterprise employment indicators

- 18 Employment of workers in middle-level (ISCO major groups 3 to 8) occupations in formal and informal business enterprises
- 19 The relative importance of middle-level (ISCO major groups 3 to 8) occupations in formal and informal business enterprise workforces
- 20 Employment of technicians and associate professionals (ISCO major group 3) in formal and informal business enterprises
- 21 The relative importance of technician and associate professional (ISCO major group 3) occupations in formal and informal business enterprises
- 22 Employment of clerks (ISCO major group 4) in formal and informal business enterprises
- 23 The relative importance of clerical (ISCO major group 4) occupations in formal and informal business enterprises
- 24 Employment of service workers, shop and market sales workers (ISCO major group 5) in formal and informal business enterprises
- 25 The relative importance of service, shop and market sales worker (ISCO major group 5) occupations in formal and informal business enterprises
- 26 Employment of skilled agricultural and fishery workers (ISCO major group 6) in formal and informal business enterprises
- 27 The relative importance of skilled agricultural and fishery (ISCO major group 6) occupations in formal and informal business enterprises
- 28 Employment of craft and related trade workers (ISCO major group 7) in formal and informal business enterprises
- 29 The relative importance of craft and related trade worker (ISCO major group 7) occupations in formal and informal business enterprises
- 30 Employment of plant and machinery operators and assemblers (ISCO major group 8) in formal and informal business enterprises
- 31 The relative importance of machine operator and assembler (ISCO major group 8) occupations in formal and informal business enterprises
- 32 Employment of workers with middle-level technician/trades training (NTQF level 1, 2, 3 and 4) in formal and informal business enterprises
- 33 The relative importance of workers with middle-level technician/trades training (NTQF level 1, 2, 3 and 4) in the workforces of formal and informal business enterprises
- 34 The relative importance of elementary level skilled workers (with NTQF level 1 certificate) in the workforces of formal and informal business enterprises
- 35 The relative importance of semi-skilled workers (with NTQF level 2 certificate) in the workforces of formal and informal business enterprises

- 36 The relative importance of skilled workers (with NTQF level 3 certificate) in the workforces of formal and informal business enterprises
- 37 The relative importance of higher skilled workers (with NTQF level 4 certificate) in the workforces of formal and informal business enterprises
- 38 Hours worked by employees of formal and informal business enterprises
- 39 Monthly wages derived from employment in formal and informal business enterprises
- 40 Monthly wages of full-time employees of formal and informal business enterprises

D. Job opportunity indicators

- 41 Job vacancies in middle-level (ISCO major groups 3 to 8) occupations in formal and informal business enterprises
- 42 Job advertisements in major national and provincial newspapers for middle-level (ISCO major groups 3 to 8) occupations
- 43 Employer registered job opportunities on NTB's online Job Shop for middle-level (ISCO major groups 3 to 8) occupations
- 44 Employer registered job opportunities at National Employment Agency centers, for middle-level (ISCO major groups 3 to 8) occupations

E. Job seeker indicators

- 45 Number of registered job-seekers on NTB's online Job Shop with NTQF level 1, 2, 3 and 4 training qualifications.
- 46 Number of registered job-seekers at National Employment Agency centers with NTQF level 1, 2, 3 and 4 training qualifications.

F. Recruitment indicators

- 47 Turnover rates in formal and informal business enterprises of workers with middle-level technician/trades training (NTQF level 1, 2, 3 and 4)
- 48 Difficulty in recruiting workers with middle-level technician/trades training (NTQF level 1, 2, 3 and 4)
- 49 Main reasons for experiencing difficulty in recruiting workers with middle-level technician/trades training (NTQF level 1, 2, 3 and 4)
- 50 Methods used by formal and informal business enterprises in recruiting workers with middle-level technician/trades training (NTQF level 1, 2, 3 and 4)
- 51 Characteristics employers in formal and informal business enterprises look for in recruits with middle-level technician/trades training (NTQF level 1, 2, 3 and 4)
- 52 Characteristics employers in formal and informal business enterprises consider graduates from middle-level technician/trades training (GDTVET long-course) institutions possess
- 53 Sources of skills required by employees of formal and informal business enterprises to perform their current jobs
- 54 Average time it takes recruits straight from GDTVET long-course institutes to reach full productivity in their first jobs in formal and informal business enterprises
- 55 Percentage of final year students on GDTVET long-course programs that already have jobs to go to upon completion
- 56 Means by which final-year students on middle-level (NTQF level 1, 2, 3 and 4) training courses secure jobs prior to graduating
- 57 Assessment by final-year students on middle-level (NTQF level 1, 2, 3 and 4) training courses, who have yet to be offered a job, of how easy it will be to find employment
- 58 Amount of time it takes graduates of middle-level (NTQF level 1, 2, 3 and 4) training courses (who are not already in jobs) to find employment after graduation
- 59 Means by which first-year out graduates of middle-level (NTQF level 1, 2, 3 and 4) training courses secure jobs
- 60 Number of job placements of registered job-seekers on NTB's online Job Shop with NTQF level 1, 2, 3 and 4 training qualifications
- 61 Number of job placements of registered job-seekers at National Employment Agency centers with NTQF level 1, 2, 3 and 4 training qualifications

G. Workplace training indicators

- 62 The proportion of formal and informal business enterprises that undertake their own training activities for their workers with middle-level (NTQF level 1, 2, 3 and 4) training qualifications
- 63 The types of training formal and informal business enterprises provide for their employees with middle-level professional/ technical (NTQF level 1, 2, 3 and 4) training qualifications
- 64 The average duration of training formal and informal business enterprises provide for their employees with middle-level professional/ technical (NTQF level 1, 2, 3 and 4) training qualifications
- 65 The proportion of employees of formal and informal business enterprises with middle-level professional/ technical (NTQF level 1, 2, 3 and 4) training qualifications that have received training by their current employers
- 66 The types of training received by employees with middle-level professional/ technical (NTQF level 1, 2, 3 and 4) training qualifications of formal and informal business enterprises
- 67 The average duration of training received by employees with middle-level professional/ technical (NTQF level 1, 2, 3 and 4) training qualifications of formal and informal business enterprises
- 68 The average duration of training received by first-year graduates of middle-level professional/ technical (NTQF level 1, 2, 3 and 4) training courses

H. Track 2 long-course trainee aspirations indicators

- 69 The proportion of final-year students on middle-level (NTQF level 1, 2, 3 and 4) training courses that receive career guidance at school
- 70 Opinions of final-year students on middle-level (NTQF level 1, 2, 3 and 4) training courses that receive career guidance at school of how useful the career guidance they have received has been
- 71 Anticipated economic activity of final year students on middle-level (NTQF level 1, 2, 3 and 4) training courses, twelve months after graduation
- 72 Plans for further study of final year students on middle-level (NTQF level 1, 2, 3 and 4) training courses after graduation
- 73 Anticipated employment of final year students on middle-level (NTQF level 1, 2, 3 and 4) training courses after graduation

I. Track 2 long-course graduate destinations

- 74 Destinations of graduates from NTQF level 1 courses, in the first year after graduation
- 75 Destinations of graduates from NTQF level 2 courses, in the first year after graduation
- 76 Destinations of graduates from NTQF level 3 courses, in the first year after graduation
- 77 Destinations of graduates from NTQF level 4 courses, in the first year after graduation
- 78 Further full-time training undertaken by graduates from NTQF level 1 courses, in the first year after graduation
- 79 Further full-time training undertaken by graduates from NTQF level 2 courses, in the first year after graduation
- 80 Further full-time training undertaken by graduates from NTQF level 3 courses, in the first year after graduation
- 81 Further full-time training undertaken by graduates from NTQF level 4 courses, in the first year after graduation
- 82 Number of jobs graduates from NTQF level 1, 2, 3 and 4 training courses hold in the early years after graduation
- 83 Amount of unemployment graduates of NTQF level 1 courses experience in the early years after graduation
- 84 Amount of unemployment graduates of NTQF level 2 courses experience in the early years after graduation
- 85 Amount of unemployment graduates of NTQF level 3 courses experience in the early years after graduation

- 86 Amount of unemployment graduates of NTQF level 4 courses experience in the early years after graduation
- 87 The duration of current unemployment experienced by recent graduates of NTQF level 1 courses
- 88 The duration of current unemployment experienced by recent graduates of NTQF level 2 courses
- 89 The duration of current unemployment experienced by recent graduates of NTQF level 3 courses
- 90 The duration of current unemployment experienced by recent graduates of NTQF level 4 courses

J. Track 2 long-course graduate early employment indicators

- 91 Labor force participation (LFP) rates for graduates from middle-level (NTQF level 1, 2, 3 and 4) training courses
- 92 Unemployment rates for graduates from middle-level (NTQF level 1, 2, 3 and 4) training courses
- 93 Employee rates for graduates from middle-level (NTQF level 1, 2, 3 and 4) training courses
- 94 Employment of graduates from NTQF level 1 courses
- 95 Employment of graduates from NTQF level 2 courses
- 96 Employment of graduates from NTQF level 3 courses
- 97 Employment of graduates from NTQF level 4 courses
- 98 Hours worked by graduates from middle-level (NTQF level 1, 2, 3 and 4) training courses
- 99 Monthly wages of graduates from middle-level (NTQF level 1, 2, 3 and 4) training courses derived from employment
- 100 Monthly wages of graduates from middle-level (NTQF level 1, 2, 3 and 4) training courses who are working full-time

K. Track 2 long-course feedback indicators

- 101 Opinions of management in formal and informal business enterprises of the quality of middle-level (NTQF level 1, 2, 3 and 4) training provided by GDTVET long-course programs
- 102 Opinions of employees in formal and informal business enterprises with middle-level (NTQF level 1, 2, 3 and 4) training qualifications as to the quality of the training they received
- 103 Opinions of final-year students on middle-level (NTQF level 1, 2, 3 and 4) training courses as to the usefulness of the training they are receiving
- 104 Opinions of recent graduates from NTQF level 1 courses as to the relevance of the training they received on GDTVET long-course programs
- 105 Opinions of recent graduates from NTQF level 2 courses as to the relevance of the training they received on GDTVET long-course programs
- 106 Opinions of recent graduates from NTQF level 3 courses as to the relevance of the training they received on GDTVET long-course programs
- 107 Opinions of recent graduates from NTQF level 4 courses as to the relevance of the training they received on GDTVET long-course programs

L. International employment indicators

- 108 Number of Cambodians with NTQF level 1, 2, 3 and 4 training qualifications applying for overseas work
- 109 Number of Cambodians with NTQF level 1, 2, 3 and 4 training qualifications working overseas
- 110 Number of aliens with work permits employed in Cambodia in middle-level (ISCO major groups 3 to 8) occupations

Analysis of labor markets using KLMI

KLMI are not single dimensional. Each one of the 110 KLMI identified above can be seen as a 'primary unit', a single statistic, distinguishing itself from all the others. However, each in turn can take a variety of forms, depending upon the task it is being used for. There are five main ways KLMI can be used in labor market analysis: as *primary units* per se, in terms of their *composition*, in *comparative* format, as *trends* and as *projections*. Each of these uses of KLMI will involve different *measurements* and differing *statistical treatments*. Figures A4.6 and A4.7 provide examples of the options available. It is up to the judgement of the labor market analyst as to which way the KLMI is to be used in any given situation, and hence as to what is the most effective way to measure the KLMI and what statistical treatments are most appropriate.

Further analysis and interpretation

Well-considered measurement and statistical treatment of KLMI allow the labor market analyst to identify and highlight the *underlying patterns and trends* that are emerging in the labor market. Once these have been established the analyst can then ask the twin questions of what are the *likely causes* of these patterns and trends, and what are the *probable consequences* of them for TVET planning, management and policy-making. In doing so, the analyst may also need to decide what further investigation and analysis is required – whether and what additional information is needed, whether further statistical analyses, such as regression analysis, are required, and so on.

Figure A4.6. KLMI measurement options

KLMI PRIMARY UNIT	KLMI COMPOSITION	KLMI COMPARISONS	KLMI TRENDS	KLMI PROJECTIONS
The total value of each KLMI at a given time, or for a given period, expressed in the units in which the variable is primarily measured (for example, thousands of persons, USD millions)	Composition of a KLMI primary unit for the latest available year, expressed either in absolute terms or as a percentage of the total	(a) Comparisons of the same KLMI (primary unit) between categories (for example, across provinces, or between industrial sectors) (b) One KLMI (primary unit) expressed as a ratio, or percentage, of another KLMI (primary unit)	Changes in KLMI primary units, components and comparisons on a year by year basis, starting with the earliest year for which reliable data is available and coming up to the latest and most up-to-date	Extrapolations of KLMI primary units, components and comparisons, for each year over a given period in the future, based on past trends, or best estimates of likely future events

Figure A4.7 KLMI statistical treatment options

PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
Single item with text description	<ul style="list-style-type: none"> • Tabular form • Pie chart • Stacked bar chart • 100% stacked bar chart • Stacked column chart • 100% stacked column chart • Frequency distribution • Relative frequency distribution • Averages (and weighted averages) • Relative indices 	(a) <ul style="list-style-type: none"> • Tabular form • Column chart • Bar chart (b) Single item (ratio) with text description	<ul style="list-style-type: none"> • Actual figures set out in tabular form • Column chart • Column chart with trend line • Arithmetic scale line chart • Logarithmic scale line chart • Average annual rate of change (percent per annum) using Excel function LOGEST 	<ul style="list-style-type: none"> • Projected annual figures set out in tabular form • Arithmetic scale line chart showing exponential growth projections • Logarithmic scale line chart showing exponential growth projections

APPENDIX 4

ATTACHMENT A.4.1: PROVISIONAL CLASSIFICATION AND CODING SYSTEM

- Level of training
- Field of training
- Type of training institute
- GDTVET training provider
- Source of finance
- Province
- Economic status (of population age 12 and above)
- Occupation
- Industry
- Product

Level of course (NTQF)

CODE	
0	short course, no accreditation
1	Certificate Level 1
2	Certificate Level 2
3	Certificate Level 3
4	Diploma
5	Bachelor
6	Master

Field of training

CODE	
A000	<u>Agriculture</u>
A100	cereals
A110	general
A120	rice
A190	other
A200	vegetables & fruit production
A210	general
A220	mushrooms
A230	organic vegetables
A240	fruit production
A290	other
A300	livestock
A310	general
A320	poultry
A330	pigs
A340	cattle
A350	aquatic
A351	fish
A359	other
A390	other livestock

CODE

A400	fertiliser
A410	general
A420	natural
A430	worm raising
A900	other
A910	natural poison making
A920	basic veterinary
B000	<u>Mechanical engineering</u>
B100	agricultural machinery
B110	general
B120	repair
B200	automotive
B210	general
B220	repair
B300	motor cycle
B310	general
B320	repair
B400	small engines and machines
B410	general
B420	repair
B900	other
C000	<u>Electricity/Electrical</u>
C100	electricity
C110	general
C120	repair
C200	electrical
C210	general
C220	repair
D000	<u>Electronic</u>
D100	general
D200	repair
E000	<u>Airconditioning</u>
E100	general
E200	repair
F000	<u>Plumbing</u>
F100	general
F200	repair
G000	<u>Welding and Metal Fabrication</u>
G100	general
G900	other
H000	<u>Construction</u>
H100	general
H900	other
I000	<u>Masonry</u>
I100	general
I900	other

CODE	
J000	<u>Woodworking/carpentry</u>
J100	carpentry and woodworking
J200	joinery, cabinet making and furniture
K000	<u>Light Manufacturing</u>
K100	food processing
K200	soap making
L000	<u>Garments</u>
L100	general
L200	weaving
L300	sewing
L400	tailoring
L500	wedding outfitting
L900	other
M000	<u>Handicrafts and Jewellery</u>
M100	rattan
M200	jewelley
M300	stone carving
M400	wood carving
N000	<u>Hairdressing and beautician</u>
N100	hairdressing
N200	beautician
P000	<u>Computing</u>
P100	general
P200	information technology
P300	CAD/CAM
Q000	<u>Tourism and hospitality</u>
Q100	cookery
Q110	general
Q120	baking
Q190	other
Q200	front office
Q300	housekeeping
Q400	casino
Q900	other
R000	<u>Business/management</u>
R100	general
R200	accounting and bookkeeping
R300	small business management
R400	marketing
R900	other
S000	<u>Languages</u>
S100	English
S200	Korean
S300	Chinese
S900	other

CODE

T000	<u>Teacher training</u>
T100	junior teacher
T200	senior teacher
U000	<u>Art and design</u>
U100	general
U200	architecture
U300	graphic design
U400	photography
U900	other
Z000	<u>Miscellaneous</u>
Z001	pattern publication
Z002	flower decoration
Z003	driving
Z999	Other – non-specified

Type of training institute**CODE**

100	Polytechnics and other long-course institutes
200	Vocational training centers
300	Provincial training centers
400	Other training institutes
410	DOLVT
420	Schools
430	Women's training centers

GDTVET Training provider**CODE**

101	National Technical Training Institute (NTTI)
102	National Polytechnic Institute of Cambodia (NPIC)
103	Pre Kosomak Polytechnic Institute (PPI)
104	National Institute of Business (NIB)
105	Cambodia-Thai Skills Development Center (CTSDC)
106	Cambodia-India Entrepreneur Development Center (CIEDC)
107	Polytechnic Institute of Battambang Province (PIB)
108	Battambang Institute of Technology (BIT)
109	Polytechnic Institute of Kampot Province (PIK)
201	Russey Keo Industrial Technical College
202	Phnom Penh JVC Technical School
203	Sihanoukville JVC Technical School
204	Chantiers-Ecoles de Formation Professionnelle (CEFP)
205	Centre Nationale de la Soie (CNS)
206	Boeng Nimol Vocational Training Center
207	Rolang Vocational Training Center

CODE	
301	Pailin Provincial Training Center
302	Pery Kongla Provincial Training Center
303	Kompong Thom Provincial Training Center
304	Koh Kong Provincial Training Center
305	Krong Kep Provincial Training Center
306	Stung Treng Provincial Training Center
307	Kompong Speu Provincial Training Center
308	Sihanouk Provincial Training Center
309	Kompong Cham Provincial Training Center
310	Kratie Provincial Training Center
311	Siem Reap Provincial Training Center
312	Takeo Provincial Training Center
313	Ratankiri Provincial Training Center
314	Oudar Meanchey Provincial Training Center
315	Banteay Meanchey Provincial Training Center
316	Prey Veng Provincial Training Center
317	Say Rieng Provincial Training Center
318	Pursat Provincial Training Center
319	Kompong Chhnang Provincial Training Center
320	Kandal Provincial Training Center
411	Provincial Department of Labor and Vocational Training (Kompong Thom)
412	Provincial Department of Labor and Vocational Training (Takeo)
413	Provincial Department of Labor and Vocational Training (Preach Vihear)
431	Women's Center in Development (Preach Vihear)

Source of funds

CODE	
0	not stated
1	National Training Fund (NTF)
2	Priority Advancement Program (PAP)
3	Program Budget (PB)
4	NTF/PB
5	NTF/PAP
6	VSTP

Province

CODE	
01	Phnom Penh, Special Municipality of
02	Kep, Special Municipality of
03	Pailin, Special Municipality of
04	Sihanoukville, Special Municipality of
05	Banteay Meanchey

CODE	
06	Battambang
07	Kampong Cham
08	Kampong Chhnang
09	Kampong Speu
10	Kampong Thom
11	Kampot
12	Kandal
13	Koh Kong
14	Kratie
15	Mondulkiri
16	Oddar Meanchey
17	Preah Vihear
18	Pursat
19	Prey Veng
20	Ratanakiri
21	Siem Reap
22	Stung Treng
23	Svay Rieng
24	Takeo

Economic status (of population age 12 and above)

CODE	
0000	Population age 12 and above
1000	Economically inactive
1100	Schooling
1200	Housework
1300	Elderly
1400	Sick
1500	Handicapped
1900	Other
2000	Economically active
2100	Unemployed
2200	Employed
2210	Unpaid family worker
2220	Own-account/self-employed worker
2230	Employer
2240	Employee
2241	Public Servant
2242	State owned enterprise employee
2243	Co-operative employee
2244	Domestic private employee
2245	Joint venture employee
2249	Other

Occupation

CODE	
1	Managers
2	Professionals
3	Technicians and associate professionals
4	Clerical support workers
5	Service and sales workers
6	Skilled agricultural, forestry and fishery workers
7	Craft and related trades workers
8	Plant and machine operators, and assemblers
9	Elementary occupations
0	Armed forces occupations

International Standard Classification of Occupations (ISCO) 2008 four-digit code
<http://www.ilo.org/public/english/bureau/stat/isco/index.htm>

Industry

CODE	
A	Agriculture, forestry and fishing
B	Mining and quarrying
C	Manufacturing
D	Electricity, gas, steam and air conditioning supply
E	Water supply; sewerage, waste management and remediation activities
F	Construction
G	Wholesale and retail trade; repair of motor vehicles and motorcycles
H	Transportation and storage
I	Accommodation and food service activities
J	Information and communication
K	Financial and insurance activities
L	Real estate activities
M	Professional, scientific and technical activities
N	Administrative and support service activities
O	Public administration and defence; compulsory social security
P	Education
Q	Human health and social work activities
R	Arts, entertainment and recreation
S	Other service activities
T	Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use
U	Activities of extraterritorial organizations and bodies

International Standard Industrial Classification (ISIC) Rev.4 four-digit code
<http://unstats.un.org/unsd/cr/registry/regct.asp>

Product

CODE	
0	Agriculture, forestry and fishery products
1	Ores and minerals; electricity, gas and water
2	Food products, beverages and tobacco; textiles, apparel and leather products
3	Other transportable goods, except metal products, machinery and equipment
4	Metal products, machinery and equipment
5	Constructions and construction services
6	Distributive trade services; accommodation, food and beverage serving services; transport services; and electricity, gas and water distribution services
7	Financial and related services; real estate services; and rental and leasing services
8	Business and production services
9	Community, social and personal services

Central Product Classification (CPC) Ver.2 four-digit code

<http://unstats.un.org/unsd/cr/registry/regct.asp>

APPENDIX 4

ATTACHMENT A.4.2: KEY LABOR MARKET INDICATORS

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
MEASUREMENT OPTIONS	The document from which the data relating to the variable are sourced (for example, NIS Labor Force Survey, November 2001)	The total value of the variable at a given time, or for a given period, expressed in the units in which the variable is primarily measured (for example, thousands of persons, USD millions)	Composition of the primary unit for the latest available year, expressed either in absolute terms or as a percentage of the total	(a) Comparisons of the same variable (primary unit) between categories (for example, across provinces or regions, or between industrial sectors) (b) One variable (primary unit) expressed as a ratio, or percentage, of another variable (primary unit)	Changes in primary units, components and comparisons on a year by year basis, starting with the earliest year for which reliable data is available and coming up to the latest and most up-to-date	Extrapolations of primary units, components and comparisons, for each year over a given period in the future, based on past trends, or best estimates of likely future events
STATISTICAL TREATMENT OPTIONS		Single item with text description	<ul style="list-style-type: none"> • Tabular form • Pie chart • Stacked bar chart • 100% stacked bar chart • Stacked column chart • 100% stacked column chart • Frequency distribution • Relative frequency distribution • Averages (and weighted averages) • Relative indexes 	(a) <ul style="list-style-type: none"> • Tabular form • Column chart • Bar chart (b) Single item (ratio) with text description	<ul style="list-style-type: none"> • Actual figures set out in tabular form • Column chart • Column chart with trend line • Arithmetic scale line chart • Logarithmic scale line chart • Average annual rate of change (percent per annum) using Excel function LOGEST 	<ul style="list-style-type: none"> • Projected annual figures set out in tabular form • Arithmetic scale line chart showing exponential growth projections • Logarithmic scale line chart showing exponential growth projections

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
A. SKILL SUPPLY INDICATORS						
1 Person-months of short course (less than 12 months) training	GDTVET EMIS	The number of person-months (calculated by multiplying the number attending the course by the length of the course in months) of each short-course run by PTCs, other public TVET providers, by private providers and NGOs	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training 	By <ul style="list-style-type: none"> • PTC • Province • GDTVET, other government and private and non-government providers 	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training By <ul style="list-style-type: none"> • PTC • Province • GDTVET, other government and private and non-government providers 	
2 Numbers completing short course (less than 12 months) training	GDTVET EMIS	The number of trainees completing each short course run by PTCs, other public TVET providers, by private providers and NGOs	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training 	By <ul style="list-style-type: none"> • PTC • Province • GDTVET, other government and private and non-government providers 	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training By <ul style="list-style-type: none"> • PTC • Province • GDTVET, other government and private and non-government providers 	
3 Enrolments in NTQF level 1 training courses	GDTVET EMIS	The total number of enrolments in NTQF level 1 training courses in GDTVET training institutions and in other government and non-government technical education and training institutions	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training 	By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers, by <ul style="list-style-type: none"> • Fields of training • Province

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
4 Graduates from NTQF level 1 training courses	GDTVET EMIS	The total number of graduates from NTQF level 1 training courses in GDTVET training institutions and in other government and non-government technical education and training institutions	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training 	By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers, by <ul style="list-style-type: none"> • Fields of training • Province
5 Enrolments in NTQF level 2 training courses	GDTVET EMIS	The total number of enrolments in NTQF level 2 training courses in GDTVET training institutions and in other government and non-government technical education and training institutions	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training 	By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers, by <ul style="list-style-type: none"> • Fields of training • Province
6 Graduates from NTQF level 2 training courses	GDTVET EMIS	The total number of graduates from NTQF level 2 training courses in GDTVET training institutions and in other government and non-government technical education and training institutions	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training 	By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers, by <ul style="list-style-type: none"> • Fields of training • Province

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
7 Enrolments in NTQF level 3 training courses	GDTVET EMIS	The total number of enrolments in NTQF level 3 training courses in GDTVET training institutions and in other government and non-government technical education and training institutions	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training 	By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers, by <ul style="list-style-type: none"> • Fields of training • Province
8 Graduates from NTQF level 3 training courses	GDTVET EMIS	The total number of graduates from NTQF level 3 training courses in GDTVET training institutions and in other government and non-government technical education and training institutions	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training 	By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers, by <ul style="list-style-type: none"> • Fields of training • Province
9 Enrolments in NTQF level 4 training courses	GDTVET EMIS	The total number of enrolments in NTQF level 4 training courses in GDTVET training institutions and in other government and non-government technical education and training institutions	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training 	By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers, by <ul style="list-style-type: none"> • Fields of training • Province

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
10 Graduates from NTQF level 4 training courses	GDTVET EMIS	The total number of graduates from NTQF level 4 training courses in GDTVET training institutions and in other government and non-government technical education and training institutions	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training 	By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers and percentages by <ul style="list-style-type: none"> • Males/ females • Fields of training By <ul style="list-style-type: none"> • Province • GDTVET, other government and non-government providers 	Absolute numbers, by <ul style="list-style-type: none"> • Fields of training • Province
B. MACRO LABOR FORCE INDICATORS						
11 Population of working age	NIS Household Survey	Estimate of the population age 12 and over (in millions)	<ul style="list-style-type: none"> • Percent male/female • Percent urban/rural 	<ul style="list-style-type: none"> • By province 	<ul style="list-style-type: none"> • Total • Percent urban 	<ul style="list-style-type: none"> • Total • Percent urban
12 Labor force	NIS Household Survey	Estimate of the population age 12 and over who are either in employment or are actively seeking employment. Also referred to as the adult population that is <i>economically active</i> . (in millions)	<ul style="list-style-type: none"> • Percent male/female • Percent urban/rural • Percent of total in employment • Percent of males in employment • Percent of females in employment 	(a) <ul style="list-style-type: none"> • By province (b) <ul style="list-style-type: none"> • <i>labor force participation rate</i> (labor force divided by population age 12 plus) • <i>unemployment rate</i> (total employment divided by the labor force) (c) <ul style="list-style-type: none"> both rates in (b) by province 	<ul style="list-style-type: none"> • Total • Male labor force • Female labor force • Urban labor force • Rural labor force • Labor force participation rate • Unemployment rate 	<ul style="list-style-type: none"> • Total • Male labor force • Female labor force • Urban labor force • Rural labor force • Labor force participation rate
13 Unemployment	NIS Household Survey	Estimate of the number of people in the workforce, actively seeking a job, who are not currently employed (in thousands)	<ul style="list-style-type: none"> • Percent male/female • Percent urban/rural • Percent by age group, for males, females and total • Percent by level of education and training 	<ul style="list-style-type: none"> • By province 	<ul style="list-style-type: none"> • Total unemployment • Male unemployment • Female unemployment • Urban unemployment • Youth unemployment (age 12 to 14, 15 to 19, and 20 to 24) 	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
					<ul style="list-style-type: none"> Unemployment rate amongst workers with middle-level training 	
14 Total Employment	NIS Household Survey	Estimate of the number of people who are currently in paid or unpaid employment, including those who regard themselves as being underemployed (in millions)	<ul style="list-style-type: none"> Percent male/female Percent urban/rural Composition by level of education and training Composition by type of employment (for both males and females) Composition by ownership sector Composition by industrial (economic) sector Composition by occupational category (ISCO major, first digit, categories 1 to 0) 	<ul style="list-style-type: none"> Total employment by region and by province, and comparisons across provinces and regions of its composition (see previous column) 	<ul style="list-style-type: none"> Total employment Percent male/female Percent urban/rural Composition by level of education and training Composition by type of employment (for both males and females) Composition by ownership sector Composition by industrial (economic) sector Composition by major occupational category (ISCO major, first digit, categories) 	<ul style="list-style-type: none"> Total employment Percent male/female Percent urban/rural Composition by level of education and training Composition by type of employment (for both males and females) Composition by ownership sector Composition by industrial (economic) sector Composition by major occupational category (ISCO major, first digit, categories)
15 Employment in middle-level occupations	NIS Household Survey	Estimates of the combined number of people employed in ISCO first digit category occupations 3 to 8: <ul style="list-style-type: none"> 3 technicians, etc 4 clerks 5 service workers etc 6 skilled agric workers, 	<ul style="list-style-type: none"> Number, and percentage of total middle-level employment, in each occupation category Percent male/female in each category Absolute and percentage distribution 	<ul style="list-style-type: none"> Total employment in middle-level occupations as a percentage of total employment Employment in each middle-level category across regions and provinces 	<ul style="list-style-type: none"> Employment in each middle-level first digit category Distribution of employment in each category by ownership sector Distribution of employment in each 	<ul style="list-style-type: none"> Employment in each middle-level first digit category

INDICATOR		SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
			etc • 7 tradesmen etc • 8 operatives etc (in thousands)	of each category across ownership sectors • Absolute and percentage distribution of each category across industrial sectors • Number of workers within each category at the 2 and 3 digit levels of occupation		category by industrial sector	
16	Employment of workers with middle-level skills training	NIS Household Survey	Estimates of the combined number of people in employment with middle training level categories NTQF levels 1, 2, 3 and 4 (in thousands)	• Number, and percentage of total with middle-level training in each training level category • Percent male/female in each category • Absolute and percentage distribution of each category across ownership sectors • Absolute and percentage distribution of each category across industrial sectors • Number of workers within each category at the 2 and 3 digit levels of occupation	• Total number of workers with middle-level training as a percentage of total employment • Employment in each middle-level category across regions and provinces	• Employment in each middle-level first digit category • Distribution of employment in each category by ownership sector • Distribution of employment in each category by industrial sector	• Employment in each middle-level first digit category
17	Earnings and hours	NIS Household	(a) gross monthly	(a) relative frequency	Both (a) and (b)	Average monthly	Average monthly

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS	
	Survey	wages, salaries and other earnings derived from all types of employment (in USD or KHR) (b) weekly hours engaged in employment (in hours)	distributions of monthly earnings, and accompanying estimates of average monthly earnings (b) relative frequency distributions of weekly hours worked, and accompanying estimates of average hours worked per week	<ul style="list-style-type: none"> • For males/females • By region/province • By type of employment • By ownership sector • By industrial sector • By major occupational category • By level of training 	earnings <ul style="list-style-type: none"> • For males/females • By region/province • By type of employment • By ownership sector • By industrial sector • By major occupational category • By level of training 	earnings <ul style="list-style-type: none"> • For males/females • By region/province • By type of employment • By ownership sector • By industrial sector • By major occupational category • By level of training 	
C. ENTERPRISE EMPLOYMENT INDICATORS							
18	Employment of workers in middle-level occupations in formal and informal business enterprises	NIS Enterprise Survey	The total number of workers in each enterprise surveyed employed in ISCO first digit category occupations 3 to 8:	<ul style="list-style-type: none"> • Percent male/female • Percent in each occupation category 3 to 8 	<ul style="list-style-type: none"> • By size of enterprise (measured in terms of total enterprise employment) • By size of enterprise (measured in terms of annual general revenue) • By average labor productivity level (annual general revenue of the enterprise divided by total employment in the enterprise) • By category of ownership • By economic/industrial sector • By province • 	Average annual rates of change (percent per annum)	Predicted employment growth over next two years Average annual rates of change (percent per annum)

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
19 The relative importance of middle-level occupations in formal and informal business enterprise workforces	NIS Enterprise Survey	The combined number of workers employed in ISCO first digit category occupations 3 to 8, in each enterprise surveyed, expressed as a percentage of its total employment	(a) Relative frequency distributions: <ul style="list-style-type: none"> • Below 10% • 10 to less than 20% • 20 to less than 30% • 30 to less than 40% • 40 to less than 50% • 50 to less than 60% • 60 to less than 70% • 70 to less than 80% • 80 to less than 90% • 90% and over (b) Average percentage of total enterprise employment	(a) and (b) by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector • Province 	(b) only, by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector • Province 	
20 Employment of technicians and associate professionals in formal and informal business enterprises	NIS Enterprise Survey	The number of workers in each enterprise surveyed employed in ISCO first digit category occupations 3000	The number employed in second and third digit occupations within this category, in both absolute and relative terms		Average annual rates of change (percent per annum)	Predicted employment growth over next two years Average annual rates of change (percent per annum)
21 The relative importance of technician and associate professional occupations in formal and informal business enterprises	NIS Enterprise Survey	The number of people employed in ISCO first digit category 3000 occupations in each of the enterprises surveyed, expressed as a percentage of total employment in each enterprise	(a) Relative frequency distributions: <ul style="list-style-type: none"> • Below 10% • 10 to less than 20% • 20 to less than 30% • 30 to less than 40% • 40 to less than 50% • 50 to less than 60% • 60 to less than 70% • 70 to less than 80% • 80 to less than 90% • 90% and over (b) Average percentage	(a) and (b) by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector 	(b) only, by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership 	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS	
			of total enterprise employment	<ul style="list-style-type: none"> Province 	<ul style="list-style-type: none"> Economic/industrial sector Province 		
22	Employment of clerks in formal and informal business enterprises	NIS Enterprise Survey	The number of workers in each enterprise surveyed employed in ISCO first digit category occupations 4000	The number employed in second and third digit occupations within this category, in both absolute and relative terms		Average annual rates of change (percent per annum)	Predicted employment growth over next two years Average annual rates of change (percent per annum)
23	The relative importance of clerical occupations in formal and informal business enterprises	NIS Enterprise Survey	The number of people employed in ISCO first digit category 4000 occupations in each of the enterprises surveyed, expressed as a percentage of total employment in each enterprise	<p>(a) Relative frequency distributions:</p> <ul style="list-style-type: none"> Below 10% 10 to less than 20% 20 to less than 30% 30 to less than 40% 40 to less than 50% 50 to less than 60% 60 to less than 70% 70 to less than 80% 80 to less than 90% 90% and over <p>(b) Average percentage of total enterprise employment</p>	<p>(a) and (b) by</p> <ul style="list-style-type: none"> Size of enterprise (measured in terms of total enterprise employment) Size of enterprise (measured in terms of annual general revenue) By average labor productivity level Category of ownership Economic/industrial sector Province 	<p>(b) only, by</p> <ul style="list-style-type: none"> Size of enterprise (measured in terms of total enterprise employment) Size of enterprise (measured in terms of annual general revenue) By average labor productivity level Category of ownership Economic/industrial sector Province 	
24	Employment of service workers, shop and market sales workers in formal and informal business enterprises	NIS Enterprise Survey	The number of workers in each enterprise surveyed employed in ISCO first digit category occupations 5000	The number employed in second and third digit occupations within this category, in both absolute and relative terms		Average annual rates of change (percent per annum)	Predicted employment growth over next two years Average annual rates of change (percent per annum)
25	The relative importance of service, shop and market sales worker	NIS Enterprise Survey	The number of people employed in ISCO first digit category 5000 occupations in each of	<p>(a) Relative frequency distributions:</p> <ul style="list-style-type: none"> Below 10% 10 to less than 20% 	<p>(a) and (b) by</p> <ul style="list-style-type: none"> Size of enterprise (measured in terms of total enterprise 	<p>(b) only, by</p> <ul style="list-style-type: none"> Size of enterprise (measured in terms of total enterprise 	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
occupations in formal and informal business enterprises		the enterprises surveyed , expressed as a percentage of total employment in each enterprise	<ul style="list-style-type: none"> • 20 to less than 30% • 30 to less than 40% • 40 to less than 50% • 50 to less than 60% • 60 to less than 70% • 70 to less than 80% • 80 to less than 90% • 90% and over (b) Average percentage of total enterprise employment	employment) <ul style="list-style-type: none"> • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector • Province 	employment) <ul style="list-style-type: none"> • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector • Province 	
26 Employment of skilled agricultural and fishery workers in formal and informal business enterprises	NIS Enterprise Survey	The number of workers in each enterprise surveyed employed in ISCO first digit category occupations 6000	The number employed in second and third digit occupations within this category, in both absolute and relative terms		Average annual rates of change (percent per annum)	Predicted employment growth over next two years Average annual rates of change (percent per annum)
27 The relative importance of skilled agricultural and fishery occupations in formal and informal business enterprises	NIS Enterprise Survey)	The number of people employed in ISCO first digit category 6000 occupations in each of the enterprises surveyed , expressed as a percentage of total employment in each enterprise	(a) Relative frequency distributions: <ul style="list-style-type: none"> • Below 10% • 10 to less than 20% • 20 to less than 30% • 30 to less than 40% • 40 to less than 50% • 50 to less than 60% • 60 to less than 70% • 70 to less than 80% • 80 to less than 90% • 90% and over (b) Average percentage of total enterprise employment	(a) and (b) by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector • Province 	(b) only, by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector • Province 	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS	
28	Employment of craft and related trade workers in formal and informal business enterprises	NIS Enterprise Survey	The number of workers in each enterprise surveyed employed in ISCO first digit category occupations 7000	The number employed in second and third digit occupations within this category, in both absolute and relative terms		Average annual rates of change (percent per annum)	Predicted employment growth over next two years Average annual rates of change (percent per annum)
29	The relative importance of craft and related trade worker occupations in formal and informal business enterprises	NIS Enterprise Survey	The number of people employed in ISCO first digit category 7000 occupations in each of the enterprises surveyed, expressed as a percentage of total employment in each enterprise	(a) Relative frequency distributions: <ul style="list-style-type: none"> • Below 10% • 10 to less than 20% • 20 to less than 30% • 30 to less than 40% • 40 to less than 50% • 50 to less than 60% • 60 to less than 70% • 70 to less than 80% • 80 to less than 90% • 90% and over (b) Average percentage of total enterprise employment	(a) and (b) by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector • Province 	(b) only, by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector • Province 	
30	Employment of plant and machinery operators and assemblers in formal and informal business enterprises	NIS Enterprise Survey	The number of workers in each enterprise surveyed employed in ISCO first digit category occupations 8000	The number employed in second and third digit occupations within this category, in both absolute and relative terms		Average annual rates of change (percent per annum)	Predicted employment growth over next two years Average annual rates of change (percent per annum)
31	The relative importance of machine operator and assembler occupations in	NIS Enterprise Survey	The number of people employed in ISCO first digit category 8000 occupations in each of the enterprises	(a) Relative frequency distributions: <ul style="list-style-type: none"> • Below 10% • 10 to less than 20% • 20 to less than 30% 	(a) and (b) by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) 	(b) only, by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) 	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
formal and informal business enterprises		surveyed , expressed as a percentage of total employment in each enterprise	<ul style="list-style-type: none"> • 30 to less than 40% • 40 to less than 50% • 50 to less than 60% • 60 to less than 70% • 70 to less than 80% • 80 to less than 90% • 90% and over (b) Average percentage of total enterprise employment	<ul style="list-style-type: none"> • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector • Province 	<ul style="list-style-type: none"> • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector • Province 	
32 Employment of workers with middle-level technician/trades training in formal and informal business enterprises	NIS Enterprise Survey	The total number of workers in each enterprise surveyed with NTQF levels1, 2, 3 and 4	<ul style="list-style-type: none"> • Percent male/female • Percent with each NTQF level of training 	<ul style="list-style-type: none"> • By size of enterprise (measured in terms of total enterprise employment) • By size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • By category of ownership • By economic/industrial sector • By province 	Average annual rates of change (percent per annum)	Predicted employment growth over next two years Average annual rates of change (percent per annum)
33 The relative importance of workers with middle-level technician/trades training in the workforces of formal and informal business enterprises	NIS Enterprise Survey	The combined number of workers with NTQF levels1, 2, 3 and 4 in each enterprise surveyed, expressed as a percentage of its total employment	(a) Relative frequency distributions: <ul style="list-style-type: none"> • Below 10% • 10 to less than 20% • 20 to less than 30% • 30 to less than 40% • 40 to less than 50% • 50 to less than 60% • 60 to less than 70% • 70 to less than 80% • 80 to less than 90% 	(a) and (b) by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial 	(b) only, by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of 	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS	
			<ul style="list-style-type: none"> • 90% and over (b) Average percentage of total enterprise employment	sector <ul style="list-style-type: none"> • ISCO first digit occupational categories 4 to 8 • Province 	ownership <ul style="list-style-type: none"> • Economic/industrial sector • ISCO first digit occupational categories 4 to 8 • Province 		
34	The relative importance of elementary level skilled workers in the workforces of formal and informal business enterprises	NIS Enterprise Survey	The number of workers with NTQF level 1 training in each enterprise surveyed, expressed as a percentage of its total employment	(a) Relative frequency distributions: <ul style="list-style-type: none"> • Below 10% • 10 to less than 20% • 20 to less than 30% • 30 to less than 40% • 40 to less than 50% • 50 to less than 60% • 60 to less than 70% • 70 to less than 80% • 80 to less than 90% • 90% and over (b) Average percentage of total enterprise employment	(a) and (b) by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector • ISCO first digit occupational categories 4 to 8 • Province 	(b) only, by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector • ISCO first digit occupational categories 4 to 8 • Province 	
35	The relative importance of semi-skilled workers (with certificate level 2) in the workforces of formal and informal business enterprises	NIS Enterprise Survey	The number of workers with NTQF level 2 training in each enterprise surveyed, expressed as a percentage of its total employment	(a) Relative frequency distributions: <ul style="list-style-type: none"> • Below 10% • 10 to less than 20% • 20 to less than 30% • 30 to less than 40% • 40 to less than 50% • 50 to less than 60% • 60 to less than 70% • 70 to less than 80% 	(a) and (b) by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level 	(b) only, by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor 	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS	
			<ul style="list-style-type: none"> • 80 to less than 90% • 90% and over (b) Average percentage of total enterprise employment	<ul style="list-style-type: none"> • Category of ownership • Economic/industrial sector • ISCO first digit occupational categories 4 to 8 • Province 	productivity level <ul style="list-style-type: none"> • Category of ownership • Economic/industrial sector • ISCO first digit occupational categories 4 to 8 • Province 		
36	The relative importance of skilled workers (with certificate level 3) in the workforces of formal and informal business enterprises	NIS Enterprise Survey	The number of workers with NTQF level 3 training in each enterprise surveyed, expressed as a percentage of its total employment	(a) Relative frequency distributions: <ul style="list-style-type: none"> • Below 10% • 10 to less than 20% • 20 to less than 30% • 30 to less than 40% • 40 to less than 50% • 50 to less than 60% • 60 to less than 70% • 70 to less than 80% • 80 to less than 90% • 90% and over (b) Average percentage of total enterprise employment	(a) and (b) by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector • ISCO first digit occupational categories 4 to 8 • Province 	(b) only, by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) • By average labor productivity level • Category of ownership • Economic/industrial sector • ISCO first digit occupational categories 4 to 8 • Province 	
37	The relative importance of higher skilled workers (with certificate level 4) in the workforces of formal and informal business	NIS Enterprise Employee Sub-Survey	The number of workers with NTQF level 4 training in each enterprise surveyed, expressed as a percentage of its total employment	(a) Relative frequency distributions: <ul style="list-style-type: none"> • Below 10% • 10 to less than 20% • 20 to less than 30% • 30 to less than 40% • 40 to less than 50% • 50 to less than 60% 	(a) and (b) by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general revenue) 	(b) only, by <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Size of enterprise (measured in terms of annual general 	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS	
enterprises			<ul style="list-style-type: none"> • 60 to less than 70% • 70 to less than 80% • 80 to less than 90% • 90% and over (b) Average percentage of total enterprise employment	<ul style="list-style-type: none"> • By average labor productivity level • Category of ownership • Economic/industrial sector • ISCO first digit occupational categories 4 to 8 • Province 	revenue) <ul style="list-style-type: none"> • By average labor productivity level • Category of ownership • Economic/industrial sector • ISCO first digit occupational categories 4 to 8 • Province 		
38	Hours worked by employees of formal and informal business enterprises	NIS Enterprise Employee Sub-Survey	Hours per week normally worked by employees in the formal and informal business enterprises surveyed	(a) Relative frequency distributions of hours worked per week <ul style="list-style-type: none"> • below 15 hours • 15 to less than 35 • 35 hours or more (b) Average hours per week	(a) and (b) by <ul style="list-style-type: none"> • males/females • employment status (permanent, contract, etc) • level of professional/ technical training • occupation, classified at the first and second digit levels • enterprise ownership category • enterprise economic sector/ industry 	(b) by <ul style="list-style-type: none"> • males/females • employment status (permanent, contract, etc) • level of professional/ technical training • occupation, classified at the first and second digit levels • enterprise ownership category • enterprise economic sector/ industry 	
39	Monthly wages derived from employment in formal and informal business enterprises	NIS Enterprise Employee Sub-Survey	Monthly wages (and other monetary entitlements) earned from working in formal and informal business enterprises (KHR thousand)	(a) Relative frequency distribution of monthly wages (KHR thousand) <ul style="list-style-type: none"> • under 500 • 5 -< 750 • 750 -< 1,000 • 1,000 -< 1,250 • 1,250 -< 1,500 • 1,500 -< 2,000 	(a) and (b) by <ul style="list-style-type: none"> • hours worked per week • employment status • male/female 	(b) by <ul style="list-style-type: none"> • hours worked per week • employment status male/female 	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
			<ul style="list-style-type: none"> • 2,000 and over (b) average monthly wages 			
40 Monthly wages of full-time employees of formal and informal business enterprises	NIS Enterprise Employee Sub-Survey	Monthly wages of those working <i>35 hours a week or more</i> as employees for formal and informal business enterprises (KHR thousand)	(a) Relative frequency distribution of monthly wages (KHR thousand) <ul style="list-style-type: none"> • under 500 • 500 -< 750 • 750 -< 1,000 • 1,000 -< 1,250 • 1,250 -< 1,500 • 1,500 -< 2,000 • 2,000 and over (b) average monthly wages	(a) and (b) by <ul style="list-style-type: none"> • males/females • age of employee • employment status (permanent, contract, etc) • level of professional/ technical training • occupation, classified at the first and second digit levels • enterprise ownership category • enterprise economic sector/ industry • size of the enterprise (measured in terms of total employment) • size of enterprise (measured in terms of annual general revenue) • province 	(b) by <ul style="list-style-type: none"> • males/females • age of employee • employment status (permanent, contract, etc) • level of professional/ technical training • occupation, classified at the first and second digit levels • enterprise ownership category • enterprise economic sector/ industry • size of the enterprise (measured in terms of total employment) • size of enterprise (measured in terms of annual general revenue) • province 	
D. JOB OPPORTUNITY INDICATORS						
41 Job vacancies in middle-level occupations in formal and informal business enterprises	NIS Enterprise Survey	The estimated number of vacancies enterprises identify, at the first, second and third digit levels of ISCO occupations 4000 to 8000	Actual numbers in each category	As a percentage of the total numbers employed in each category, by <ul style="list-style-type: none"> • enterprise ownership category • enterprise economic sector/ industry • size of the enterprise 	Annual vacancy figures for each category of occupation, and percentage change in vacancies year by year	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
				(measured in terms of total employment) <ul style="list-style-type: none"> size of enterprise (measured in terms of annual general revenue) province 		
42 Job advertisements in major national and provincial newspapers for middle-level (ISCO major groups 3 to 8) occupations	DLMI conducted surveys	The number of vacancies advertised, at the first, second and third digit levels of ISCO occupations 4000 to 8000	Actual numbers in each category, and any information regarding pay and conditions	As a percentage of the total numbers advertised in each category, by <ul style="list-style-type: none"> enterprise ownership category enterprise economic sector/ industry province 	Monthly job opportunity figures for each category of occupation, and percentage change in vacancies month by month	
43 Job opportunities registered by employers on the NTB online Job Shop, for middle-level (ISCO major groups 3 to 8) occupations	NTB online Job Shop	The number of job opportunities registered, at the first, second and third digit levels of ISCO occupations 4000 to 8000	Actual numbers in each category, and any information regarding pay and conditions	As a percentage of the total numbers registered in each category, by <ul style="list-style-type: none"> enterprise ownership category enterprise economic sector/ industry province 	Weekly job opportunity figures for each category of occupation, and percentage change in vacancies week by week	
44 Job opportunities registered by employers at National Employment Agency centers, for middle-level (ISCO major groups 3 to 8) occupations	MOLVT National Employment Agency centers	The number of job opportunities registered, at the first, second and third digit levels of ISCO occupations 4000 to 8000	Actual numbers in each category, and any information regarding pay and conditions	As a percentage of the total numbers registered in each category, by <ul style="list-style-type: none"> enterprise ownership category enterprise economic sector/ industry province 	Weekly job opportunity figures for each category of occupation, and percentage change in vacancies week by week	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
E. JOB SEEKER INDICATORS						
45	Number of registered job-seekers on NTB's online Job Shop with NTQF level 1, 2, 3 and 4 training qualifications.	GDTVET	Total number of registered job-seekers on NTB's online Job Shop with NTQF level 1, 2, 3 and 4 training qualifications.	Actual numbers and percentages at each NTQF level	As a percentage of the total numbers at each NTQF level,, by <ul style="list-style-type: none"> gender field of training province 	Monthly (or even weekly) numbers at each NTQF level, by <ul style="list-style-type: none"> gender field of training province
46	Number of registered job-seekers at National Employment Agency centers, with NTQF level 1, 2, 3 and 4 training qualifications.	GDTVET	Total number of registered job-seekers at National Employment Agency centers, with NTQF level 1, 2, 3 and 4 training qualifications.	Actual numbers and percentages at each NTQF level	As a percentage of the total numbers at each NTQF level,, by <ul style="list-style-type: none"> gender field of training province 	Monthly (or even weekly) numbers at each NTQF level, by <ul style="list-style-type: none"> gender field of training province
F. RECRUITMENT INDICATORS						
47	Turnover rates in formal and informal business enterprises of workers with middle-level technician/trades training	NIS Enterprise Survey	(a) Numbers of workers with NTQF levels1, 2, 3 and 4 joining the enterprise in a year (b) Numbers of workers with NTQF levels1, 2, 3 and 4 leaving the enterprise in a year	For each category of worker in NTQF levels1, 2, 3 and 4 and for these categories as a group: <ul style="list-style-type: none"> Number joining as a percentage of total employment of this category of worker Number leaving as a percentage of total employment of this category of worker Number joining expressed as a ratio to those leaving (base = 1.00) 	Average joining and leaving percentages and turnover ratios for each of NTQF levels1, 2, 3 and 4 and for these categories as a group	Average joining and leaving percentages and turnover ratios for each of NTQF levels1, 2, 3 and 4 and for these categories as a group

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
48 Difficulty in recruiting workers with middle-level technician/trades training	NIS Enterprise Survey	Number of enterprises indicating that they are currently experiencing difficulty recruiting workers with NTQF levels 1, 2, 3 and 4	Percentage of enterprises experiencing difficulty with each category of recruit	Percentage of all enterprises surveyed, and in the following categories <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Category of ownership • Economic/industrial sector • Province 	Percentage of all enterprises surveyed,	
49 Main reasons for experiencing difficulty in recruiting workers with middle-level technician/trades training	NIS Enterprise Survey	Weighted enterprise ranking of reasons, for each NTQF level 1, 2, 3 and 4 <ul style="list-style-type: none"> • Number 1 ranking x4 • Number 2 ranking x3 • Number 3 ranking x2 • Number 4 ranking x1 	<i>A relative importance index</i> calculated by summing the weighted rankings for each reason and expressing them as a percentage of the total sum of weighted responses	The relative importance index for each NTQF level 1, 2, 3 and 4, by: <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Category of ownership • Economic/industrial sector • Province 	The relative importance index for each NTQF level 1, 2, 3 and 4	
50 Methods used by formal and informal business enterprises in recruiting workers with middle-level technician/trades training	NIS Enterprise Survey	Weighted enterprise ranking of methods of recruitment, for each NTQF level 1, 2, 3 and 4 <ul style="list-style-type: none"> • Number 1 ranking x3 • Number 2 ranking x2 • Number 3 ranking x1 	<i>A relative importance index</i> calculated by summing the weighted rankings for each method of recruitment, and expressing them as a percentage of the total sum of weighted responses	The relative importance index for each NTQF level 1, 2, 3 and 4, by: <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Category of ownership • Economic/industrial sector • Province • 	The relative importance index for each NTQF level 1, 2, 3 and 4	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
51	Characteristics employers in formal and informal business enterprises look for in recruits with middle-level technician/trades training	NIS Enterprise Survey	Weighted enterprise ranking of characteristics, for each NTQF level 1, 2, 3 and 4 <ul style="list-style-type: none"> • Number 1 ranking x3 • Number 2 ranking x2 • Number 3 ranking x1 	<i>A relative importance index</i> calculated by summing the weighted rankings for each characteristic and expressing them as a percentage of the total sum of weighted responses	The relative importance index for each NTQF level 1, 2, 3 and 4, by: <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Category of ownership • Economic/industrial sector • Province 	The relative importance index for each NTQF level 1, 2, 3 and 4
52	Characteristics employers in formal and informal business enterprises consider graduates from middle-level technician/trades training institutions possess	NIS Enterprise Survey	Weighted enterprise ranking of characteristics, for each NTQF level 1, 2, 3 and 4 <ul style="list-style-type: none"> • Number 1 ranking x3 • Number 2 ranking x2 • Number 3 ranking x1 	<i>A relative importance index</i> calculated by summing the weighted rankings for each characteristic and expressing them as a percentage of the total sum of weighted responses	(a) The relative importance index for each NTQF level 1, 2, 3 and 4, by: <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Category of ownership • Economic/industrial sector • Province (b) a matching of relative importance index of recruit characteristics (variable 37) with relative importance index of graduate characteristics (variable 38)	The relative importance index for each NTQF level 1, 2, 3 and 4
53	Sources of skills required by employees of formal and informal business enterprises to perform their current jobs	NIS Enterprise Employee Sub-Survey	Weighted enterprise ranking of sources of skills <ul style="list-style-type: none"> • Number 1 ranking x7 • Number 2 ranking x6 • Number 3 ranking x5 • Number 4 ranking x4 • Number 5 ranking x3 	<i>A relative importance index</i> , calculated by summing the weighted rankings for each sources of skills and expressing them as a percentage of the total sum of weighted	The relative importance index for each category of employee by: <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Category of ownership 	The relative importance index for each category of employee

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
		<ul style="list-style-type: none"> Number 6 ranking x2 Number 7 ranking x1 	responses, for each of the following category of employees <ul style="list-style-type: none"> Males/females Workers with NTQF levels 1, 2, 3 and 4 Workers in first and second digit ISCO occupations 	<ul style="list-style-type: none"> Economic/industrial sector Province 		
54	Average time it takes recruits straight from TVET training institute to reach full productivity in their first jobs in formal and informal business enterprises	NIS Enterprise Survey	Estimates made by enterprise management of the average time it takes recruits straight from TVET long-course programs with NTQF level 1, 2, 3 and 4 to reach full productivity in their first jobs	Relative frequency distributions for each NTQF level 1, 2, 3 and 4 <ul style="list-style-type: none"> Less than 1 week More than 1 week but less than 1 month More than 1 month but less than 3 months More than 3 months but less than 6 months More than 6 months 	Relative frequency distributions for each NTQF level 1, 2, 3 and 4, by <ul style="list-style-type: none"> Size of enterprise (measured in terms of total enterprise employment) Category of ownership Economic/industrial sector Province 	Relative frequency distributions for each NTQF level 1, 2, 3 and 4
55	Percentage of final year students on TVET long-course programs that already have jobs to go to upon completion	Baseline tracer surveys of final-year students on GDTVET long-course programs	The percentage of participants in baseline surveys of final year students on NTQF level 1, 2, 3 and 4 Training courses, who indicate that they already have had job offers before graduation	The proportion who already have jobs before graduation, by <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2, 3 and 4 Field of training Province Training institute 	The proportion who already have jobs before graduation, by <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2, 3 and 4 Field of training Province Training institute 	
56	Means by which final-year students on middle-level	Baseline tracer surveys of final-year students on	Sources of job-offers final-year students participating in the	Percentage of respondents indicating each source of job offer	Percentage distribution by <ul style="list-style-type: none"> Male/female Age group 	Percentage distribution by <ul style="list-style-type: none"> Male/female

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
training courses secure jobs prior to graduating	GDTVET long-course programs	base-line tracer surveys indicate they have received prior to graduation		<ul style="list-style-type: none"> • NTQF level 1, 2, 3 and 4 • Field of training • Province • Training institute 	<ul style="list-style-type: none"> • Age group • NTQF level 1, 2, 3 and 4 • Field of training • Province • Training institute 	
57 Assessment by final-year students on middle-level training courses, who have yet to be offered a job, of how easy it will be to find employment	Baseline tracer surveys of final-year students on GDTVET long-course programs	Ratings by baseline tracer survey respondents of the relative ease of finding employment after graduation	<p>(a) The percentage of final-year students rating the prospect</p> <ul style="list-style-type: none"> • Very easy • Easy • Difficult • Very difficult <p>(b) <i>A relative ease index for Job Shop</i></p>	<p>The <i>relative ease index</i> for jobsearch, by</p> <ul style="list-style-type: none"> • Male/female • Age group • NTQF level 1, 2, 3 and 4 • Field of training • Intended type of employment • Province • Training institute 	<p>The <i>relative ease index</i> for jobsearch, by</p> <ul style="list-style-type: none"> • Male/female • Age group • NTQF level 1, 2, 3 and 4 • Field of training • Intended type of employment • Province • Training institute 	
58 Amount of time it takes graduates of middle-level courses (who are not already in jobs) to find employment after graduation	Follow-up tracer surveys of graduates from GDTVET long-course programs	The number of months respondents to the follow-up tracer survey, who had not secured a job prior to graduation, indicate it took them to find a job after graduation.	<p>(a) relative frequency distribution of months</p> <p>(b) average number of months</p>	<p>(a) and (b) by</p> <ul style="list-style-type: none"> • Male/female • NTQF level 1, 2, 3 and 4 • Field of training • Province • Training institute 	<p>(b) by</p> <ul style="list-style-type: none"> • Male/female • NTQF level 1, 2, 3 and 4 • Field of training • Province • Training institute 	
59 Means by which first-year out graduates of middle-level training courses secure jobs	Follow-up tracer surveys of graduates from GDTVET long-course programs	Sources of current job indicated by graduates participating in the first-year tracer surveys	Percentage of respondents indicating each source of job offer	Percentage distribution by <ul style="list-style-type: none"> • Male/female • NTQF level 1, 2, 3 and 4 • Province • Training institute 	Percentage distribution by <ul style="list-style-type: none"> • Male/female • NTQF level 1, 2, 3 and 4 • Province • Training institute 	
60 Number of job placements of registered job-	GDTVET	Total number of job placements on NTB's online Job Shop with	Actual numbers and percentages at each NTQF level	As a percentage of the total numbers at each NTQF level,, by	Monthly (or even weekly) numbers at each NTQF level, by	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
seekers on NTB's online Job Shop with NTQF level 1, 2, 3 and 4 training qualifications		NTQF level 1, 2, 3 and 4 training qualifications.		<ul style="list-style-type: none"> gender field of training province 	<ul style="list-style-type: none"> gender field of training province 	
61 Number of job placements of registered job-seekers at National Employment Agency centers with NTQF level 1, 2, 3 and 4 training qualifications	GDTVET	Total number of job placements at National Employment Agency centers, with NTQF level 1, 2, 3 and 4 training qualifications.	Actual numbers and percentages at each NTQF level	As a percentage of the total numbers at each NTQF level,, by <ul style="list-style-type: none"> gender field of training province 	Monthly (or even weekly) numbers at each NTQF level, by <ul style="list-style-type: none"> gender field of training province 	
G. WORKPLACE TRAINING INDICATORS						
62 The percentage of formal and informal business enterprises that undertake their own training activities for their workers with middle-level training qualifications	NIS Enterprise Survey	<ul style="list-style-type: none"> The percentage of enterprises surveyed that indicated that they provide training for employees with NTQF level 1, 2, 3 and 4 	<ul style="list-style-type: none"> The percentage for each NTQF level 1, 2, 3 and 4 	<ul style="list-style-type: none"> The percentage for each NTQF level 1, 2, 3 and 4 by Size of enterprise (measured in terms of total enterprise employment) Category of ownership Economic/industrial sector Province 	<ul style="list-style-type: none"> The percentage for each NTQF level 1, 2, 3 and 4, by Size of enterprise (measured in terms of total enterprise employment) Category of ownership Economic/industrial sector Province 	
63 The types of training formal and informal business enterprises provide for their employees with middle-level professional/ technical training qualifications	NIS Enterprise Survey	<ul style="list-style-type: none"> The percentage of enterprises surveyed that indicated they provide training of different types for employees with NTQF level 1, 2, 3 	For each NTQF level 1, 2, 3 and 4, the percentage of enterprises indicating they provide <ul style="list-style-type: none"> On-the-job informal training Off-the-job in-house 	The percentages providing each type of training for employees with each NTQF level 1, 2, 3 and 4, by <ul style="list-style-type: none"> Size of enterprise (measured in terms of total enterprise employment) 	The percentages providing each type of training for employees with each NTQF level 1, 2, 3 and 4	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS	
		and 4	formal training <ul style="list-style-type: none"> Off-the-job training using outside training facilities Other (note that these percentage do not have to sum to 100) 	<ul style="list-style-type: none"> Category of ownership Economic/industrial sector Province 			
64	The average duration of training formal and informal business enterprises provide for their employees with middle-level professional/technical training qualifications	NIS Enterprise Survey	The average number of hours of training enterprises indicate they provide of each type for employees with NTQF level 1, 2, 3 and 4	For each NTQF level 1, 2, 3 and 4, the average number of hours training enterprises indicating they provide through <ul style="list-style-type: none"> On-the-job informal training Off-the-job in-house formal training Off-the-job training using outside training facilities Other 	For each NTQF level 1, 2, 3 and 4, the average number of hours training enterprises indicating they provide through each type of training, by <ul style="list-style-type: none"> Size of enterprise (measured in terms of total enterprise employment) Category of ownership Economic/industrial sector Province 	For each NTQF level 1, 2, 3 and 4, the average number of hours training enterprises indicating they provide through each type of training	
65	The percentage of employees of formal and informal business enterprises with middle-level professional/technical training qualifications that have received training by their current employers	NIS Enterprise Employee Sub-Survey	The percentage of employees with NTQF level 1, 2, 3 and 4 who have indicated they have received training	The percentage for each NTQF level 1, 2, 3 and 4 by <ul style="list-style-type: none"> Male/female Age group Employment status 	The percentage for each NTQF level 1, 2, 3 and 4, by <ul style="list-style-type: none"> Size of enterprise (measured in terms of total enterprise employment) Category of ownership Economic/industrial sector Province 	The percentage for each NTQF level 1, 2, 3 and 4, by <ul style="list-style-type: none"> Size of enterprise (measured in terms of total enterprise employment) Category of ownership Economic/industrial sector Province 	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
66 The types of training received by employees with middle-level professional/ technical training qualifications of formal and informal business enterprises	NIS Enterprise Employee Sub-Survey	The percentage of employees with NTQF level 1, 2, 3 and 4 surveyed who indicated they received training of different types from their employers	For each NTQF level 1, 2, 3 and 4, the percentage of employees indicating they receive <ul style="list-style-type: none"> On-the-job informal training Off-the-job in-house formal training Off-the-job training using outside training facilities Other (note that these percentage do not have to sum to 100)	The percentages of employees with each NTQF level 1, 2, 3 and 4 receiving each type of training, by <ul style="list-style-type: none"> Size of enterprise (measured in terms of total enterprise employment) Category of ownership Economic/industrial sector Province 	The percentages of employees with each NTQF level 1, 2, 3 and 4 receiving each type of training	
67 The average duration of training received by employees with middle-level professional/ technical training qualifications of formal and informal business enterprises	NIS Enterprise Employee Sub-Survey	The average number of hours employees with NTQF level 1, 2, 3 and 4 surveyed indicated they received in training of different types from their employers	For employees with each NTQF level 1, 2, 3 and 4, the average number of hours training they receive from their employers through <ul style="list-style-type: none"> On-the-job informal training Off-the-job in-house formal training Off-the-job training using outside training facilities Other 	For employees with each NTQF level 1, 2, 3 and 4, the average number of training they receive from their employers through each type of training, by <ul style="list-style-type: none"> Size of enterprise (measured in terms of total enterprise employment) Category of ownership Economic/industrial sector Province 	For employees with each NTQF level 1, 2, 3 and 4, the average number of training they receive from their employers through each type of training	
68 The average duration of training received by first-year graduates of middle-level	Follow-up tracer surveys of graduates from GDTVET long-course programs	The number of hours per week first-year graduates from GDTVET long-course training institutes	(a) a relative frequency distribution of hours of training per week <ul style="list-style-type: none"> less than 5 hours 5 to less than 10 	(a) and (b) for <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2, 3 and 4 Field of training 	(b) for <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2, 3 and 4 	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS	
professional/technical training courses		indicate they receive in their place of employment	hours <ul style="list-style-type: none"> 10 to less than 15 hours 15 hours or more (b) average hours per week	<ul style="list-style-type: none"> Province Training institute 	<ul style="list-style-type: none"> Field of training Province Training institute 		
H. TRACK 2 TRAINEE ASPIRATIONS INDICATORS							
69	Proportion of final-year students on middle-level training courses that receive career guidance at school	Baseline tracer surveys of final-year students on GDTVET long-course programs	The proportion of final year students on NTQF level 1, 2, 3 and 4 courses at GDTVET long-course training institutes who indicate they have received career guidance from their schools		The proportion receiving career guidance, by <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2, 3 and 4 Field of training Province Training institute 	The proportion receiving career guidance, by <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2, 3 and 4 Field of training Province Training institute 	
70	Opinion of final-year students on middle-level training courses that receive career guidance at school of how useful the career guidance they have received has been	Baseline tracer surveys of final-year students on GDTVET long-course programs	The rating by final year students on NTQF level 1, 2, 3 and 4 courses at GDTVET long-course training institutes of the usefulness of the career guidance they have received from their schools	(a) The percentage of final-year students rating career guidance as to whether it was <ul style="list-style-type: none"> Very useful Useful Little use No use (b) A <i>relative useful index</i> for career guidance	The <i>relative useful index</i> for career guidance, by <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2, 3 and 4 Field of training Province Training institute 	The <i>relative useful index</i> for career guidance, by <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2, 3 and 4 Field of training Province Training institute 	
71	Anticipated economic activity of final year students on middle-level training courses, twelve months after graduation	Baseline tracer surveys of final-year students on GDTVET long-course programs	Number of participants in baseline surveys of final year students at GDTVET long-course training institutes on NTQF level 1, 2, 3 and 4 courses	Percentage of respondents who indicated that they anticipated being <ul style="list-style-type: none"> In employment In further full-time study In neither 	Percentage distribution of anticipated destinations, by <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2, 3 and 4 Field of training Province Training institute 	Percentage distribution of anticipated destinations, by <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2, 3 and 4 Field of training 	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS	
			employment nor full-time study		<ul style="list-style-type: none"> Province Training institute 		
72	Plans for further study of final year students on middle-level training courses after graduation	Baseline tracer surveys of final-year students on GDTVET long-course programs	Number of participants in baseline surveys of final year students on NTQF level 1, 2, 3 and 4 courses, who indicate that they intend to pursue full-time study after graduating from their training courses	Percentage distribution across (a) intended further education destinations (e.g college, university, etc) (b) intended fields of study	(a) and (b) by <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2, 3 and 4 Field of training Province Training institute 	(a) and (b) by <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2, 3 and 4 Field of training Province Training institute 	
73	Anticipated employment of final year students on middle-level training courses after graduation	Baseline tracer surveys of final-year students on GDTVET long-course programs	Number of participants in baseline surveys of final year students on NTQF level 1, 2, 3 and 4 courses, who indicate that they intend entering the labor force and seeking employment after graduating from their training courses	Percentage distribution across (a) intended occupations (ISCO one and two digit categories) (b) intended type of employment (c) intended economic/ industrial sectors	(a), (b) and (c) by <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2, 3 and 4 Field of training Province Training institute 	(a) and (b) by <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2, 3 and 4 Field of training Province Training institute 	
I. TRACK 2 GRADUATE DESTINATIONS							
74	Destinations of graduates from NTQF level 1 courses, in the first year after graduation	Follow-up tracer surveys of graduates from GDTVET long-course programs	The current major activity indicated by each graduate of NTQF level 1 courses, in each of the first year after graduation	The percentage indicating that their major activity is <ol style="list-style-type: none"> further full-time study other non-labor force activities economically inactive – not in the labor force [sum of (i) and (ii)] in the labor force 	Percentages by <ul style="list-style-type: none"> Male/female Province Training institute 	Percentages for each successive cohort of graduates	

INDICATOR		SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
				and in employment v. in the labor force, but not in a job (unemployed) vi. economically active – in the labor force [sum of (iv) and (v)]			
75	Destinations of graduates from NTQF level 2 courses, in the first year after graduation	Follow-up tracer surveys of graduates from GDTVET long-course programs	The current major activity indicated by each graduate of NTQF level 2 courses, in each of the first year after graduation	The percentage indicating that their major activity is vii. further full-time study viii. other non-labor force activities ix. economically inactive – not in the labor force [sum of (i) and (ii)] x. in the labor force and in employment xi. in the labor force, but not in a job (unemployed) xii. economically active – in the labor force [sum of (iv) and (v)]	Percentages by <ul style="list-style-type: none"> • Male/female • Province • Training institute 	Percentages for each successive cohort of graduates	
76	Destinations of graduates from NTQF level 3 courses, in the first year after graduation	Follow-up tracer surveys of graduates from GDTVET long-course programs	The current major activity indicated by each graduate of NTQF level 3 courses, in each of the first year after graduation	The percentage indicating that their major activity is xiii. further full-time study xiv. other non-labor force activities	Percentages by <ul style="list-style-type: none"> • Male/female • Province • Training institute 	Percentages for each successive cohort of graduates	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
			xv. economically inactive – not in the labor force [sum of (i) and (ii)] xvi. in the labor force and in employment xvii. in the labor force, but not in a job (unemployed) xviii. economically active – in the labor force [sum of (iv) and (v)]			
77 Destinations of graduates from NTQF level 4 courses, in the first year after graduation	Follow-up tracer surveys of graduates from GDTVET long-course programs	The current major activity indicated by each graduate of NTQF level 4 courses, in each of the first year after graduation	The percentage indicating that their major activity is xix. further full-time study xx. other non-labor force activities xxi. economically inactive – not in the labor force [sum of (i) and (ii)] xxii. in the labor force and in employment xxiii. in the labor force, but not in a job (unemployed) xxiv. economically active – in the labor force [sum of (iv) and (v)]	Percentages by <ul style="list-style-type: none"> • Male/female • Province • Training institute 	Percentages for each successive cohort of graduates	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS	
78	Further full-time training undertaken by graduates from NTQF level 1 courses, in the first year after graduation	Follow-up tracer surveys of graduates from GDTVET long-course programs	The number of graduates from NTQF level 1 courses, in the first year after graduation, undertaking further full-time training	Percentage distribution of those undertaking further full-time study across (a) NTQF level (b) fields of further full-time training	(a) and (b), by <ul style="list-style-type: none"> • Male/female • Field of training • Training institute 	Comparisons for each successive cohort of graduates	
79	Further full-time training undertaken by graduates from NTQF level 2 courses, in the first year after graduation	Follow-up tracer surveys of graduates from GDTVET long-course programs	The number of graduates from NTQF level 2 courses, in the first year after graduation, undertaking further full-time training	Percentage distribution of those undertaking further full-time study across (a) NTQF level (b) fields of further full-time training	(a) and (b), by <ul style="list-style-type: none"> • Male/female • Field of training • Training institute 	Comparisons for each successive cohort of graduates	
80	Further full-time training undertaken by graduates from NTQF level 3 courses, in the first year after graduation	Follow-up tracer surveys of graduates from GDTVET long-course programs	The number of graduates from NTQF level 3 courses, in the first year after graduation, undertaking further full-time training	Percentage distribution of those undertaking further full-time study across (a) NTQF level (b) fields of further full-time training	(a) and (b), by <ul style="list-style-type: none"> • Male/female • Field of training • Training institute 	Comparisons for each successive cohort of graduates	
81	Further full-time training undertaken by graduates from NTQF level 4 courses, in the first year after graduation	Follow-up tracer surveys of graduates from GDTVET long-course programs	The number of graduates from NTQF level 4 courses, in the first year after graduation, undertaking further full-time training	Percentage distribution of those undertaking further full-time study across (a) NTQF level (b) fields of further full-time training	(a) and (b), by <ul style="list-style-type: none"> • Male/female • Field of training • Training institute 	Comparisons for each successive cohort of graduates	
82	Number of jobs graduates from NTQF level 1, 2, 3 and 4 training courses hold in the early years after graduation	Follow-up tracer surveys of graduates from GDTVET long-course programs	<ul style="list-style-type: none"> • The number of jobs graduates from NTQF level 1, 2, 3 and 4 training courses indicate they have had since graduation 	<ul style="list-style-type: none"> • For each NTQF level 1, 2, 3 and 4 (a) a relative frequency distribution • 1 only • 2 • 3 	(a) and (b) in the first, second and third year after graduation, by <ul style="list-style-type: none"> • Male/female • Field of training • Training institute 	Comparisons for each successive cohort of graduates	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
			<ul style="list-style-type: none"> • 4 • 5 or more (b) average number of jobs			
83	Amount of unemployment graduates of NTQF level 1 courses experience in the early years after graduation	Follow-up tracer surveys of graduates from GDTVET long-course programs	The number of weeks of unemployment all graduates of NTQF level 1 courses (<i>both those who are currently employed and those who are currently unemployed</i>) have experienced since graduation	(a) A frequency distribution <ul style="list-style-type: none"> • 1 week or less • between 1 and 4 weeks • between 4 and 12 weeks • between 12 and 26 weeks • over 26 weeks (b) average number of weeks	(a) and (b) in the first, second and third year after graduation, by <ul style="list-style-type: none"> • Male/female • Field of training • Training institute 	Comparisons for each successive cohort of graduates
84	Amount of unemployment graduates of NTQF level 2 courses experience in the early years after graduation	Follow-up tracer surveys of graduates from GDTVET long-course programs	The number of weeks of unemployment all graduates of NTQF level 2 courses (<i>both those who are currently employed and those who are currently unemployed</i>) have experienced since graduation	(a) A frequency distribution <ul style="list-style-type: none"> • 1 week or less • between 1 and 4 weeks • between 4 and 12 weeks • between 12 and 26 weeks • over 26 weeks (b) average number of weeks	(a) and (b) in the first, second and third year after graduation, by <ul style="list-style-type: none"> • Male/female • Field of training • Training institute 	Comparisons for each successive cohort of graduates
85	Amount of unemployment graduates of NTQF level 3 courses experience in the	Follow-up tracer surveys of graduates from GDTVET long-course programs	The number of weeks of unemployment all graduates of NTQF level 3 courses (<i>both those who are currently</i>	(a) A frequency distribution <ul style="list-style-type: none"> • 1 week or less • between 1 and 4 weeks 	(a) and (b) in the first, second and third year after graduation, by <ul style="list-style-type: none"> • Male/female • Field of training 	Comparisons for each successive cohort of graduates

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
early years after graduation		<i>employed and those who are currently unemployed</i>) have experienced since graduation	<ul style="list-style-type: none"> • between 4 and 12 weeks • between 12 and 26 weeks • over 26 weeks (b) average number of weeks	<ul style="list-style-type: none"> • Training institute 		
86 Amount of unemployment graduates of NTQF level 4 courses experience in the early years after graduation	Follow-up tracer surveys of graduates from GDTVET long-course programs	The number of weeks of unemployment all graduates of NTQF level 4 courses (<i>both those who are currently employed and those who are currently unemployed</i>) have experienced since graduation	(a) A frequency distribution <ul style="list-style-type: none"> • 1 week or less • between 1 and 4 weeks • between 4 and 12 weeks • between 12 and 26 weeks • over 26 weeks (b) average number of weeks	(a) and (b) in the first, second and third year after graduation, by <ul style="list-style-type: none"> • Male/female • Field of training • Training institute 	Comparisons for each successive cohort of graduates	
87 The duration of current unemployment experienced by recent graduates of NTQF level 1 courses	Follow-up tracer surveys of graduates from GDTVET long-course programs	The number of weeks unemployed graduates of NTQF level 4 courses have had since their most recent jobs	(a) A frequency distribution <ul style="list-style-type: none"> • 1 week or less • between 1 and 4 weeks • between 4 and 12 weeks • between 12 and 26 weeks • over 26 weeks (b) average number of weeks	(a) and (b) by <ul style="list-style-type: none"> • Male/female • Field of training • Training institute 	Comparisons for each successive cohort of graduates	
88 The duration of current unemployment	Follow-up tracer surveys of graduates from	The number of weeks unemployed graduates of NTQF level 2	(a) A frequency distribution <ul style="list-style-type: none"> • 1 week or less 	(a) and (b) by <ul style="list-style-type: none"> • Male/female • Field of training 	Comparisons for each successive cohort of graduates	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
experienced by recent graduates of NTQF level 2 courses	GDTVET long-course programs	courses have had since their most recent jobs	<ul style="list-style-type: none"> • between 1 and 4 weeks • between 4 and 12 weeks • between 12 and 26 weeks • over 26 weeks (b) average number of weeks	<ul style="list-style-type: none"> • Training institute 		
89 The duration of current unemployment experienced by recent graduates of NTQF level 3 courses	Follow-up tracer surveys of graduates from GDTVET long-course programs	The number of weeks unemployed graduates of NTQF level 3 courses have had since their most recent jobs	(a) A frequency distribution <ul style="list-style-type: none"> • 1 week or less • between 1 and 4 weeks • between 4 and 12 weeks • between 12 and 26 weeks • over 26 weeks (b) average number of weeks	(a) and (b) by <ul style="list-style-type: none"> • Male/female • Field of training • Training institute 	Comparisons for each successive cohort of graduates	
90 The duration of current unemployment experienced by recent graduates of NTQF level 4 courses	Follow-up tracer surveys of graduates from GDTVET long-course programs	The number of weeks unemployed graduates of NTQF level 4 courses have had since their most recent jobs	(a) A frequency distribution <ul style="list-style-type: none"> • 1 week or less • between 1 and 4 weeks • between 4 and 12 weeks • between 12 and 26 weeks • over 26 weeks (b) average number of weeks	(a) and (b) by <ul style="list-style-type: none"> • Male/female • Field of training • Training institute 	Comparisons for each successive cohort of graduates	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
J. TRACK 2 GRADUATE EARLY EMPLOYMENT INDICATORS						
91	Labor force participation (LFP) rates for graduates from middle-level training courses	Follow-up tracer surveys of graduates from GDTVET long-course programs	The proportion of training institute graduates surveyed that indicate that they are in the labor force (that is, are either currently employed or are unemployed but actively seeking work)	The LFP rates for graduates (the LFP rate is calculated by dividing the number in the labor force by the total number surveyed)	LFP rates for by <ul style="list-style-type: none"> • Male/female • NTQF level 1, 2; 3; and 4 • Training institute 	LFP rates for each year's cohort, by <ul style="list-style-type: none"> • Male/female • NTQF level 1, 2; 3; and 4 • Training institute
92	Unemployment rates for graduates from middle-level training courses	Follow-up tracer surveys of graduates from GDTVET long-course programs	The proportion of training institute graduates surveyed that indicate that they are in the labor force but are currently unemployed (actively seeking work)	The unemployment rates for graduates (the unemployment rate is calculated by dividing the number unemployed by the sum of those employed and unemployed)	Unemployment rates ,by <ul style="list-style-type: none"> • Male/female • NTQF level 1, 2; 3; and 4 • Training institute 	Unemployment rates for each year's cohort, by <ul style="list-style-type: none"> • Male/female • NTQF level 1, 2; 3; and 4 • Training institute
93	Employee rates for graduates from middle-level training courses	Follow-up tracer surveys of graduates from GDTVET long-course programs	The proportion of training institute graduates surveyed who are in employment and that indicate that they are working as employees	The employee rates for graduates (the employee rate is calculated by dividing the number of employees by the total number in employment)	Employee rates for <ul style="list-style-type: none"> • Male/female • NTQF level 1, 2; 3; and 4 • Training institute 	Employee rates for each year's cohort for <ul style="list-style-type: none"> • Male/female • NTQF level 1, 2; 3; and 4 • Training institute
94	Employment of graduates from NTQF level 1 courses	Follow-up tracer surveys of graduates from GDTVET long-course programs	Numbers of NTQF level 1 course graduates surveyed	Percentage distribution by <ul style="list-style-type: none"> • Type of employment • Ownership sector • Economic/ industrial sector • Occupation (ISCO first and second digit categories) 		These employment patterns for each year's cohort

INDICATOR		SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
95	Employment of graduates from NTQF level 2 courses	Follow-up tracer surveys of graduates from GDTVET long-course programs	Numbers of NTQF level 2 course graduates surveyed	Percentage distribution by <ul style="list-style-type: none"> Type of employment Ownership sector Economic/ industrial sector Occupation (ISCO first and second digit categories) 		These employment patterns for each year's cohort	
96	Employment of graduates from NTQF level 3 courses	Follow-up tracer surveys of graduates from GDTVET long-course programs	Numbers of NTQF level 3 course graduates surveyed	Percentage distribution by <ul style="list-style-type: none"> Type of employment Ownership sector Economic/ industrial sector Occupation (ISCO first and second digit categories) 		These employment patterns for each year's cohort	
97	Employment of graduates from NTQF level 4 courses	Follow-up tracer surveys of graduates from GDTVET long-course programs	Numbers of NTQF level 4 course graduates surveyed	Percentage distribution by <ul style="list-style-type: none"> Type of employment Ownership sector Economic/ industrial sector Occupation (ISCO first and second digit categories) 		These employment patterns for each year's cohort	
98	Hours worked by graduates from middle-level training courses	Follow-up tracer surveys of graduates from GDTVET long-course programs	Hours per week normally worked by graduates of NTQF level 1, 2; 3; and 4 courses	(a) Average hours per week (b) Percent working 35 hours a week or more		(a) and (b) for each year's cohort	
99	Monthly wages graduates from middle-level	Follow-up tracer surveys of graduates from	Monthly wages earned from employment by graduates of NTQF	Average monthly wages for <ul style="list-style-type: none"> Males 		Average monthly wages for) for each year's cohort	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
training courses derived from employment	GDTVET long-course programs	level 1, 2; 3; and 4 courses (KHR thousand)	<ul style="list-style-type: none"> • Females • Both sexes 			
100 Monthly wages graduates from middle-level training courses who are working full-time	Follow-up tracer surveys of graduates from GDTVET long-course programs	Monthly wages of graduates of NTQF level 1, 2; 3; and 4 courses working 35 hours a week or more (KHR thousand)	<p>Average monthly wages for</p> <ul style="list-style-type: none"> • Males • Females • Both sexes 	<ul style="list-style-type: none"> • 	Average monthly wages for each year's cohort	
K. TRACK 2 TRAINING COURSE FEEDBACK INDICATORS						
101 Opinion of management of formal and informal business enterprises of the quality of middle-level training provided by government training institutions	NIS Enterprise Survey	<p>The rating by the enterprises surveyed of the quality of three key aspects of training provided at NTQF level 1, 2; 3; and 4</p> <ul style="list-style-type: none"> • Theoretical knowledge • Practical skills training • General preparation for employment 	<p>(a) The percentage of enterprises rating each aspect of training at each NTQF level 1, 2; 3; and 4 as to whether it was</p> <ul style="list-style-type: none"> • Very good • Good • Fair • Unsatisfactory • Poor <p>(b) A relative quality index for each aspect of training for each training level calculated as a weighted average of responses (where the weights assigned are</p> <ul style="list-style-type: none"> • Very good x 5 • Good x 4 • Fair x 3 • Unsatisfactory x 2 • Poor x 1) • 	<p>The relative quality index for each aspect of training for each NTQF level 1, 2; 3; and 4 by</p> <ul style="list-style-type: none"> • Size of enterprise (measured in terms of total enterprise employment) • Category of ownership • Economic/Industrial sector • Province 	The relative quality index for each aspect of training for each NTQF level 1, 2; 3; and 4	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
102 Opinion of employees in formal and informal business enterprises with middle-level training qualifications as to the quality of the training they received	NIS Enterprise Employee Sub-Survey	The rating by the employees surveyed with NTQF level 1, 2; 3; and 4 of the quality of three key aspects of the training they received <ul style="list-style-type: none"> Theoretical knowledge Practical skills training General preparation for employment 	(a) The percentage of employees rating each aspect of training at each NTQF level 1, 2; 3; and 4 as to whether it was <ul style="list-style-type: none"> Very good Good Fair Unsatisfactory Poor (b) <i>A relative quality index</i> for each aspect of training for each training level	The <i>relative quality index</i> for each aspect of training for each NTQF level 1, 2; 3; and 4, by <ul style="list-style-type: none"> Size of enterprise (measured in terms of total enterprise employment) Category of ownership Economic/industrial sector Province 	The <i>relative quality index</i> for each aspect of training for each NTQF level 1, 2; 3; and 4	
103 Opinion of final-year students on middle-level training courses as to the usefulness of the training they are receiving	Baseline tracer surveys of final-year students on GDTVET long-course programs	The rating by final year students on NTQF level 1, 2; 3; and 4 courses at GDTVET long-course institutes of the usefulness of the training they are receiving	(a) The percentage of final-year students rating their training as to whether it was <ul style="list-style-type: none"> Very useful Useful Little use No use (b) <i>A relative usefulness index</i> for training programs	The <i>relative usefulness index</i> for training, by <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2; 3; and 4 Field of training Intended type of employment Province Training institute 	The <i>relative usefulness index</i> for training, by <ul style="list-style-type: none"> Male/female Age group NTQF level 1, 2; 3; and 4 Field of training Intended type of employment Province Training institute 	
104 Opinion of recent graduates from NTQF level 1 courses as to the relevance of the training they received on GDTVET long-course programs	Follow-up tracer surveys of graduates from GDTVET long-course programs	The rating by graduates from NTQF level 1 courses of the relevance of two key aspects of the training they received <ul style="list-style-type: none"> Theoretical knowledge Practical skills training 	(a) The percentage of skilled worker certificate course graduates rating their training as to whether it was <ul style="list-style-type: none"> Very relevant relevant Of little relevance Of no relevance (b) <i>A relevance index</i>	<i>A relevance index</i> for training for <ul style="list-style-type: none"> Males/females Field of study Type of employment Ownership sector Economic/ industrial sector ISCO first and second digit occupational 		

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
			for training	categories <ul style="list-style-type: none"> Province Training institute 		
105	Opinion of recent graduates from NTQF level 2 courses as to the relevance of the training they received on GDTVET long-course programs	Follow-up tracer surveys of graduates from GDTVET long-course programs	The rating by graduates from NTQF level 2 courses of the relevance of two key aspects of the training they received <ul style="list-style-type: none"> Theoretical knowledge Practical skills training 	(a) The percentage of skilled worker certificate course graduates rating their training as to whether it was <ul style="list-style-type: none"> Very relevant relevant Of little relevance Of no relevance (b) <i>A relevance index</i> for training	<i>A relevance index</i> for training for <ul style="list-style-type: none"> Males/females Field of study Type of employment Ownership sector Economic/ industrial sector ISCO first and second digit occupational categories Province Training institute 	
106	Opinion of recent graduates from NTQF level 3 courses as to the relevance of the training they received on GDTVET long-course programs	Follow-up tracer surveys of graduates from GDTVET long-course programs	The rating by graduates from NTQF level 3 courses of the relevance of two key aspects of the training they received <ul style="list-style-type: none"> Theoretical knowledge Practical skills training 	(a) The percentage of skilled worker certificate course graduates rating their training as to whether it was <ul style="list-style-type: none"> Very relevant relevant Of little relevance Of no relevance (b) <i>A relevance index</i> for training	<i>A relevance index</i> for training for <ul style="list-style-type: none"> Males/females Field of study Type of employment Ownership sector Economic/ industrial sector ISCO first and second digit occupational categories Province Training institute 	
107	Opinion of recent graduates from NTQF level 4 courses as to the relevance of the training they	Follow-up tracer surveys of graduates from GDTVET long-course programs	The rating by graduates from NTQF level 4 courses of the relevance of two key aspects of the training they received	(a) The percentage of skilled worker certificate course graduates rating their training as to whether it was <ul style="list-style-type: none"> Very relevant 	<i>A relevance index</i> for training for <ul style="list-style-type: none"> Males/females Field of study Type of employment Ownership sector 	

INDICATOR	SOURCES OF DATA	PRIMARY UNIT	COMPOSITION	COMPARISONS	TRENDS	PROJECTIONS
received on GDTVET long-course programs		<ul style="list-style-type: none"> Theoretical knowledge Practical skills training 	<ul style="list-style-type: none"> relevant Of little relevance Of no relevance (b) A <i>relevance index</i> for training	<ul style="list-style-type: none"> Economic/ industrial sector ISCO first and second digit occupational categories Province Training institute 		
L. INTERNATIONAL EMPLOYMENT INDICATORS						
108	Number of Cambodians with NTQF level 1, 2, 3 and 4 training qualifications applying for overseas work	MOLVT/Association of Cambodian Recruitment Agencies (ACRA)	Total number of Cambodians with NTQF level 1, 2, 3 and 4 training qualifications applying for employment in other countries	Actual numbers and percentages at each NTQF level	As a percentage of the total numbers at each NTQF level,, by <ul style="list-style-type: none"> gender field of training province preferred country of employment 	Quarterly numbers at each NTQF level, by <ul style="list-style-type: none"> gender field of training province preferred country of employment
109	Number of Cambodians with NTQF level 1, 2, 3 and 4 training qualifications working overseas	MOLVT/Association of Cambodian Recruitment Agencies (ACRA)	Total number of Cambodians with NTQF level 1, 2, 3 and 4 training qualifications placed in employment in other countries	Actual numbers and percentages at each NTQF level	As a percentage of the total numbers at each NTQF level,, by <ul style="list-style-type: none"> gender field of training province country of employment 	Quarterly numbers at each NTQF level, by <ul style="list-style-type: none"> gender field of training province country of employment
110	Number of aliens with work permits employed in Cambodia in middle-level (ISCO major groups 3 to 8) occupations	MOLVT/Ministry of the Interior Department of Immigration	The total number of alien permit holders employed in ISCO major occupational groups 3 to 8 (at the first, second and third digit levels)	Actual numbers and percentages in each occupational group	As a percentage of the total numbers in each occupational group, by <ul style="list-style-type: none"> country of origin enterprise ownership category enterprise economic sector/ industry province 	Quarterly numbers in each occupational group, by <ul style="list-style-type: none"> country of origin enterprise ownership category enterprise economic sector/ industry province

APPENDIX 5:

Outline Terms of Reference for a Consultant for the Establishment of a National Employment Agency

Scope of Work

1. Review existing project documents regarding the history, background, and recent developments pertaining to the intent to establish a National Employment Agency (NEA)
2. Conduct consultative meetings with individuals and groups that are stakeholders in the establishment of the NEA
3. Gather available information and statistics regarding the labor market and the employers market
4. Gather key and/or priority sets of data and information that are not currently available through rapid primary data gathering techniques and or focus group discussions with groups of NEA stakeholders
5. Prepare a draft proposal for the establishment of the NEA that will include its proposed vision, mission, objectives, key strategies, main programs and services
6. Facilitate a project planning workshop to validate the feasibility of the draft proposal
7. After validation, finalize the draft proposal
8. Present the finalized proposal in a meeting with high ranking officials of concerned government ministries and offices, decision-makers in educational institutions (public and private universities and TVET institutions), associations of employers, and representatives from organizations of students in universities and public and private TVET institutions
9. Implement ownership-building techniques by conducting a workshop on implementation planning and monitoring systems, inviting individuals and group of stakeholders in the implementation and technical support level as participants
10. Based on the implementation plan, determine the resources needed (e.g. for current and fixed assets), prepare preliminary calculations of annual expenses, and prepare the total budget requirement to establish the NEA
11. Estimate possible revenues that can be generated through the NEA for the first 2 years of operation
12. Prepare preliminary financial analysis based on a set of financial notes and assumptions

Duration

Four and a half (4.5) person months

Consultant Qualifications

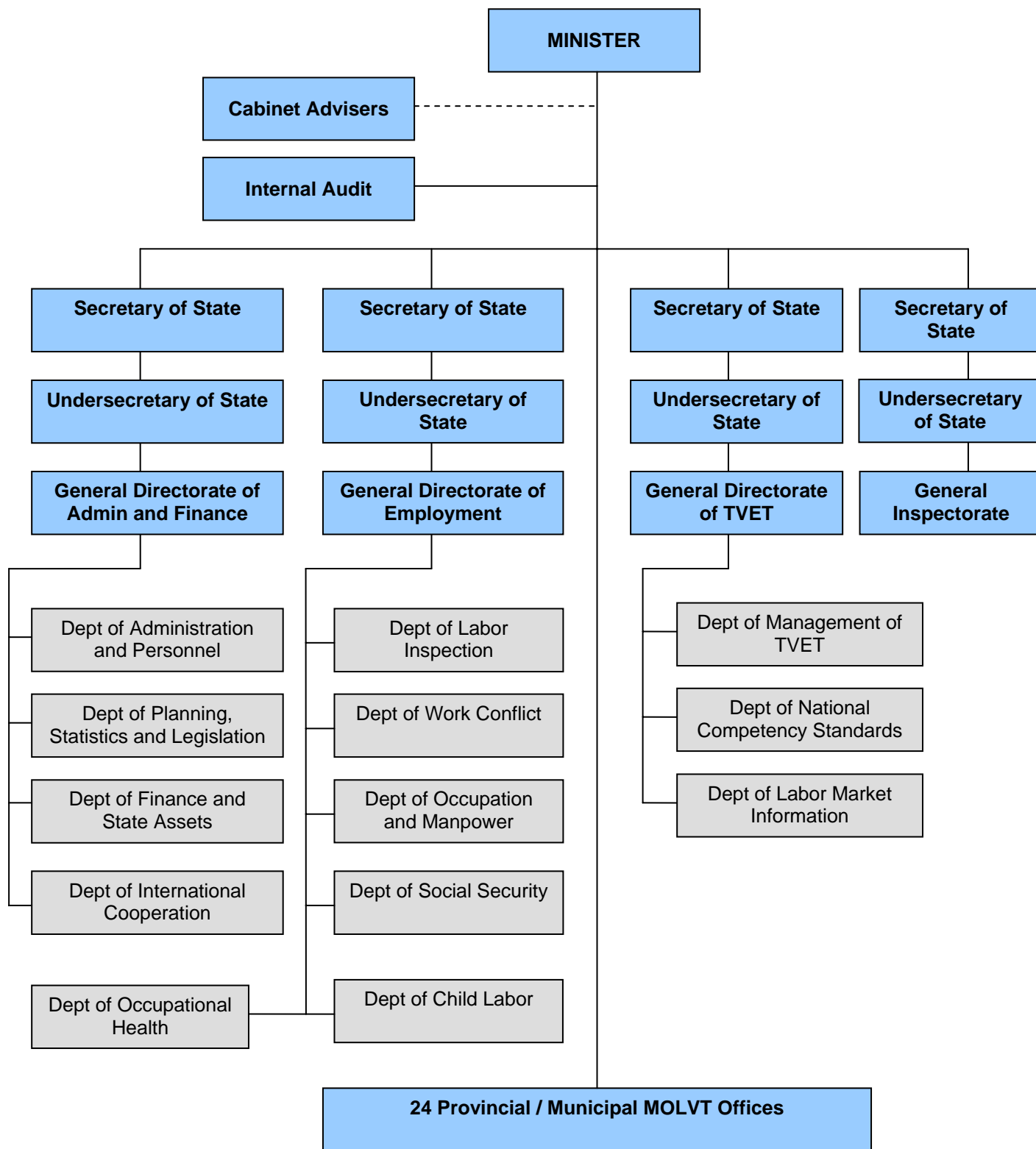
1. Academic preparation and ten years experience in human resource management and development or employee-employer relations management and development
2. Experience in conducting stakeholder analysis and in using participatory planning and research methods
3. Experience in organizational design, planning, and development
4. Knowledge of and experience in employer and employee services elements, systems, and procedures
5. Functional knowledge and experience in preparing financial projections and financial analysis
6. High relational skills and cultural flexibility
7. Previous work experience in the Greater Mekong Sub-region could be helpful

APPENDIX 6: SUPPORT INITIATIVES FOR SMES AND SEs*

- Pilot programs on one stop shops for SMEs business licensing (1 under the Ministry of Interior and the 2 others under the Ministry of Industry, Mining and Energy) in Battambang and in Siem Reap; SME Sub Committee in the process of developing its Website to include a one-stop window
- USAID and Asia Foundation: Facilitating registration and licensing procedures for provincial MSMEs (2004 – 2005);
- GTZ's Private Sector Promotion Program which lends support in capacity building of BDS providers and business associations; community-based tourism development; IT-based business information systems; and, agri-based value chain promotion, among others (2005 – 2013)
- GTZ' Rural Development Programme in Kampot and Kampong Thon, 2002 – 2008, promotes selected production -increasing agricultural measures as well as income-producing innovations and helps in improving rural infrastructure
- GTZ Trade Promotion Program, 2004 – 2007, involved in development of sector specific promotional measures (cashew nuts, silk, and organic rice)
- UNIDO's Technical Assistance to Ministry of Industry on Capacity Building of the Standards Office; Trade Integration and Competitive Strengthening (see UNIDO report)
- UNDP's Trade Related Assistance for Development and Equity (TRADE) Project comprising of the Diagnostic Trade Integration Study, capacity building on the linkages between trade and human development, support to selected employment generating export-oriented sectors, and support to business development by strengthening the regulatory framework and enhancing access of SMEs to business information
- USAID's Agricultural Quality Improvement Program
- Asia Foundation's Provincial Business Environment Scoreboard (PBES) Project on improving business environment through assessment and measurement of the provinces' economic governance and regulatory policy using criteria such as business entry, taxation, proactiveness of the government, crime prevention, and property rights;
- SME Cambodia: renewable energies promotion among SMEs (biomass gasification technology)
- EU assistance programs for handicrafts (silk, wickerworks, silversmithing, and ceramics) thru sending of experts in training local craftsmen
- ILO's Integrated Support to Small Enterprises in Mekong Delta Countries (ISED) – SYB, SIYB, Get Ahead, etc (2004 – 2006)
- ADB's Small Enterprise Development Project aimed at establishing the SME Development Framework, improving governance and regulatory reform related to SMEs such as improving the business registration process, and enhancing SMEs' access to finance. (2004 – 2007)
- ADB's Tonle Sap Poverty Reduction and Smallholder Development Project (formerly Siem Reap Livelihoods Project), enhancing the productivity and income growth of rural households, and supporting diversification of agriculture through improved access to technology and markets in three Tonle Sap provinces namely, Siem Reap, Kampong Thom and Kampong Cham. (started in Dec 2007)
- ADB's Micro Finance Institution Funding Initiative (April 2008) is aimed at providing cost effective loan capital to qualified (and regulated) MFIs in Cambodia
- MPSDF's Business Enabling Environment Project which conducted and published research on SME issues such as SME Financing, WTO Guide and Survey of the Manufacturing Sector
- World Bank's Trade Facilitation and Competitiveness Project which provides support to a revised policy framework and implementation of capacity building program (2005 – 2008)
- KfW's SME Credit Line for provision of cash flow based term lending to SMEs in the manufacturing sector (started in 2002)
- USAID's Credit Guarantee Line guaranteeing 50% of Canadia Bank's on-lending to SMEs and MFIs (started in 2004)

*Capati, A. & Virtudazo, C., *Needs Assessment Study of SMEs in Cambodia*, Technonet Asia, January 2008.

**APPENDIX 7:
ORGANOGRAM OF THE MINISTRY OF LABOR AND VOCATIONAL TRAINING (MOLVT)**



Source: MOLVT, March 2009

APPENDIX 8: VOUCHER SKILLS TRAINING PROGRAM 2006-2008

Although the VSTP Pilot program was a clear success, there were many lessons learned that can be used to adjust the expansion model. Several changes were made to the program to fine tune it to the reality in the communes and these too need to be included in the new design. Some actions need to be taken before actual commune initiated training begins to improve chances for success.

1. Lessons Learned to be used in the Planning Process

The VSTP planning methodology is new to most of the stakeholders so they were learning this in the actual implementation process.

- i. Although preparation was done to orient them, it was not adequate to engage their full support and participation. Now that the pilot phase has given 7 PTCs and Provinces the actual experience, they will be valuable in the orientation of the ones who are just going to start the process. This stakeholders' collaboration is new and has much broader implications for TVET decentralization and responsiveness than just the VSTP. This needs to be strengthened to work more cohesively.
- ii. In successful VSTP pilots, Provincial Training Boards have begun to prove their value in developing a sense of the economic direction of each Province. Though much work is still required, given some framework to make decisions about local direction, Commune Councils are developing as important representative bodies to provide local and decentralized leadership. Increasing the interaction between VSTP and those councils enhances their capacity to link decisions to community plans and strategies and support the democratic process. More time needs to be spent in developing the relationship with the Councils. As this will be a long term training relationship, it is worth the time to establish good work patterns.
- iii. No baseline survey was undertaken on selected participants. This greatly complicated the work of determining the impact of VSTP . Although the VSTP Surveys are very useful in identifying improvements to be made in the expansion to the remaining 17 PTCs, a baseline study would have allowed a much more finely tuned measure of impact on individual graduates and their families. A baseline study of participants should be undertaken in the proposed Loan within the first 3 months of implementation.
- iv. The survey confirmed that the success of VSTP was largely anchored on the PTC Community Development Specialist (CDS) staff. The central item here was the commitment of the PTC Directors who took personal charge of the VSTP and led CDS on first visits to Commune Councils and in mapping exercises. Having learned from their experience, the PTCs involved in the pilot phase can facilitate the introduction and orientation of the ones that will be starting in the expansion program. While their experience has given them knowledge and skills, the pilot PTCs must continue to improve their capacity in working with the PTB and Commune Councils, local enterprises and other training providers. They also need support in market analysis, farm to market strategies, post harvest technologies, labour market information, availability of skills and trainers, the range of skills needed in the emerging Cambodian economy, monitoring of training and career planning.
- v. The PTCs require thorough preparation before implementation. Adequate training of Directors, CDS and Finance officers is necessary. In the initial implementation, coaching and day to day especially in the TENA process will be needed by PTCs. Such support can come from the pilot PTCs.

2. Lessons Learned in the PTCs

- i. The areas that the pilot PTCs have identified as needing improvements include training of staff, in particular, for the PTC Directors to support Provincial Training Boards to begin and strengthen the process of local human resources development planning. This will give the communes a more focused planning framework. Moreover, the PTC Directors and CDS need to improve their skills in working with enterprises. In addition, the PTC Directors and CDS in PTCs starting VSTP need to be trained, at least, 3 months before the start of VSTP so they are prepared when they go to the communes. For this training, it is recommended that experienced pilot PTC Directors and staff act as trainers. It is also crucial to train the PTC accountant in the Program based/NTF accounting process so they can do the accounts for mainstream PTC finances and provide appropriate data.
- ii. PTCs require adequate hand tools to support basic skills development in masonry, electricity, small engines, sewing and basic hotel skills. Each of these can link to the entry level of the NTVF and start young people on a career. All PTCs should meet a basic hygiene standard as a model to the Communes.
- iii. As the additional 17 PTCs reorient, it is important to make VSTP not just an isolated activity but part of the regular PTC training activities. DGTVET must assign staff to work with the PTCs, help train the Directors, support the PTC staff and be responsible for monitoring the training so that VSTP becomes a regular part of TVET and not an isolated project activity. This may also affect the way DGMTVET provides management support to NTF programs over time.
- iv. The survey also indicated that aside from resources and training, where incentives were in place for the PTCs to coordinate demand driven training, they respond well and become effective training coordinators.
- v. The primary delivery system used by TVET up to the beginning of VSTP was institution based training, offering courses linked to the PTCs capabilities, not community needs. Although an excellent start has been made, much more work needs to be done to develop PTC capacity to initiate and support community based, demand responsive education. Moving to a demand driven, community responsive TVET model will take time, but the process has started and refinements suggested here will make the PTCs increasingly effective as provincial centers for the management of TVET and not simply TVET providers.

3. Community Development Specialists

More time is required to train Community Development Specialists in implementing TENA and in supporting the Commune Councils in training plan design. In some cases, there was no economic development plan in the selected Communes and so CDS had to be involved in the basic design of such a plan, the data inputs required and the processes for gathering general information and passing these on to all commune members so they could make informed choices among alternate directions. The CDS working with Enterprise require a much more specific training to engage enterprise owners to participate in the program.

4. Transportation Support

In some Communes, transportation was an issue due to distance or very remote location. In addition, the PTCs the amount of travel and coordination needed to support the development in the communes was not anticipated in the planning process. .

5. Commune Selection

The selection of commune is important to VSTP. The work becomes more difficult when the Communes are very far from each other and when the Commune Councils are not cooperative. The pilot experience also showed that urban communes have different needs than the rural ones.

6. Commune Council Role

The pilot experience underlined the need for the Commune Council to better understand its role and to be supported in the promotion of training to villagers as an important component in economic development. They need brochures/signs, new information. There is a need to stimulate ideas in the Communes and promote training to those who really need it and to those who can apply it. The Council Chief opens training and thanks graduates so they can use these occasions to promote new ideas for income growth.

However, Council members need to be more actively involved in community mapping, determining opportunities for the commune, assessing the one village one product program, selection of training options, selection of trainees, agreeing to the trainers, monitoring training and participating in follow up activities.

The Communes in making decisions around courses had to give preference to courses that engaged more people in the commune. Given Cambodia's largely agricultural rural population, most of the skills offerings were agriculture related and easy to offer within the commune regular life schedule. The center and enterprise based training engaged only a few. There is a need to increase participation in these by expanding awareness of communes of the need to acquire advanced skills and also the range of offerings included. As well, especially for women, a support mechanism has to be put in place to encourage greater participation. As commune population equate training with increase in income, raising their awareness of the income and career path they can get into in the center and enterprise based training programs will be encouraging.

7. Community Training Plan

Many of the communes do not have training plans. They also lack data and information necessary to do the planning. As well, a detailed plan helps to bring villagers into the planning activities, not just the Commune Council. It will also give direction to the choices of skills in VSTP and link the training to the plan. As most communes do not yet have a plan, the CDS have to assist them develop one.

8. Trainer Selection and Effectiveness

Skills trainers often were hard to find and most had no training techniques. In some cases, certain requested skills were not taught when a trainer could not be found. Yet, in the neighbouring Province there was an excellent trainer who was mobile.

PTCs need to share the names of trainers who are effective. They also need to offer brief training workshops for skills trainers in training techniques before they begin training. Advertisement for these sessions can be used to recruit potential trainers from the private sector and local Government offices to increase the number of available trainers.

9. Trainee Selection and Profile

The pilot implementation demonstrated that in rural areas, the family head involvement is important as he makes the decision. Often, they are more effective in passing on the learning to the rest of the family who will likely learn out of respect for him. Sometimes, trainees don't have the time or the land to apply training if the head is not interested. As such, the trainees vary in age.

Some commune residents live far away from the location of training so are not able to avail of such. Many female students cannot attend center based training unless there are hostels

10. Cost Per Trainee

The survey showed that planned cost per trainee varied per province and as such needs to be adjusted based on the reality in each province. As full costs increase, the cost of monitoring also increase and without consistent monitoring of training by CDS, there is no assurance of effectiveness of training. Not only that the cost per province is varied, the cost to small employers of training is higher than expected because of the cost of training supplies, fuel, food for trainees and market costs. A reasonable costing per trainee for 2009 would be \$30 for Commune based, \$250 for Enterprise based (4 month) and \$210 for Center Based (4 month)

11. Payment of Trainees

There is no provision to pay trainees in VSTP. Paying a stipend to trainees was traditional in recovery from the past when survival was an issue. Now, it is time to move away from that expectation. In fact, in the survey, 14.19 percent indicated a willingness to pay at least 500 Riel a day with the majority of these respondents indicating a willingness to pay 2000 Riel.

12. Training Selection and Scheduling

Around 50 courses were offered under VSTP (**See Appendix 3**). Duration of commune based training was typically 7 or 8 hours a day for 5 to 7 days, depending on what skills were being taught.

- i. Of those responding to the survey, 25.74 percent felt the training time was too short and 74 percent felt the training duration was just right. The decision on duration was made using budget reality as well as estimated time required to both demonstrate and ensure mastery of the skills being taught. The compromise appears to have been about right.
- ii. Of those who responded, 76.28 percent indicated they would take more training. Some requested follow up and field practice on the existing courses and advanced training without specifying in which fields. This absence of specification shows a lack of information on possible training courses.
- iii. Some training courses in Communes are too short and very basic with no provision for advanced levels. Some are offered during the planting season so few are able to participate. They are often very theoretical. In the rural areas, there is often a lack of information on available training courses and inability to identify training requirements.
- iv. In enterprise based training, trainers will not share with future competition. Small business needs some help in learning how to train. Some Enterprises do not want to train even with training payments. Some trainers lack pedagogy to transfer their knowledge to trainees. Most trainers teach them through direct practice with very limited theoretical base. There is no curriculum. Hand outs are useful when literacy is not an issue. The PTCs can provide these but they will need financial support to deliver these.
- v. Enterprise based training is a new concept and the system still need to be put in place for enterprise to be engaged in it. Many of the enterprises are too small to take in the training function and PTCs still have to learn how to work with enterprises. Training must also meet the needs in the market and the number of trainees required.

13. Promotion and Visibility

The survey clearly pointed out that much more promotion of VSTP is required in the Communes before the training starts. Communes need new information, ideas and opportunities to stimulate thinking around income growth and economic development. There is lack of information on basic services and especially micro credit and other opportunities. They have very limited understanding of the markets. They need to grow more but also to sell more.

14. Finance and Budget

The budget is transparent so all can see the funds flow. It was the PTCs and trainers first time to use the banks as part of institutional operations..

There are, however, a few constraints identified by trainees and PTC Directors that will be addressed in forming the budgets for training: (i) here is not enough money for enterprise based training so PTCs have difficulty in recruiting trainers, (ii) some training courses are too short to apply the learning, (iii) often there is not enough budget to buy seeds and fertilizer to get trainees started on their own land, (iv) VSTP cannot pay trainees, so some drop out as they need the time to earn, (v) some trainees cannot buy lunch so they go home and did not finish the training, (vi) low planned cost per trainee so cannot select some skills that have high cost, (vii) Enterprise does not know of VSTP and does not understand how they can use the training, (viii) here is lack of transportation for some trainees as their houses are too far away from the training place, (ix) there is lack of budget (micro credit) for starting business when graduated

APPENDIX 9 (a) - VOUCHER PROGRAM (VSTP) - SCOPE OF IMPLEMENTATION, COSTS AND REVENUES in 2008

Name of Province	PTC Code	Training Delivery Modality Code	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Gender of Trainees		Average Cost per Course or Placement in USD	Total Cost of Courses & Placements in USD (equates to 80% of available funds)	Add Comm. Council/ PTB Costs	Add M&E Cost for PTC	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour	PIF Revenue/ Trainee/ Training Hour to PTC	Total PIF Revenue to PTC	
								M	F												
Battambang	107	11	A340	22	40	23.3	513	262	251	\$400.00	\$8,800.00	\$550.00	\$550.00	\$9,900.00	20,520	\$0.43	\$17.15	\$10.00	\$0.04	\$1,100.00	
	107	11	A330	20	40	22.8	455	162	293	\$400.00	\$8,000.00	\$500.00	\$500.00	\$9,000.00	18,200	\$0.44	\$17.58	\$10.00	\$0.04	\$1,000.00	
	107	11	A359	12	40	41.3	496	210	286	\$400.00	\$4,800.00	\$300.00	\$300.00	\$5,400.00	19,840	\$0.24	\$9.68	\$10.00	\$0.02	\$600.00	
	107	11	K100	29	40	34.1	988	263	725	\$400.00	\$11,600.00	\$725.00	\$725.00	\$13,050.00	39,520	\$0.29	\$11.74	\$10.00	\$0.03	\$1,450.00	
	107	11	A210	21	40	42.0	883	355	528	\$390.00	\$8,190.00	\$511.88	\$511.88	\$9,213.75	35,320	\$0.23	\$9.28	\$9.75	\$0.02	\$1,023.75	
	107	11	A120	13	40	28.8	374	148	226	\$390.00	\$5,070.00	\$316.88	\$316.88	\$5,703.75	14,960	\$0.34	\$13.56	\$9.75	\$0.03	\$633.75	
	107	11	Z004	11	40	38.5	424	131	293	\$390.00	\$4,290.00	\$268.13	\$268.13	\$4,826.25	16,960	\$0.25	\$10.12	\$9.75	\$0.03	\$536.25	
	107	11	A220	12	40	32.1	385	173	212	\$400.00	\$4,800.00	\$300.00	\$300.00	\$5,400.00	15,400	\$0.31	\$12.47	\$10.00	\$0.03	\$600.00	
	107	11	Z002	1	40	35.0	35	17	18	\$400.00	\$400.00	\$25.00	\$25.00	\$450.00	1,400	\$0.29	\$11.43	\$10.00	\$0.03	\$50.00	
	107	11	A320	8	40	102.8	822	333	489	\$400.00	\$3,200.00	\$200.00	\$200.00	\$3,600.00	32,880	\$0.10	\$3.89	\$10.00	\$0.01	\$400.00	
	107	11	A420	9	40	40.3	363	156	207	\$390.00	\$3,510.00	\$219.38	\$219.38	\$3,948.75	14,520	\$0.24	\$9.67	\$9.75	\$0.02	\$438.75	
	107	11	A240	2	40	17.5	35	6	29	\$390.00	\$780.00	\$48.75	\$48.75	\$877.50	1,400	\$0.56	\$22.29	\$9.75	\$0.06	\$97.50	
	107	11	A351	11	40	42.0	462	225	237	\$400.00	\$4,400.00	\$275.00	\$275.00	\$4,950.00	18,480	\$0.24	\$9.52	\$10.00	\$0.02	\$550.00	
Sub-Total Community Based Program Costs											\$67,840.00				Sub-Total Community Based Program Revenue						\$8,480.00
	107	22	N100	29	866	1.0	29	0	29	\$200.00	\$5,800.00	\$362.50	\$362.50	\$6,525.00	25,114	\$0.23	\$200.00	\$0.23	\$0.02	\$725.00	
	107	22	L500	29	866	1.0	29	0	29	\$300.00	\$8,700.00	\$543.75	\$543.75	\$9,787.50	25,114	\$0.35	\$300.00	\$0.35	\$0.03	\$1,087.50	
Sub-Total Enterprise Based Placement Costs											\$14,500.00				Sub-Total Enterprise Based Placement Revenue						\$2,175.00
	107	33	P000	29	866	2.0	58	42	16	\$460.00	\$13,340.00	\$833.75	\$833.75	\$15,007.50	50,228	\$0.27	\$230.00	\$0.53	\$0.04	\$1,667.50	
	107	33	L300	29	866	1.0	29	0	29	\$200.00	\$5,800.00	\$362.50	\$362.50	\$6,525.00	25,114	\$0.23	\$200.00	\$0.23	\$0.03	\$725.00	
	107	33	D200	29	866	2.0	58	58	0	\$460.00	\$13,340.00	\$833.75	\$833.75	\$15,007.50	50,228	\$0.27	\$230.00	\$0.53	\$0.04	\$1,667.50	
Sub-Total Centre Based Program Costs											\$32,480.00				Sub-Total Centre Based Program Revenue						\$3,987.50
Total Cost for all Programs											\$114,820.00				Total PTC Revenue for all Programs						\$14,642.50

Name of Province	PTC Code	Training Delivery Modality Code	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Gender of Trainees		Average Cost per Course or Placement in USD	Total Cost of Courses & Placements in USD (equates to 80% of available funds)	Add Comm. Council/ PTB Costs	Add M&E Cost for PTC	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour	PIF Revenue/ Trainee/ Training Hour to PTC	Total PIF Revenue to PTC	
								M	F												
Kampot	109	11	A320	25	40	36.4	910	362	548	\$440.00	\$11,000.00	\$687.50	\$687.50	\$12,375.00	36,400	\$0.30	\$12.09	\$11.00	\$0.03	\$1,375.00	
	109	11	A330	34	40	34.0	1155	368	787	\$450.00	\$15,300.00	\$956.25	\$956.25	\$17,212.50	46,200	\$0.33	\$13.25	\$11.25	\$0.03	\$1,912.50	
	109	11	A351	21	40	35.0	735	344	391	\$420.00	\$8,820.00	\$551.25	\$551.25	\$9,922.50	29,400	\$0.30	\$12.00	\$10.50	\$0.03	\$1,102.50	
	109	11	A420	35	40	35.0	1225	566	659	\$420.00	\$14,700.00	\$918.75	\$918.75	\$16,537.50	49,000	\$0.30	\$12.00	\$10.50	\$0.03	\$1,837.50	
	109	11	A210	10	40	35.0	350	162	188	\$420.00	\$4,200.00	\$262.50	\$262.50	\$4,725.00	14,000	\$0.30	\$12.00	\$10.50	\$0.03	\$525.00	
	109	11	A220	35	40	35.0	1225	534	691	\$420.00	\$14,700.00	\$918.75	\$918.75	\$16,537.50	49,000	\$0.30	\$12.00	\$10.50	\$0.03	\$1,837.50	
	109	11	A910	6	40	35.0	210	117	93	\$420.00	\$2,520.00	\$157.50	\$157.50	\$2,835.00	8,400	\$0.30	\$12.00	\$10.50	\$0.03	\$315.00	
	109	11	A120	27	40	35.0	945	322	623	\$450.00	\$12,150.00	\$759.38	\$759.38	\$13,668.75	37,800	\$0.32	\$12.86	\$11.25	\$0.03	\$1,518.75	
Sub-Total Community Based Program Cost											\$83,390.00				Sub-Total Community Based Program Revenue						\$10,423.75
	109	22	N100	20	520	1.5	30	30	0	\$150.00	\$3,000.00	\$187.50	\$187.50	\$3,375.00	15,600	\$0.19	\$100.00	\$0.29	\$0.02	\$375.00	
	109	22	B320	19	693	1.7	32	32	0	\$180.00	\$3,420.00	\$213.75	\$213.75	\$3,847.50	16,640	\$0.21	\$106.88	\$0.35	\$0.02	\$427.50	
	109	22	L300	11	693	2.5	28	0	28	\$270.00	\$2,970.00	\$185.63	\$185.63	\$3,341.25	19,404	\$0.15	\$106.07	\$0.39	\$0.02	\$371.25	
	109	22	B420	23	173	4.1	94	94	0	\$486.96	\$11,200.00	\$700.00	\$700.00	\$12,600.00	16,262	\$0.69	\$119.15	\$2.81	\$0.07	\$1,400.00	
	109	22	D200	11	693	1.1	12	12	0	\$120.00	\$1,320.00	\$82.50	\$82.50	\$1,485.00	8,316	\$0.16	\$110.00	\$0.17	\$0.02	\$165.00	
	109	22	L500	15	693	1.9	28	0	28	\$205.33	\$3,080.00	\$192.50	\$192.50	\$3,465.00	19,404	\$0.16	\$110.00	\$0.30	\$0.02	\$385.00	
	109	22	G100	6	693	2.0	12	12	0	\$235.00	\$1,410.00	\$88.13	\$88.13	\$1,586.25	8,316	\$0.17	\$117.50	\$0.34	\$0.02	\$176.25	
Sub-total Enterprise Based Placement Costs											\$26,400.00				Sub-Total Enterprise Based Placement Revenue						\$3,300.00
	109	33	B220	13	693	1.3	17	17	0	\$206.92	\$2,690.00	\$168.13	\$168.13	\$3,026.25	11,781	\$0.23	\$158.24	\$0.30	\$0.02	\$336.25	
	109	33	A920	24	693	1.9	45	43	2	\$244.58	\$5,870.00	\$366.88	\$366.88	\$6,603.75	31,185	\$0.19	\$130.44	\$0.35	\$0.02	\$733.75	
	109	33	P000	11	520	1.5	16	12	4	\$72.73	\$800.00	\$50.00	\$50.00	\$900.00	8,320	\$0.10	\$50.00	\$0.14	\$0.01	\$100.00	
	109	33	B320	20	693	1.9	38	38	0	\$246.00	\$4,920.00	\$307.50	\$307.50	\$5,535.00	26,334	\$0.19	\$129.47	\$0.35	\$0.02	\$615.00	
	109	33	L300	14	693	1.5	21	0	21	\$188.57	\$2,640.00	\$165.00	\$165.00	\$2,970.00	14,553	\$0.18	\$125.71	\$0.27	\$0.02	\$330.00	
	109	33	L200	3	693	2.7	8	0	8	\$320.00	\$960.00	\$60.00	\$60.00	\$1,080.00	5,544	\$0.17	\$120.00	\$0.46	\$0.02	\$120.00	
Sub-Total Centre Based Program Costs											\$17,880.00				Sub-Total Centre Based Program Revenue						\$2,235.00
Total Cost for all Programs											\$127,670.00				Total PTC Revenue for all Programs						\$15,958.75

Name of Province	PTC Code	Training Delivery Modality Code	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Gender of Trainees		Average Cost per Course or Placement in USD	Total Cost of Courses & Placements in USD (equates to 80% of available funds)	Add Comm. Council/ PTB Costs	Add M&E Cost for PTC	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour	PIF Revenue/ Trainee/ Training Hour to PTC	Total PIF Revenue to PTC
								M	F											
Kampong Chhnang	319	11	A320	17	40	36.0	612	250	362	\$504.00	\$8,568.00	\$535.50	\$535.50	\$9,639.00	24,480	\$0.35	\$14.00	\$12.60	\$0.04	\$1,071.00
	319	11	A340	9	40	36.0	324	145	179	\$504.00	\$4,536.00	\$283.50	\$283.50	\$5,103.00	12,960	\$0.35	\$14.00	\$12.60	\$0.04	\$567.00
	319	11	A351	9	40	36.0	324	191	133	\$504.00	\$4,536.00	\$283.50	\$283.50	\$5,103.00	12,960	\$0.35	\$14.00	\$12.60	\$0.04	\$567.00
	319	11	A420	17	40	35.9	611	206	405	\$468.00	\$7,956.00	\$497.25	\$497.25	\$8,950.50	24,440	\$0.33	\$13.02	\$11.70	\$0.03	\$994.50
	319	11	A220	22	40	35.7	786	306	480	\$468.00	\$10,296.00	\$643.50	\$643.50	\$11,583.00	31,440	\$0.33	\$13.10	\$11.70	\$0.03	\$1,287.00
	319	11	A330	23	40	36.0	828	383	445	\$504.00	\$11,592.00	\$724.50	\$724.50	\$13,041.00	33,120	\$0.35	\$14.00	\$12.60	\$0.04	\$1,449.00
	319	11	A120	23	40	35.2	809	308	501	\$455.00	\$10,465.00	\$654.06	\$654.06	\$11,773.13	32,360	\$0.32	\$12.94	\$11.38	\$0.03	\$1,308.13
	319	11	A920	21	40	36.0	756	381	375	\$504.00	\$10,584.00	\$661.50	\$661.50	\$11,907.00	30,240	\$0.35	\$14.00	\$12.60	\$0.04	\$1,323.00
	319	11	A210	15	40	36.0	540	185	355	\$468.00	\$7,020.00	\$438.75	\$438.75	\$7,897.50	21,600	\$0.33	\$13.00	\$11.70	\$0.03	\$877.50
Sub-Total Community Based Program Cost											\$75,553.00				Sub-Total Community Based Program Revenue					\$9,444.13
	319	22	P000	8	640	1.8	14	11	3	\$215.63	\$1,725.00	\$107.81	\$107.81	\$1,940.63	8,960	\$0.19	\$123.21	\$0.34	\$0.02	\$215.63
	319	22	G900	4	640	1.3	5	5	0	\$243.75	\$975.00	\$60.94	\$60.94	\$1,096.88	3,200	\$0.30	\$195.00	\$0.38	\$0.03	\$121.88
	319	22	N100	11	640	1.5	17	0	17	\$302.18	\$3,324.00	\$207.75	\$207.75	\$3,739.50	10,880	\$0.31	\$195.53	\$0.47	\$0.03	\$415.50
	319	22	B320	7	640	1.3	9	9	0	\$172.71	\$1,209.00	\$75.56	\$75.56	\$1,360.13	5,760	\$0.21	\$134.33	\$0.27	\$0.02	\$151.13
	319	22	L300	4	640	2.0	8	0	8	\$240.00	\$960.00	\$60.00	\$60.00	\$1,080.00	5,120	\$0.19	\$120.00	\$0.38	\$0.02	\$120.00
	319	22	D200	2	640	1.0	2	2	0	\$183.00	\$366.00	\$22.88	\$22.88	\$411.75	1,280	\$0.29	\$183.00	\$0.29	\$0.03	\$45.75
	319	22	G100	1	640	1.0	1	1	0	\$133.00	\$133.00	\$8.31	\$8.31	\$149.63	640	\$0.21	\$133.00	\$0.21	\$0.02	\$16.63
Sub-total Enterprise Based Placement Costs											\$8,692.00				Sub-Total Enterprise Based Placement Revenue					\$1,086.50
	319	33	P000	14	640	1.9	26	17	9	\$275.21	\$3,853.00	\$240.81	\$240.81	\$4,334.63	16,640	\$0.23	\$148.19	\$0.43	\$0.02	\$481.63
	319	33	N100	9	640	1.6	14	0	14	\$233.33	\$2,100.00	\$131.25	\$131.25	\$2,362.50	8,960	\$0.23	\$150.00	\$0.36	\$0.02	\$262.50
	319	33	B320	11	640	1.5	17	17	0	\$232.73	\$2,560.00	\$160.00	\$160.00	\$2,880.00	10,880	\$0.24	\$150.59	\$0.36	\$0.02	\$320.00
	319	33	L300	16	640	1.6	26	1	25	\$243.75	\$3,900.00	\$243.75	\$243.75	\$4,387.50	16,640	\$0.23	\$150.00	\$0.38	\$0.02	\$487.50
	319	33	B420	10	640	1.7	17	17	0	\$266.90	\$2,669.00	\$166.81	\$166.81	\$3,002.63	10,880	\$0.25	\$157.00	\$0.42	\$0.02	\$333.63
	319	33	D200	18	640	1.4	26	26	0	\$240.00	\$4,320.00	\$270.00	\$270.00	\$4,860.00	16,640	\$0.26	\$166.15	\$0.38	\$0.03	\$540.00
Sub-Total Centre Based Program Costs											\$19,402.00				Sub-Total Centre Based Program Revenue					\$2,425.25
Total Cost for all Programs											\$103,647.00				Total PTC Revenue for all Programs					\$12,955.88

Name of Province	PTC Code	Training Delivery Modality Code	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Gender of Trainees		Average Cost per Course or Placement in USD	Total Cost of Courses & Placements in USD (equates to 80% of available funds)	Add Comm. Council/ PTB Costs	Add M&E Cost for PTC	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour	PIF Revenue/ Trainee/ Training Hour to PTC	Total PIF Revenue to PTC
								M	F											
Siem Reap	311	11	A330	35	61.7	60.3	2112	441	1671	\$738.80	\$25,858.00	\$1,616.13	\$1,616.13	\$29,090.25	130,341	\$0.20	\$12.24	\$11.97	\$0.02	\$3,232.25
	311	11	A320	36	68.9	73.3	2638	645	1723	\$805.00	\$28,980.00	\$1,811.25	\$1,811.25	\$32,602.50	181,729	\$0.16	\$10.99	\$11.69	\$0.02	\$3,622.50
	311	11	A210	36	63.3	59.0	2125	514	1611	\$714.28	\$25,714.00	\$1,607.13	\$1,607.13	\$28,928.25	134,583	\$0.19	\$12.10	\$11.28	\$0.02	\$3,214.25
	311	11	A120	18	57.8	48.7	877	209	668	\$610.39	\$10,987.00	\$686.69	\$686.69	\$12,360.38	50,671	\$0.22	\$12.53	\$10.56	\$0.02	\$1,373.38
	311	11	A351	7	45.7	36.3	254	109	145	\$533.00	\$3,731.00	\$233.19	\$233.19	\$4,197.38	11,611	\$0.32	\$14.69	\$11.66	\$0.03	\$466.38
	311	11	A240	2	40	36.0	72	14	58	\$431.00	\$862.00	\$53.88	\$53.88	\$969.75	2,880	\$0.30	\$11.97	\$10.78	\$0.03	\$107.75
	311	11	A420	7	40	37.9	265	44	221	\$436.71	\$3,057.00	\$191.06	\$191.06	\$3,439.13	10,600	\$0.29	\$11.54	\$10.92	\$0.03	\$382.13
	311	11	A340	9	40	16.4	148	18	130	\$441.67	\$3,975.00	\$248.44	\$248.44	\$4,471.88	5,920	\$0.67	\$26.86	\$11.04	\$0.07	\$496.88
	311	11	A310	1	40	36.0	36	13	23	\$490.00	\$490.00	\$30.63	\$30.63	\$551.25	1,440	\$0.34	\$13.61	\$12.25	\$0.03	\$61.25
Sub-Total Community Based Program Cost											\$103,654.00				Sub-Total Community Based Program Revenue					\$12,956.75
	311	22	M100	1	480	20.0	20	0	20	\$700.00	\$700.00	\$43.75	\$43.75	\$787.50	9,600	\$0.07	\$35.00	\$1.46	\$0.01	\$87.50
	311	22	N100	9	960	0.9	8	0	8	\$194.44	\$1,750.00	\$109.38	\$109.38	\$1,968.75	7,680	\$0.23	\$218.75	\$0.20	\$0.02	\$218.75
	311	22	B320	30	960	1.3	39	39	0	\$357.33	\$10,720.00	\$670.00	\$670.00	\$12,060.00	37,440	\$0.29	\$274.87	\$0.37	\$0.03	\$1,340.00
	311	22	L300	22	960	1.6	36	0	36	\$292.73	\$6,440.00	\$402.50	\$402.50	\$7,245.00	34,560	\$0.19	\$178.89	\$0.30	\$0.02	\$805.00
	311	22	D200	8	960	0.6	5	5	0	\$306.25	\$2,450.00	\$153.13	\$153.13	\$2,756.25	4,800	\$0.51	\$490.00	\$0.32	\$0.05	\$306.25
	311	22	L500	10	960	1.5	15	0	15	\$288.00	\$2,880.00	\$180.00	\$180.00	\$3,240.00	14,400	\$0.20	\$192.00	\$0.30	\$0.02	\$360.00
Sub-total Enterprise Based Placement Costs											\$24,940.00				Sub-Total Enterprise Based Placement Revenue					\$3,117.50
	311	33	E100	8	640	2.1	17	17	0	\$530.25	\$4,242.00	\$265.13	\$265.13	\$4,772.25	10,880	\$0.39	\$249.53	\$0.83	\$0.04	\$530.25
	311	33	P000	16	480	10.3	164	102	62	\$355.69	\$5,691.00	\$355.69	\$355.69	\$6,402.38	78,720	\$0.07	\$34.70	\$0.74	\$0.01	\$711.38
	311	33	C110	14	640	2.0	28	28	0	\$497.00	\$6,958.00	\$434.88	\$434.88	\$7,827.75	17,920	\$0.39	\$248.50	\$0.78	\$0.04	\$869.75
	311	33	Q110	7	640	4.9	34	23	11	\$251.43	\$1,760.00	\$110.00	\$110.00	\$1,980.00	21,760	\$0.08	\$51.76	\$0.39	\$0.01	\$220.00
	311	33	D200	15	640	1.3	19	19	0	\$282.00	\$4,230.00	\$264.38	\$264.38	\$4,758.75	12,160	\$0.35	\$222.63	\$0.44	\$0.03	\$528.75
	311	33	L500	14	640	1.9	26	0	26	\$322.14	\$4,510.00	\$281.88	\$281.88	\$5,073.75	16,640	\$0.27	\$173.46	\$0.50	\$0.03	\$563.75
Sub-Total Centre Based Program Costs											\$27,391.00				Sub-Total Centre Based Program Revenue					\$3,423.88
Total Cost for all Programs											\$155,985.00				Total PTC Revenue for all Programs					\$19,498.13

Name of Province	PTC Code	Training Delivery Modality Code	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Gender of Trainees		Average Cost per Course or Placement in USD	Total Cost of Courses & Placements in USD (equates to 80% of available funds)	Add Comm. Council/ PTB Costs	Add M&E Cost for PTC	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour	PIF Revenue/ Trainee/ Training Hour to PTC	Total PIF Revenue to PTC
								M	F											
Steoung Treng	306	11	A320	5	56	28.2	141	71	70	\$627.20	\$3,136.00	\$196.00	\$196.00	\$3,528.00	7,896	\$0.40	\$22.24	\$11.20	\$0.04	\$392.00
	306	11	A340	8	56	73.8	590	210	380	\$928.00	\$7,424.00	\$464.00	\$464.00	\$8,352.00	33,040	\$0.22	\$12.58	\$16.57	\$0.02	\$928.00
	306	11	A351	6	56	79.5	477	86	391	\$538.83	\$3,233.00	\$202.06	\$202.06	\$3,637.13	26,712	\$0.12	\$6.78	\$9.62	\$0.01	\$404.13
	306	11	A220	20	56	32.7	654	126	528	\$621.60	\$12,432.00	\$777.00	\$777.00	\$13,986.00	36,624	\$0.34	\$19.01	\$11.10	\$0.03	\$1,554.00
	306	11	A330	15	56	53.9	809	134	675	\$903.47	\$13,552.00	\$847.00	\$847.00	\$15,246.00	45,304	\$0.30	\$16.75	\$16.13	\$0.03	\$1,694.00
	306	11	A210	8	56	50.1	401	92	309	\$589.75	\$4,718.00	\$294.88	\$294.88	\$5,307.75	22,456	\$0.21	\$11.77	\$10.53	\$0.02	\$589.75
Sub-Total Community Based Program Cost											\$44,495.00				Sub-Total Community Based Program Revenue					\$5,561.88
	306	22	L300	5	693	3.2	16	0	16	\$288.00	\$1,440.00	\$90.00	\$90.00	\$1,620.00	11,088	\$0.13	\$90.00	\$0.42	\$0.01	\$180.00
	306	22	L500	9	693	2.9	26	0	26	\$361.11	\$3,250.00	\$203.13	\$203.13	\$3,656.25	18,018	\$0.18	\$125.00	\$0.52	\$0.02	\$406.25
	306	22	Z005	2	693	1.0	2	2	0	\$222.00	\$444.00	\$27.75	\$27.75	\$499.50	1,386	\$0.32	\$222.00	\$0.32	\$0.03	\$55.50
	306	22	D200	7	693	1.0	7	7	0	\$160.00	\$1,120.00	\$70.00	\$70.00	\$1,260.00	4,851	\$0.23	\$160.00	\$0.23	\$0.02	\$140.00
	306	22	B320	5	693	1.2	6	6	0	\$174.00	\$870.00	\$54.38	\$54.38	\$978.75	4,158	\$0.21	\$145.00	\$0.25	\$0.02	\$108.75
	306	22	N100	3	693	1.3	4	0	4	\$178.33	\$535.00	\$33.44	\$33.44	\$601.88	2,772	\$0.19	\$133.75	\$0.26	\$0.02	\$66.88
Sub-total Enterprise Based Placement Costs											\$7,659.00				Sub-Total Enterprise Based Placement Revenue					\$957.38
	306	33	B320	6	693	1.8	11	11	0	\$247.50	\$1,485.00	\$92.81	\$92.81	\$1,670.63	7,623	\$0.19	\$135.00	\$0.36	\$0.02	\$185.63
Sub-Total Centre Based Program Costs											\$1,485.00				Sub-Total Centre Based Program Revenue					\$185.63
Total Cost for all Programs											\$53,639.00				Total PTC Revenue for all Programs					\$6,704.88

Name of Province	PTC Code	Training Delivery Modality Code	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Gender of Trainees		Average Cost per Course or Placement in USD	Total Cost of Courses & Placements in USD (equates to 80% of available funds)	Add Comm. Council/ PTB Costs	Add M&E Cost for PTC	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour	PIF Revenue/ Trainee/ Training Hour to PTC	Total PIF Revenue to PTC	
								M	F												
Svay Reing	317	Community-based	A320	34	40	36.0	1224	585	639	\$499.56	\$16,985.00	\$1,061.56	\$1,061.56	\$19,108.13	48,960	\$0.35	\$13.88	\$12.49	\$0.03	\$2,123.13	
	317	11	A351	17	40	36.0	612	289	323	\$497.65	\$8,460.00	\$528.75	\$528.75	\$9,517.50	24,480	\$0.35	\$13.82	\$12.44	\$0.03	\$1,057.50	
	317	11	A420	20	40	34.2	684	332	352	\$503.80	\$10,076.00	\$629.75	\$629.75	\$11,335.50	27,360	\$0.37	\$14.73	\$12.60	\$0.04	\$1,259.50	
	317	11	A290	1	40	72.0	72	42	30	\$485.00	\$485.00	\$30.31	\$30.31	\$545.63	2,880	\$0.17	\$6.74	\$12.13	\$0.02	\$60.63	
	317	11	A220	32	40	36.0	1152	612	540	\$500.06	\$16,002.00	\$1,000.13	\$1,000.13	\$18,002.25	46,080	\$0.35	\$13.89	\$12.50	\$0.03	\$2,000.25	
	317	11	A330	55	40	36.7	2016	949	1067	\$504.91	\$27,770.00	\$1,735.63	\$1,735.63	\$31,241.25	80,640	\$0.34	\$13.77	\$12.62	\$0.03	\$3,471.25	
	317	11	A120	11	40	36.0	396	159	237	\$501.36	\$5,515.00	\$344.69	\$344.69	\$6,204.38	15,840	\$0.35	\$13.93	\$12.53	\$0.03	\$689.38	
	317	11	A210	16	40	33.8	540	191	349	\$498.56	\$7,977.00	\$498.56	\$498.56	\$8,974.13	21,600	\$0.37	\$14.77	\$12.46	\$0.04	\$997.13	
Sub-Total Community Based Program Cost											\$93,270.00				Sub-Total Community Based Program Revenue						\$11,658.75
	317	22	P000	18	693	1.0	18	17	1	\$80.00	\$1,440.00	\$90.00	\$90.00	\$1,620.00	12,474	\$0.12	\$80.00	\$0.12	\$0.01	\$180.00	
	317	22	B320	55	693	1.0	55	55	0	\$180.00	\$9,900.00	\$618.75	\$618.75	\$11,137.50	38,115	\$0.26	\$180.00	\$0.26	\$0.03	\$1,237.50	
	317	22	L300	2	693	1.0	2	0	2	\$180.00	\$360.00	\$22.50	\$22.50	\$405.00	1,386	\$0.26	\$180.00	\$0.26	\$0.03	\$45.00	
	317	22	L500	3	693	1.0	3	0	3	\$180.00	\$540.00	\$33.75	\$33.75	\$607.50	2,079	\$0.26	\$180.00	\$0.26	\$0.03	\$67.50	
Sub-total Enterprise Based Placement Costs											\$12,240.00				Sub-Total Enterprise Based Placement Revenue						\$1,530.00
	317	33	P000	11	693	1.0	11	9	2	\$80.00	\$880.00	\$55.00	\$55.00	\$990.00	7,623	\$0.12	\$80.00	\$0.12	\$0.01	\$110.00	
	317	33	C120	23	693	1.0	23	23	0	\$180.00	\$4,140.00	\$258.75	\$258.75	\$4,657.50	15,939	\$0.26	\$180.00	\$0.26	\$0.03	\$517.50	
	317	33	B320	32	693	1.0	32	32	0	\$180.00	\$5,760.00	\$360.00	\$360.00	\$6,480.00	22,176	\$0.26	\$180.00	\$0.26	\$0.03	\$720.00	
	317	33	L300	23	693	1.0	23	0	23	\$180.00	\$4,140.00	\$258.75	\$258.75	\$4,657.50	15,939	\$0.26	\$180.00	\$0.26	\$0.03	\$517.50	
	317	33	L500	28	693	1.0	28	0	28	\$180.00	\$5,040.00	\$315.00	\$315.00	\$5,670.00	19,404	\$0.26	\$180.00	\$0.26	\$0.03	\$630.00	
Sub-Total Centre Based Program Costs											\$19,960.00				Sub-Total Centre Based Program Revenue						\$2,495.00
Total Cost for all Programs											\$125,470.00				Total PTC Revenue for all Programs						\$15,683.75

Name of Province	PTC Code	Training Delivery Modality Code	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Gender of Trainees		Average Cost per Course or Placement in USD	Total Cost of Courses & Placements in USD (equates to 80% of available funds)	Add Comm. Council/ PTB Costs	Add M&E Cost for PTC	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour	PIF Revenue/ Trainee/ Training Hour to PTC	Total PIF Revenue to PTC
								M	F											
Takeo	312	11	A320	38	40	37.9	1440	685	755	\$520.34	\$19,773.00	\$1,235.81	\$1,235.81	\$22,244.63	57,600	\$0.34	\$13.73	\$13.01	\$0.03	\$2,471.63
	312	11	A340	12	40	36.0	432	222	210	\$519.58	\$6,235.00	\$389.69	\$389.69	\$7,014.38	17,280	\$0.36	\$14.43	\$12.99	\$0.04	\$779.38
	312	11	A320	21	40	39.4	828	394	434	\$515.62	\$10,828.00	\$676.75	\$676.75	\$12,181.50	33,120	\$0.33	\$13.08	\$12.89	\$0.03	\$1,353.50
	312	11	A410	17	40	38.1	648	316	332	\$467.35	\$7,945.00	\$496.56	\$496.56	\$8,938.13	25,920	\$0.31	\$12.26	\$11.68	\$0.03	\$993.13
	312	11	A351	40	40	36.0	1440	762	678	\$519.90	\$20,796.00	\$1,299.75	\$1,299.75	\$23,395.50	57,600	\$0.36	\$14.44	\$13.00	\$0.04	\$2,599.50
	312	11	A420	10	40	36.0	360	147	213	\$476.50	\$4,765.00	\$297.81	\$297.81	\$5,360.63	14,400	\$0.33	\$13.24	\$11.91	\$0.03	\$595.63
	312	11	A220	16	40	29.3	468	194	274	\$482.19	\$7,715.00	\$482.19	\$482.19	\$8,679.38	18,720	\$0.41	\$16.49	\$12.05	\$0.04	\$964.38
	312	11	A230	17	40	36.0	612	307	305	\$469.12	\$7,975.00	\$498.44	\$498.44	\$8,971.88	24,480	\$0.33	\$13.03	\$11.73	\$0.03	\$996.88
	312	11	A330	39	40	36.9	1440	538	902	\$522.13	\$20,363.00	\$1,272.69	\$1,272.69	\$22,908.38	57,600	\$0.35	\$14.14	\$13.05	\$0.04	\$2,545.38
	312	11	A120	9	40	36.0	324	122	202	\$472.22	\$4,250.00	\$265.63	\$265.63	\$4,781.25	12,960	\$0.33	\$13.12	\$11.81	\$0.03	\$531.25
	312	11	A430	13	40	44.3	576	280	296	\$465.38	\$6,050.00	\$378.13	\$378.13	\$6,806.25	23,040	\$0.26	\$10.50	\$11.63	\$0.03	\$756.25
Sub-Total Community Based Program Costs											\$116,695.00				Sub-Total Community Based Program Revenue					\$14,586.88
	312	22	N100	1	693	5.0	5	0	5	\$260.00	\$260.00	\$16.25	\$16.25	\$292.50	3,465	\$0.08	\$52.00	\$0.38	\$0.01	\$32.50
	312	22	B320	15	693	1.4	21	21	0	\$249.33	\$3,740.00	\$233.75	\$233.75	\$4,207.50	14,553	\$0.26	\$178.10	\$0.36	\$0.03	\$467.50
	312	22	L300	6	693	1.8	11	0	11	\$255.00	\$1,530.00	\$95.63	\$95.63	\$1,721.25	7,623	\$0.20	\$139.09	\$0.37	\$0.02	\$191.25
	312	22	B420	11	693	1.0	11	11	0	\$279.09	\$3,070.00	\$191.88	\$191.88	\$3,453.75	7,623	\$0.40	\$279.09	\$0.40	\$0.04	\$383.75
	312	22	D200	9	693	1.3	12	12	0	\$245.56	\$2,210.00	\$138.13	\$138.13	\$2,486.25	8,316	\$0.27	\$184.17	\$0.35	\$0.03	\$276.25
	312	22	L200	4	693	2.3	9	0	9	\$170.00	\$680.00	\$42.50	\$42.50	\$765.00	6,237	\$0.11	\$75.56	\$0.25	\$0.01	\$85.00
Sub-total Enterprise Based Placement Costs											\$11,490.00				Sub-Total Enterprise Based Placement Revenue					\$1,436.25
	312	33	P000	22	520	1.2	26	22	4	\$189.09	\$4,160.00	\$260.00	\$260.00	\$4,680.00	13,520	\$0.31	\$160.00	\$0.36	\$0.03	\$520.00
	312	33	B320	17	693	1.4	23	23	0	\$216.47	\$3,680.00	\$230.00	\$230.00	\$4,140.00	15,939	\$0.23	\$160.00	\$0.31	\$0.02	\$460.00
	312	33	L300	14	693	2.5	35	0	35	\$182.86	\$2,560.00	\$160.00	\$160.00	\$2,880.00	24,255	\$0.11	\$73.14	\$0.26	\$0.01	\$320.00
	312	33	B420	14	693	1.1	16	16	0	\$243.57	\$3,410.00	\$213.13	\$213.13	\$3,836.25	11,088	\$0.31	\$213.13	\$0.35	\$0.03	\$426.25
	312	33	D200	17	693	1.4	23	23	0	\$216.47	\$3,680.00	\$230.00	\$230.00	\$4,140.00	15,939	\$0.23	\$160.00	\$0.31	\$0.02	\$460.00
	312	33	A310	13	520	2.3	30	28	2	\$150.00	\$1,950.00	\$121.88	\$121.88	\$2,193.75	15,600	\$0.13	\$65.00	\$0.29	\$0.01	\$243.75
Sub-Total Centre Based Program Costs											\$19,440.00				Sub-Total Centre Based Program Revenue					\$2,430.00
Total Cost for all Programs											\$147,625.00				Total PTC Revenue for all Programs					\$18,453.13

APPENDIX 9 (b) - NATIONAL TRAINING FUND (NTF) - SCOPE OF IMPLEMENTATION & PLANNED EXPENDITURE in 2008

Name of Province	Name of Organisation or Institution	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Average Cost per Course in USD	Total Cost of Courses & Placements in USD	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour in USD
BATTAMBANG	Polytechnic Institute of Battambang	A351	3	173	30.0	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A230	3	173	30.0	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A320	3	173	30.0	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
								\$7,902.44					
	Battambang Institute of Technology	A351	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
		K100	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
								\$7,024.39					
	Vocational Center Prey Kaunkla	A220	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A351	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A210	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A350	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
								\$10,536.59					
								\$47,406.83					
KAMPOT	Kampot Polytechnic Institute	A220	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A420	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A120	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
								\$7,902.44					
	Branch of Khmer Vocational Dev. Organization	A330	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,380.00	\$0.17	\$29.27	\$5.08
		A230	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,380.00	\$0.17	\$29.27	\$5.08
								\$3,512.20					
	Boeung Nimul Vocational Training School	A340	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
		A230	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
		A330	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
								\$10,536.59					
								\$21,951.22					

Name of Province	Name of Organisation or Institution	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Average Cost per Course in USD	Total Cost of Courses & Placements in USD	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour in USD
KAMPONG CHHNANG	Vocational Training Center	A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$5,268.29					
	Women Association for Development	A230	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A320	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$1,756.10					
								\$7,024.39					
SIEM REAP	Siem Reap Provincial Training Centre	A230	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A351	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$5,268.29					
								\$5,268.29					
STUNG TRENG	Vocational Training Center	A240	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A340	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A330	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A351	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A230	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A220	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$7,902.44					
								\$7,902.44					
SVAY RIENG	Vocational Training Center	A920	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
		A230	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A220	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$7,024.39					
								\$7,024.39					

Name of Province	Name of Organisation or Institution	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Average Cost per Course in USD	Total Cost of Courses & Placements in USD	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour in USD
TAKEO	Vocational Training Center	A320	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A340	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A330	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A351	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A230	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A420	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
										\$7,902.44			
	Vocational Training Department	A330	5	173	30	150	\$878.05	\$4,390.24	4,390.24	25,980.00	\$0.17	\$29.27	\$5.07
		A230	5	173	30	150	\$878.05	\$4,390.24	4,390.24	25,980.00	\$0.17	\$29.27	\$5.07
								\$8,780.49					
	Cambodian Family Development Community	A230	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A330	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$1,756.10					
	Youth Kampuchea Technical Development Association Branch	A230	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A320	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A351	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$4,390.24					
	Rural Development Center	A330	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A340	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A230	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$2,634.15					
	Ponleu Sangkum Organization	A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$1,756.10					
	Khmer Vocational Development Organization	A230	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A330	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$4,390.24					
								\$31,609.76					
PREH VIHEAR	Department of Labor and Vocational Training	A220	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A920	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A100	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A100	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A210	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$10,536.59					
								\$10,536.59					

Name of Province	Name of Organisation or Institution	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Average Cost per Course in USD	Total Cost of Courses & Placements in USD	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour in USD
KAMPONG THOM	Vocational Training Center	A330	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
		A320	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A320	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A220	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$8,780.49					
	Department of Labor & Vocational Training	A330	5	173	30	150	\$878.05	\$4,390.24	4,390.24	25,980.00	\$0.17	\$29.27	\$5.07
		A290	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$5,268.29					
	Development for Sangkum Kampuchea Organization	A210	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A351	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		K100	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$2,634.15					
	Training and Research Organization	A351	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A210	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$1,756.10					
	Sahakum Yeung Development Association	A210	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A320	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$1,756.10					
	National Association for Samros Meatphum	A330	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$1,756.10					
								\$21,951.22					
KRATIE	Vocational Training Center	A330	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A351	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A220	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A340	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
								\$10,536.59					
	Sangkum Khmer Development Association	A340	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A351	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A330	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$2,634.15					
	Women and Association Dev. Organization	A351	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A230	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$1,756.10					
								\$14,926.83					

Name of Province	Name of Organisation or Institution	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Average Cost per Course in USD	Total Cost of Courses & Placements in USD	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour in USD
KAMPONG SPEU	Vocational Training Center	A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A230	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A340	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A320	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$5,268.29					
	Koma KreyKro Khmer Organization	A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$1,756.10					
	Cambodian-Poor Help Association	A320	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A330	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A351	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$2,634.15					
								\$9,658.54					
SIHANOUK VILLE	Vocational Training Center	A330	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A230	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A220	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A320	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A320	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$8,780.49					
								\$8,780.49					
KOH KONG	Vocational Training Center	A330	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A320	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A230	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
								\$8,780.49					
								\$8,780.49					
RATANAKIRI	Vocational Training Center	A320	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A330	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A351	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A220	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$7,902.44					
								\$7,902.44					

Name of Province	Name of Organisation or Institution	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Average Cost per Course in USD	Total Cost of Courses & Placements in USD	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour in USD
PREY VENG	Vocational Training Center	A220	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
		A430	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
		A350	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
								\$10,536.59					
								\$10,536.59					
KRONG PAILIN	Vocational Training Center	A230	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A351	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A220	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A320	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$8,780.49					
	Women and Association Development Organization	A351	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A320	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A230	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$2,634.15					
								\$11,414.63					
ODOR MEANCHEY	Vocational Training Center	A230	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$6,146.34					
	Bopak Sethi Lok organization	A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$1,756.10					
								\$7,902.44					
KRONG KEP	Vocational Training Center	A320	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A230	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
								\$5,268.29					
								\$5,268.29					

Name of Province	Name of Organisation or Institution	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Average Cost per Course in USD	Total Cost of Courses & Placements in USD	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour in USD
KANDAL	Vocational Training Center	A351	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A220	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A230	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A920	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A920	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A920	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								<u>\$5,268.29</u>					
	Youth Kampuchea Technical Development Association	A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								<u>\$3,512.20</u>					
	Koma Thmey Kampuchea Association	A351	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A230	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								<u>\$4,390.24</u>					
	Koma KreyKro Khmer Organization	A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								<u>\$1,756.10</u>					
								<u>\$14,926.83</u>					
SIEM REAP	Vocational Training Center	A230	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A351	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								<u>\$5,268.29</u>					
								<u>\$5,268.29</u>					

Name of Province	Name of Organisation or Institution	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Average Cost per Course in USD	Total Cost of Courses & Placements in USD	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour in USD
PURSAT	Vocational Training Center	A920	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A340	3	173	30	90	\$878.05	\$2,634.15	2,634.15	15,588.00	\$0.17	\$29.27	\$5.07
		A220	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
		A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$10,536.59					
	ROLAN Vocational Training Center	A230	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A220	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A320	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$5,268.29					
								\$15,804.88					
BANTEAY MEAN CHEY	Vocational Training Center	A230	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
		A920	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
		A220	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$8,780.49					
	Bopak Sethi Lok organization	A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$1,756.10					
	Puthikak seksa organization	A230	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$1,756.10					
								\$12,292.68					
KAMPONG CHAM	Vocational Training Center	A920	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
		A340	4	173	30	120	\$878.05	\$3,512.20	3,512.20	20,784.00	\$0.17	\$29.27	\$5.07
		A220	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A920	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$10,536.59					
	Human Resource and Health Development Association	A230	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A320	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								\$2,634.15					
	Cambodian Women Association for Peace and Dev, Orang Ov District	A351	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A330	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								\$3,512.20					
								\$16,682.93					

Name of Province	Name of Organisation or Institution	Course Code	No. of Times Course Conducted	Average Course Duration in Hours	Average No. of Trainees per Course or Placement	Total No. of Trainees	Average Cost per Course in USD	Total Cost of Courses & Placements in USD	Sub-Total	Total No. of Trainee Training Hours	Unit Cost/Trainee/ Training Hour in USD	Unit Cost per Trainee in USD	Unit Cost per Training Hour in USD
PHNOM PENH	Specialize Development Center Kampuchea-Thail (Poun Phnom)	A351	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A920	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A920	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A920	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A230	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								<u>\$4,390.24</u>					
	Enterprise Development Center Kampuchea-India	Z002	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A220	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
		A420	2	173	30	60	\$878.05	\$1,756.10	1,756.10	10,392.00	\$0.17	\$29.27	\$5.07
								<u>\$5,268.29</u>					
	Industry Technology Institute	A920	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
		A220	1	173	30	30	\$878.05	\$878.05	878.05	5,196.00	\$0.17	\$29.27	\$5.07
								<u>\$1,756.10</u>					
								<u>\$11,414.63</u>					

**APPENDIX 10:
LIST OF PERSON MET AND INSTITUTIONS VISITED DURING THE INTERIM PHASE I**

Ministry of Labour and Vocational Training (MOLVT)

HE Pich Sophoan	Secretary of State
HE Laov Him	Director General, Directorate General of TVET
Tep Oeun	Deputy Director General, Directorate General of TVET
Hoeung Sophon	Director, Labour Market Information
Iem Kounthdy	Deputy Director, Department of National Competency Standards
An Thaysocheat	Deputy Director, Department of National Competency Standards
Pang Thareth	Deputy Director, Department of National Competency Standards
Khin Chantha	Director, Department of Technical Vocational Education and Training Management
Kheng Khemara	Deputy Director, Department of Technical Vocational Education and Training Management

Supreme National Economic Council (SNEC)

Ros Seilava	Deputy Secretary General
Ung Lyna	Deputy Head
Hay Sorathea	Research Member

Ministry of Economy and Finance

Chan Sothy	Director, Department of Investment and Cooperation
Yi Sokthearith	Deputy Chief, ADB Division
Bit Seanglim	Senior Economist, Charge de Mission

Ministry of Tourism

Sdoeung Sokhom	Under Secretary of State
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Asian Development Bank, Cambodia Resident Mission

Arjun Goswami	Country Director
Mar Sophea	Social Sector Officer

Asian Development Bank (Headquarters)

Wendy Duncan	Head- Project Administration Unit, South Asia Department, Social Sector Division
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World Bank

Beng Simeth	HRD Officer
Maria Laura Sanchez Puerta	Economist

UNDP

Sheila Scopis	Trade Policy
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JICA

Hak Lyda	Program Manager
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AFD

Eric Beugnit	Director
Christofer China	Project Officer

GTZ

Peter Bolster	CTA, Private Sector Promotion
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International Labour Organization

Sophorn Tun	National Coordinator
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Garment Manufacturers Association in Cambodia (GMAC)

Roger E T Tan Acting Secretary General
Kaing Monika, Manager

Better factories Cambodia

Eleonore Richardson Project Manager
Catherine LaFlame Trainer

Cambodian Federation of Employers and Business Associations

Sandra D'Amico, Secretary-General
Som Chamnan Executive Manager
Im Samruol Marketing and External Relations Manager

**Training Institutions of the MOLVT and Private
National Polytechnic Institute of Cambodia**

Bun Phearin President

National Technical Training Institute

Yok Sothy Director
Mom Somach Deputy Director

Cambodia-India Entrepreneurship Development Centre

Pann Nora Director
Teang Sak Deputy Director

Preah Kossamak Polytechnic Institute

Hem Chantha Director
Chum Vongchann, Chief, Education Office
Sban Thuch Chief, Administration and Finance Office

National Institute of Business

Lach Socheath Director
Tear Lvhuot Deputy Director
Ly Sothea Deputy Director

Kampot Provincial Training Centre

Nou Neath Director

Cambodia-Thai Skills Development Center

Ho Huoy Director

Kampong Chhang Provincial Training Centre

Rath Vongsey Director

Polytechnic University

Paul Penfold Manager (Educational Development)

JVC Workshop / Technical School

Am Deang Director
Nop Thim Vice Director
Kaiya Hideo Japanese Advisor

Smart Training Center

Kong Pharith, President

Kinma Industries Pte. Ltd.

Colin Hong Managing Director

Ecole Paul Dubrule

Beatrice Baranger Director

Association of Canadian Community Colleges (Headquarters)

Rudy Sabas Manager, Business Development and Technical Cooperation
(TA 7116-CAM Project Director)

Other

Seng Bunthoeun National University of Management
Tep Mona Garment Industry Productivity Centre
