Analysis of Vocational Education and Training

Sri Lanka

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Sri Lanka

General

About 20 million people live in the Democratic Socialist Republic of Sri Lanka. Of these people 69,1% are Buddhist, 7,1% is Hindu, 6,2% is Christian and 7,6% is Muslim. The people speak Sinhala (official language), Tamil and English. The struggle by the Tamil Tigers of the north and east for a largely independent homeland continues to cast a shadow over the economy. In late December 2004, a major tsunami took about 31,000 lives, left more than 6,300 missing and 443,000 displaced, and destroyed an estimated $1.5 billion worth of property (CIA, 2006).

Table: Age structure

0 – 14 year	24,5 %
15 – 64 year	68,4 %
65 year and over	7,2 %

CIA, estimation 2005

Economy

The average GDP per capita is 948 USD (in 2003), and is therefore one of the 'lower level middle income countries'. There are great regional differences, varying from 2300 USD (Colombo) to 400 USD (in the North East). Sri Lanka's most dynamic sectors are food processing, textiles and apparel, food and beverages, telecommunications, and insurance and banking. In 2003, plantation crops made up only 15% of exports (compared with 93% in 1970), while textiles and garments accounted for 63% (CIA, 2006).

	% of labour force	% of GDP
Agriculture	38 %	17,7 %
Industry	17 %	27,1 %
Trade and service	45 %	55,2 %

Source: CIA, 1998 and 2005

Sri Lanka has a labour force of 8.08 million people (CIA, 2005 est.) 8,4 % of this labour force is unemployed [this counts for 67.8720 people]. About 800,000 Sri Lankans work abroad, 90% in the Middle East (CIA, 2006).

High rates of unemployment contribute to low incomes and poverty among the youth population. The Central Bank estimates that more than 70 percent of the unemployed are youth [this counts for over 475.000 youngsters]. The problem of youth unemployment has many causes but is intensified by the lack of an entrepreneurial culture and attitude amongst the youth. This, in turn, is related to limited economic opportunities for enterprising activities as well as the absence of entrepreneurial-related curriculum in the vocational and secondary schools. To reduce the high level of youth unemployment, the Government will launch a new National Youth Corps (NYC) to provide vocational training and career guidance to unemployed youth aged 17-22. In addition to vocational skills development, the NYC training will inculcate leadership qualities while providing personality development and career guidance to these young men and women (Govt. of Sri Lanka, 2002).

The supply of Sri Lankan technicians, skilled workers, and mid-level professionals is falling short of both local and international demand. There is unemployment, especially among educated youth, which remains high despite a large gap between supply and demand. "A large number of graduates lack the skills needed for jobs or self-employment. But these youths could be employed in industry if they were trained in relevant technical and vocational skills," says Leah Gutierrez, an ADB Senior Social Sectors Specialist (ADB, 2005).

Education

A country invests in its people through its education systems and the provision of social services. Investing in people is usually one of the most important public-private partnerships affecting welfare and the incidence of poverty. Nearly half of all education and health care, and a significant portion of the other social protection services, are provided by private, non-governmental and community based organizations. As the demand for social services rises, Government will need to increasingly target its human resource investment to the poor, and will need to work more closely with the private and non profit sectors to ensure that services are provided to meet the needs of all Sri Lankans.

Sri Lanka enjoys impressive basic education attainment indicators in comparison to other developing countries at similar levels of per capita national income.

Net enrolment in primary education (grades 1 – 9)	85 – 90 %
Expected in 2005	100 %
Gender ratio in primary education (M – F)	50 – 50 %
Net enrolment in secondary education	85 %
Expected in 2010	100 %
Expected enrolment in tertiary education in 2005 (students of 20 – 24 yrs)	15 %
Enrolment in vocational education in 2000	48.500
Expected enrolment in vocational education in 2005 *At the same time, just under half of all vocational training courses will be converted into competency based training.*	72.000
Adult literacy (estimated 2002)	> 90 % (88,6 females, 92,2 males)
Public spending on education as percentage of GDP	2,5 – 2,9 %
Number of trained teachers (general) 2000	59 %
Expected in 2005	90 %

Source: Govt of Sri Lanka, 2002

Ambitious goals have been set for the education sector. To deliver these results, there will be more trained teachers, more students in tertiary education and far better equipped schools. At least half of all schools will have libraries by 2005.

Although Sri Lanka has universal access to primary education, the poor quality of education services received by many poor students contributes to high dropout rates and the low returns accorded to basic education in the labour market. About 2,000 schools, most of which are in poor rural areas, lack basic facilities such as desks, chairs and blackboards. There is a key shortage of quality inputs, particularly teaching materials in subjects such as science, mathematics, environmental science and English. Many schools in remote and/or "difficult" areas do not have trained teachers, while some schools in more favoured areas have surplus teachers. Efforts to raise education achievement levels and to introduce a child-centred curriculum have been hampered by frequent teacher absences from schools. Under Sri

Lanka's public service rules, teachers are entitled to over 40 personal leave days in addition to their normal holidays. 50,000 teachers, or close to 27 percent of the total cadre, are untrained, and it is the untrained teachers who are primarily assigned to the poor, rural schools. Teachers' lack training in instructing children with special needs and the special learning needs of children in conflict affected areas needs to be addressed.

While general education from grades 1-9 is compulsory, only a network of primary schools (grades 1-5) has recently been established in the estate sector. Serious inadequacies in tertiary education limit potential for national economic development. The relatively high enrolment in secondary education has resulted in intense pressure for access to tertiary education. There is an excessive waiting period of up to two years, before university entrance. The tertiary GER is well below that of countries with whom Sri Lanka has to compete in a technological sophisticated global economy. Notwithstanding this low

participation level, unemployment among graduates is high despite the critical skill shortages in some key areas of the economy. Furthermore, employers express dissatisfaction with the competencies and skills of graduates. Curricula in many disciplines are not in tune with broader economic and social needs. Pedagogical practices do not encourage the acquisition of competencies and skills in demand in the labour market. Legal restrictions limit private sector participation in university education and the current budgeting process does not provide incentives for performance (Govt of Sri Lanka, 2002).

Technical and Vocational Education and Training

How is VET defined? Formal, informal and non formal? Does it include training on the job? Which ones have priority in governmental practices and policy? How successful are they?	Formal: integrated in the education system Informal TVET is organised by NGOs and training on the job. Most VET is lower and intermediate vocational training.
% youngsters in vocational education and training, regional differences	48.500 students in 2000, n 72000 expected in 2005.
Share of flow from regular education to vocational education and training	The number of students enrolled in vocational training has risen from 48.500 in 2000 to 72.000 in 2005. just under half of all vocational training courses will be converted into competency based training. (PRSP, 2002)
Gender ratio in VET on national level, regional differences	NA
Which institutions pay attention to VET? (private actors (local NGOs, Churches, private institutions), commercial (organised by trade and industry companies) and public actors)	Of the 1066 training providers registered with TVEC, almost half are from the private and NGO sectors. According to the training capacity data reported by the private institutions, their capacity to train could be double that of governmental institutions (TVEC, April 2004).
In which regions are they active, share urban / rural?	VET is mainly focused on rural areas.

Those who fail their O-level and A-level examinations have few options to continue their education. They can enter TEVT, or be employed in private companies or in government departments as apprentices or trainees. Not only is TEVT substandard, but there are also few chances to move up within the existing TEVT system. This hampers TEVT's potential to address unemployment, build skill based competitiveness, and develop students with the right combination of attitude and vocational aptitude. In general, there is no systematic link between TEVT and the higher education system. This makes it hard for students to forge upwardly mobile, life-long career paths. The intake capacity of tertiary education is well below the average for South Asia. Those who cannot enter public universities enroll in external degree programs or in non-degree private post-secondary institutions or private institutions affiliated with foreign universities. However, few regulatory impediments are placed in the way of establishing private post-secondary institutions and no quality standards or accreditation system exists. External degree programs suffer from poor quality and weak administration. The curriculum of the current university system should be upgraded and tailored to equip graduates with marketable skills (ADB, Dec 2005).

Table 1. Recruitment and Completions in selected Public Sector Training Organizations for the year 2003 - 2004

	Level of Training			
	Certificate	Diploma	High Diploma	Total

Institute	Recruitment	Completion	Recruitment	Completion	Recruitment	Completion	Recruitment	Completion
Vocational Training* Authority of Sri Lanka								
2003	22,503	16,186	226	242	N/A	N/A	22,729	16,428
2004	22,267	17,921	207	191	N/A	N/A	22,474	18,122
National Apprentice and Industrial Training Authority								
2003	8,704	6,543	302	199	N/A	N/A	9,006	6,742
2004	12,793	7,471	285	222	N/A	N/A	13,078	7,693
Sri Lanka Institute of Advance Technical training Institute SLITE								
2003	N/A	N/A	2,152	n.a	3,574	n.a	5,726	Na
2004	na	na	na	na	na	na	na	Na
Department Of Technical Education And training								
2003	13,107	8,509	93	61	N/A	N/A	13,200	8,570
2004	11,758	8,166	108	174	N/A	N/A	11,866	8,340
Clothing industry training Institute								
2003	1,824	1,824	61	61	N/A	N/A	1,885	1,885
2004	na	na	na	na	N/A	N/A	na	Na
Sri Lanka Institute of Printing and Graphics								
2003	na	na	na	na	na	na	na	Na
2004	975	804	109	94	N/A	N/A	1084	898
National Institute of Business Management (NIBM)								
2003	na	na	na	na	na	na	na	Na
2004	1,211	853	382	In progress	120	In progress	1,713	853
Total								
2003	**46,138**	**33,062**	**2,834**	**563**	**3,574**	**0**	**52,546**	**33,625**
2004	**49,004**	**35,215**	**1,091**	**681**	**120**	**0**	**55,462**	**35,986**

Key: na = not available, N/A = not applicable, * = Provisional
Note: Completions include the intake of previous years for courses of different duration.
Source: Vocational Training Authority of Sri Lanka, National Apprentice and Industrial Training Authority, Department of Technical Education and raining, Sri Lanka Institute of Advance Technical Education and Training, Clothing industry Training Institute

Table. Public Sector Output by Sector: Recruitment and completion for the different levels of training programmes by the selected TVET agencies functioning under the Ministry of Tertiary Education and Training in 2002

	Level of Training			
	Certificate	Diploma	Higher Diploma	Total

	Recruitment	Completions	Recruitment	Completions	Recruitment	Completions	Recruitment	Completions
Agriculture and Livestock	234	182	220	49	-	-	454	231
Mechanical / Production & Automotive	3,514	2,470	31	13	66	-	3,611	2,483
Building and Construction	5,790	3,998	215	136	59	-	6,064	4,134
Computer and Information Technology	3,216	2,618	225	232	68	-	3,509	2,850
Electrical & Electronics	6,600	4,476	75	63	65	-	6,740	4,539
Fisheries	60	50	-	-	-	-	60	50
Food & Beverages	145	140	-	-	-	-	145	140
Gem & Jewellery	433	297	17	17	-	-	450	314
Handicrafts and Cottage Industries	29	28	-	-	-	-	29	28
Hotel & Tourism	980	575	-	-	-	-	980	575
Marine & Shipping	-	-	18	17	-	-	18	17
Metal & Light Engineering	3,721	2,539	119	41	-	-	3,840	2,580
Management & Commercial	5,875	3,342	303	158	1,726	303	7,904	3,803
Personal & Community Development	1,394	1,100	574	133	-	-	1,968	1,233
Printing and Packaging	241	130	-	-	-	-	241	130
Rubber Plastics & Leather Related	128	78	-	-	-	-	128	78
Textiles & Garment	13,114	11,487	24	24	-	-	13,138	11,511
Wood Related	1,904	1,292	-	-	-	-	1,904	1,292
Total	**47,378**	**34,802**	**1,821**	**883**	**1,984**	**303**	**51,183**	**35,988**

Note   :   Completions include the intake of previous years for courses of different duration.
 Data for 2003 are not available yet.
Source: Vocational Training Authority of Sri Lanka
 National apprentice and Industrial Training Authority
 Sri Lanka institute of Advanced Technical Education
 Department of Technical Education and Training
 Clothing Industry Training Institute

Target groups of VET are: uneducated youth, ex militants, war victims, refugees and street children are trained in VT knowledge to earn money and take care of them selves. VET is mainly focused on rural areas. After the Tsunami many youth are asking for VET, but there is too little capacity to provide them all with training. Jobs are specified for sex. Girls are unwilling to go for boy's jobs or training (Questionnaire, 2006).

Of the 1066 training providers registered with TVEC, almost half are from the private and NGO sectors. According to the training capacity data reported by the private institutions, their capacity to train could be double that of governmental institutions (TVEC, April 2004).

Policy and organisation of VET

The Tertiary and Vocational Education Commission (TVEC) is responsible for the planning, coordination, and development of technical and vocational education and training (TVET) in Sri Lanka. TVEC was established by the Tertiary and Vocational Education Act No. 20 of 1990.
Currently all the major government training providers, with the exception of the institutions managed by the National Youth Services council, come under the purview of the Ministry of Tertiary Education and Training (MTET). Several ministries and their departments maintain training facilities mainly to provide training for new entrants and skills upgrading for existing workers in support of their respective functions. Departments of Agriculture, Fisheries, Posts

and Telecommunications, and Railways and Social Services and Electricity board, Ports Authority and the Ministry of Health are major examples of agencies providing such specialized training.

There are two other major agencies with regulatory mandates. The National Industry and Apprentice Training Authority (NAITA) that is established under the TVEC Act is responsible for the development of skill standards and the conducting of trade tests. NAITA also provides apprentice training.

The National Institute for Technical Education in Sri Lanka (NITESL) was established in 1998. NITESL is responsible for the development of human resources, curricula and instructional resource materials for the TVET sector. NITESL also trains the trainees.

Skill standards and curricula developed by NAITA and NITESL, respectively, have to be endorsed by TVEC before they become national documents. Both agencies are also required to act in accordance with any development plans put forward by the TVEC (TVEC, April 2004).

There are six agencies under the purview of the MTET.
- Department of Technical Education and Training
  (36 technical colleges)
- Vocational Training Authority
  (4 national centres, 4 special centres, 14 district centres, and 176 rural centres)
- Sri Lanka Institute of Advance Technical Education
  (11 stand-alone institutes and 9 sections in technical colleges)
- National Apprentice and Industrial Training authority (NAITA)
  (3 national centres and 84 regional centres)
- Clothing Industry Training Institute
- Ingrin institute of Printing and Graphics

In 2003, the total annual intake of these institutes was 52,546 and the trainee out put was 33,625

Other Major Public Sector Training Providers are:
- National Youth Services Council Training Centres
- Ceylon German Technical Training Institute
- School of Hotel and Tourism
- Gem and Jewellery Research and Training institute
- Textile Training and Services Centre

The total trainee output from these other governmental institutions may not total more than 5000 (TVEC, April 2004).

Government curriculum provides more theoretical training than practical (Questionnaire, partner Woord en Daad, Feb 2006)

Vocational training will be shifted to competency-based education and private sector involvement will be significantly boosted. The government will promote rural to urban migration that does indeed reduce poverty by enhancing the quality of rural education and vocational training. In anticipation of a strong upturn in tourism demand, government will utilize its existing network of tourism training facilities to ensure that adequate vocational training opportunities in the hospitality trades. English language skills and construction exist in poor communities. This will require reorienting rural vocational training programs. There is a lack in entrepreneurial related curricula in secondary and vocational education. To reduce the high level of unemployment, the government will introduce a National Youth Corps to provide vocational training and career guidance to unemployed youth aged 17 – 22. (PRSP, 2002)

There is much concern about the mushrooming of organizations that offer training in computing. The quality of training provided by other training institutes is also a concern. Developing standards and accreditation of courses based on those standards is the antidote to lack of quality in the TVET sector (TVEC, April 2004). The ministry of Human Resource Development and Technical and Vocational Education is responsible for the standards and quality of VET in Sri Lanka. They have written a "*Six year development program: technical education and vocational training sector.*" Performance standards for vocational training will be revised along the line of competency based training and will be based on standards derived from industry. A Higher Institute of Applied Technology will be established to lead the vocational training process and to provide a recognized system of professional certification in the vocational trades. (PRSP, 2002)

For more information on Quality standards and accreditation see appendix.

The main goals on VET in national policy

The Tertiary and Vocational Education Commission (TVEC) at the directive of the Ministry for Tertiary Education and Training has prepared development targets for VET in 2004. They strive for a TVET system which is:

- Unified (where a variety of actors is unified and operates under a common umbrella made up of (1) a national development plan, (2) a national qualifications framework and related standards and (3) a reliable TVET information system.)
- Rationalized (Private sector to serve as the main provider, Public sector to concentrate on training in areas where the private sector lacks capacity, and Public and private sectors to enter into partnerships, as necessary.)
- Demand-driven (Facilitate a demand-driven system by establishing links between training providers and industry groups or industry councils, and Increase industry-based initial training, further training and retraining opportunities
- Competency-based (enable a competency based national qualifications framework)
- Quality-assured (ensure that there are sufficient quality programs in skill areas that are in demand by industry)
- Attractive to (talented) school-leavers (Establish advanced colleges of technology that will make technology education attractive to talented school leavers by enabling: Laddering from vocational and technical track to technology track, Laddering from technology track to degree programs and Availability of quality Career guidance)
- Available and Accessible to all (Increase training opportunities to rural youth and women and groups affected by war by mobilizing public/private and NGO resources in those areas, and Ensure access to economically disadvantaged groups in all regions through a voucher system and Provide career guidance at all levels)

(TVEC, January 2004)

(See Appendix 2 for a more extended version of the development plans)

To produce skilled citizens who are capable of competing in the world market and contributing to the countries economic growth and knowledge development. VET also supports the upward socio-economic mobility of the poorest segments of the population and increases equality of opportunities across regions and among genders and ethnic groups. Handicapped persons are provided vocational training so they can return to society with useful skills for self employment (PRSP, 2002).

A program framework that spells out goals and strategies including existing investments in secondary and post secondary education (including TVET) will be developed (ADB, 2005).

Relation government and trade and industry (private) companies and private initiatives in VET

The dominant mode of training in Sri Lanka is informal on-the-job training in the industry. In the garments, rubber and plastics, leather, food and beverages sectors and in the services sectors this is the main mode of training. Some companies, especially those in the garment industry have dedicated training units (TVEC, April 2004).

Encouraging more private and NGO participation in training in key industry sectors is an issue. The implementation of the recommendations in 1997 presidential task report in this regard has not taken place to date [2004]. A review of these recommendations and an accelerated plan to implement those are highly in order.

The initial cost of setting up training facilities is one of the impediments to private provider participation. Currently TVEC receives only about 2 million rupees annually from treasury funds to award to private institutions for capital expenses. An increase in this amount is highly desirable. A voucher scheme to support trainees who pursue training in private institutions is another option that should be explored in this regard.

Bringing private or NGO providers and the public sector providers together in public-private partnerships that lead to more efficient use of existing public sector facilities is another strategy pursued by TVEC.

The 1997 report of the presidential task force on TVET is the latest available document that can be identified as a national plan. Updating the 1997 National policy document and preparing a development plan for 2005-2009 are two activities that are essential for establishing a unified system of TVET. According to the 1997 report of the presidential task force on TVET, the private sector should increasingly become the main providers of training with the government playing the role of the facilitator. The report further recommends that the government's responsibility should be focused on training with strong social development goals and on programmes for which the private sector has no interest of capacity (TVEC, April 2004).

This scenario of the private sector being the main provider will not become feasible unless there is a national program to support those who are not able to pay for training. In that regard, the proposed plans for a human resources endowment fund which is to be established through an industry levy should be pursued with vigour.

International donors / INGOs involved in VET

ADB has provided broad based assistance to the Government of Sri Lanka for the education sector, covering secondary education, post secondary education, and TVET. (ADB, 2005)
WUSC is organising short term training in various places (Questionnaire, 2006)
NA

Networks around VET

VTCs do have contacts with enterprises. The partner of Woord en Daad, St John's VTC, earns 40 % of its expenditure out of Job and Trade. Local NGOs work on TVET in networks on regional level. These networks are expanding the idea of TVET and do lobby and advocacy activities. The local NGO networks do have relations with international NGOs and the trade and industry sector. Private VTCs are influencing the government to improve their actions. Private VTCs are involved in a network with the government and NGOs to coordinate the Vocational Training Programme (questionnaire, 2006).
NA

(New) initiatives / intentions from the trade and industry (private) sector around VET

Currently, there is very little input from industry in the formal TVET sector except in the process of skill standards development at NAITA, where committees made up of relevant industry representatives are convened by NAITA for the purpose of writing standards for their

industries. Some training institutes have training advisory committees but the effectiveness of these is largely unknown.

Ideally, industry groups will decide the skill standards needed for the industry and develop the skill standards themselves with the government only assisting with the process of preparation and endorsing the final product. This scenario will become particularly important after the end of the SDP project period (TVEC, April 2004).

Currently, the tertiary and vocational education and training is largely supply driven with a network of public sector institutions delivering formal vocational and technical training with very little inputs from industries or employers. There also exists a large number of registered private and NGO providers who may or may not have industry links. The system needs to be made responsive to labour market demands through inputs from industries and industry councils.

In order to make the system more demand-driven, links between training providers and workplace need to become an essential component of the TVET and expanding access to trade-testing becomes a critical issue. Training providers who respond to the needs of retraining and further training of workers are also important.

Therefore it is important that TVEC initiates formal links with industry councils at the national level in order to receive their inputs into training, have them develop their own skill standards and training standards, and also to have them take leadership in skill development in their respective areas. Training providers or associations of training providers at the regional or local levels should also establish their own links with industry in the region (TVEC, January 2004).

The private sector can play a valuable role in broadening access to tertiary training services. In the future, the private sector will be encouraged to invest in Universities, technical training facilities and other postsecondary educational institutions. A voucher system will be introduced for the poor to ensure that they have equal access to privately provided sources of post-secondary education. A Human Resources Endowment Fund will be established to support this important venture (Govt. of Sri Lanka, 2002).

Education of teachers
NA

VET specialisations

Although more than half of the courses offered by the private and non governmental providers are for short-term computer education courses, TVEC has noted many quality institutions that provide training in areas such as construction, automotive, and electrical and electronics (TVEC, April 2004).

A labour market information system (LMIS) provides a picture of the supply of and the demand for jobs for each type of occupation is a key component of a smoothly functioning TVET sector.

Main source of information for the LMIS at TVEC is the quarterly labour force survey data from the department of census and statistics, TVEC's own survey of job vacancies advertised in Sunday newspapers, and foreign employment bureau data on job orders and departures. The results are summarized in the Labour Market Information Bulletin that is published biannually by TVEC.

Highlights from the LMIS

- The public sector output in 2002 was 36,000. The largest out puts were in textile and garment, electrical and electronic trades, building and construction, computer information and technology
- There is a high demand for the same trades in the foreign markets, but Sri Lanka is unable to fill the job orders in this category.

- The highest local demand is for sales and service sector jobs.

The main sectors for VET are:
1. Welding
2. Carpentry
3. Sewing
4. Air-condition and refegriration
5. Computer hardware
6. Secretarial Course
7. Printing
8. Leather Work
9. Electronics.
10. Electrical wiring and plumping
11. Agriculture
12. Motor Mechanism
13. Lathe (=draaibank)

Jobs which earn more money, are easy to learn, which can be done without sophisticated machines and opportunities in the Middle East countries are popular (Questionnaire, 2006).

Table. Job Orders Received & Departures by Bureau of Foreign Employment Job Category, January – September 2003

Job	Job Orders	Departures
Driver - House	13,073	2,654
Operator – Machine	11,498	7,139
Housemaid – Christian	11,314	5,344
Driver – Light Vehicle	9,576	3,,512
Other – Middle Level Person	4,277	1,911
Gardener	4,108	2,654
Mason – General	3,931	1,229
Cook – Domestic	3,764	230
Driver – Heavy Vehicle	3,695	1,987
Mechanic – General	3,496	789
Carpenter – Furniture	3,222	650
Electrician – General	3,024	814
Tailor – Female	2,838	2,375
Welder – General	2,694	669
Cook – General	2,350	396
Fitter – Plumber / Pipe	2,290	443
Carpenter – Joiner	2,013	544
Tailor – Domestic	1,926	74
Ironer	1,542	1,106
Technician - General	1,497	369

Source: TVEC, April 2004

Table Number of Job Advertisements (Informal & Small Industry Sector and Formal Sector) by Main Categories of Occupation, 2002/2003

Main Occupation Category	2nd Half 2002 No. of Ads.	1st Half 2003 No. of Ads.	Increase %
01. Senior Officials & Managers	1,049	1,258	19.9
02. Professionals	1,668	1,697	1.7
03. Technicians & Associate Professionals	2,538	2,718	7.1
04. Clerks	1,907	1,922	0.8
05. Sales & Service Workers	7,303	7,570	3.6
06. Skilled Agricultural and Fishery Workers	390	356	8.7

07. Craft and Related Workers	**4,522**	**4,891**	8.1
08. Plant & Machine Operators and Assemblers	**1,895**	**2,128**	12.2
09. Elementary Occupations	**1,546**	**1,628**	5.3
10. Management Trainees and Other Trainees	**548**	**551**	0.5
Total	**23,366**	**24,719**	**5.8**

(TVEC, April 2004)

Strengths and weaknesses

Keeping track of the training providers and reporting accurately on their capacity is a challenge. TVEC will be making the annual reporting of data by training providers a requirement for registration and increase the data processing capability of TVEC in order to overcome this problem (TVEC, April 2004).

Strengths	Weaknesses
The country has a large number of public and private institutions offering vocational training and technical education (Govt of Sri Lanka, 2002).	The curriculum is outmoded (PRSP, 2002)
Increasing the on-the-job training component of all TVET training and allowing workers to acquire certification for their on-the-job training through on-the-job assessments will improve the job prospects of new entrants to the workforce and enhance the earning potential of those already employed (TVEC, April 2004).	Programs offered are supply driven and bear little relation to the needs of the private sector (PRSP, 2002)
The government's strategy in post-secondary skills training is to promote the private sector as the main provider of pre-employment and job-entry training (Govt of Sri Lanka, 2002).	There are wider gender imbalances in enrolment (PRSP, 2002)
	In rural areas, most government vocational training instituted provide training fields for which there is very little market demand (PRSP, 2002)
	Most of the training provided is unstructured, lacks adequate coverage and is technically incomplete (PRSP, 2002)
	TVET is substandard and lacks chances to move up within the TVET system. This hampers TVETs potential to address unemployment, build skilled based competitiveness, and develop students with the right combination of attitude and vocational aptitude (ADB, 2005).
	In general there is no systematic link with TVET and the higher education system. This makes it hard for students to forge upwards mobile, life long career paths (ADB, 2005).
	Technical and vocational education and training can be expensive. Training a lathe machine operator or a welder requires much capital investment and considerable expenses for consumables. The inability of trainees to pay the full-cost of training is a barrier (TVEC, April 2004).
	Foreign jobs generally require 3-4 years of experience and therefore are largely out of the reach of most TVET trainees fresh out of technical colleges or vocational training centres.
	Local employers also may prefer workers who have trained on–the-job with them.[1]
	Currently, the technical and vocational track is seen by school leavers as an unattractive dead-end track.

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[1] A tracer study of computer studies, automotive training and office related training conducted by the TVEC show that trainees who followed apprentice courses have higher chances of employment.

	There are many issues that need to be resolved in this regard. Those issues, in particular the expansion of training at the diploma level and the mobility to and from various types training, should be addressed in a national policy document and national development plan through expert consultations and stakeholder inputs (TVEC, April 2004).
	The organisation of VET by the government of Sri Lanka is a failure. In Sri Lanka High school education is compulsory up to 11th class. This doesn't have VT education. Many children (up to 95%) don't go to University. So they finish high school without practical skills. Therefore it is important that VET will be included in the secondary school program. (Questionnaire 2006).
	There is no information sharing in Sri Lanka (Questionnaire 2006).
	There are thirteen public Universities, serving less than three percent of the University-age population. The relevance and quality of public University training is of grave concern. The lack of a more robust pool of skilled tertiary graduates weakens Sri Lanka's entire education system and starves the labour force of the sorts of skilled-public servants and entrepreneurs needed to foster broad-based economic development (Govt of Sri Lanka, 2002).
	High dropout rates and low returns to training (Govt of Sri Lanka, 2002).
	Post-secondary skills training institutes suffer from a mismatch between the training offered and the skills required in a modern, market economy (Govt of Sri Lanka, 2002). .
	There is a shortage of capable trainers (Govt of Sri Lanka, 2002).

Information sources available

- PRSP Sri Lanka 2002, IMF
- ADB technical assistance report; preparing the education sector development program, December 2005
- Status of the Technical Education and Vocational Training Sector, A report from the Tertiary and Vocational Education Commission (TVEC), April 15, 2004
- Skills development programme in Vanni, August 2003, Tamilnet
- Questionnaire 12 3 2006, St John's Vocational Training Centre, Rev.Dr S.Jeyanesan
- Development targets for 2004: Tertiary and Vocational Education Sector, prepared by the Tertiary and Vocational Education Comission, January 2004
- Regaining Sri Lanka: Vision and strategy for accelerated development, Government of Sri Lanka, December 2002
- Unesco / Unevoc website
- Project proposal CSS, project No 16.82.005
- ADB, 2005 ADB to help improve technical education and vocational training in Sri Lanka, press

6 Recommendations for further research

Appendix I Quality standards and accreditation of VET

Standards, Curricula, and Competency-Based Training

A skills standard identifies the competencies required of a worker in a given occupation. NAITA is responsible for developing skill standards and NITESL is responsible for the development of curricula under the guidance of TVEC. All skill standards and curricula have to be endorsed by TVEC.

TVEC develops accreditation standards for a given occupation based on the skill standard for that occupation. With the support of the skills development project, TVEC expects to have the standards and curricula for 45 trades ready by the middle of 2004. The list of 45 selected trades and the currently available accreditation standards are annexed (Tables 2 & 3). Currently available list of 72 accreditation standards exceed the number of skills standards that have been developed because TVEC has developed accreditation standards in the past years without reference to skill standards. Over time, all accreditation standards will be based on skill standards.

Competency-Based Training (CBT) is training that is provided according to the competencies identified in the skill standard for a given occupation. In competency-based training, the focus is on the achievement of competencies, not the time spent on training. A trainee receives a certificate of achievement for each competency module completed. An identified set of modules is matched to an occupation, and on the completion of all required modules a trainee can receive a national vocational certificate for that occupation. In this modular based approach to training, a trainee has the flexibility of completing modules at his or her own time.

Accreditation of Courses

Accreditation of programs started in 2000. Accreditation involves a desk evaluation by TVEC followed by an on-site inspection by a TVEC representative and a specialist in the subject. The inspection has five assessment components--technical aspects, document review, and training delivery review, Teaching/Learning Assessment, and Physical Observations. Further details can be found in Annexure I and in the development plan Gazetted on 7th of September, 1995.

By the end of 2003, TVEC was able to accredit only 39 courses (Table 4). A major impediment to the accreditation of training programs has been the cost of developing accreditation standards and cost of field evaluations. Since 2003, with the help of the Skills Development Project (SDP), TVEC has been able to accelerate the development of accreditation standards. Currently, TVEC has standards for 72 occupations and about 40 more will have been developed by the end of 2004. It is estimated that it would be possible now to evaluate up to 800 additional training programs within the next two years, using the newly available accreditation standards and the support of the SDP for field visits.

Registration of Institutes

The process is detailed in the development plan 867/8 published in the Gazette of September 7, 1995. To date, 1066 institutions have been registered with TVEC. Registration of an institute with TVEC means that these institutions have the basic facilities to provide training, but training programs offered by these institutions have not been evaluated in detail. After a desk evaluation, a TVEC representative visits the institution to inspect the facilities. Currently, registered institutes offer over 4000 TVET courses. The directory of training providers for 2002 is available from TVEC. The 2004 directory will be published before or by June 2004.

The process of registration of institutes has enabled TVEC to ensure that there is at least a minimum level of quality in the training provided by training institutions, until a full evaluation for accreditation of individual courses can be carried out.

Quality Management, Monitoring & Auditing

A Quality Management System (QMS) shall ensure that the Training Provider has the capability to establish and maintain an environment fit for delivering education and training to specified standards and that the training provider has adequate and appropriate good governance and management practices that helps achieve its goals and objectives. The intention of the TVEC is to establish coherent & robust quality management systems within all the training providers who are delivering accredited training programmes.

Monitoring and auditing of the training providers are essential components of a QMS. TVEC started the monitoring process in late 2003, beginning with a sample of 65 programs from the Western province. Forty of those monitoring visits have been completed to date. Monitoring ensures that the delivery processes are meeting the standards specified by the National Standard for Course Accreditation. Auditing of the Training provider ensures that the entire Quality management System defined by the training provider meets its expectations and maintains good governance and management practices.

The Monitoring & Auditing processes are done internally by the training provider and externally by the TVEC with personnel trained in quality audits.

Awarding of National Vocational Qualifications

With the assistance of the SDP, TVEC now has established a national vocational qualification (NVQ) framework around which all qualifications currently offered by a variety of training providers can be unified. The National vocational qualification policy document will be presented to the board of the TVEC by or before the end of June for the board's approval.

According to the Sri Lankan NVQ framework, qualifications will be assigned at seven levels for a given occupation. Qualifications at levels 1-4 generally should be called certificates and those at levels 5 and 6 should be called diplomas and higher diplomas, respectively. At levels 1-3, a worker is able to carry out tasks under supervision. By level 3, the degree of self-directed work would have increased, and by level 4, a worker would demonstrate the ability to work independently and can be called a master craftsman. A full description of the proposed NVQ levels can be found in Annexure II.

In an NVQ framework, training does not need to take place in an institution. A person can receive an NVQ certificate through institutional training, on-the job training, or for dual training where both institutional and on-the-job training occurs.

If a course can be accredited as meeting national accreditation standards and meeting QMS expectations, a trainee completing such a course can be awarded a NVQ certificate bearing the logo of TVEC and the logo of the training provider. The back of the certificate will contain a list of the modules completed by the trainee. An NVQ certificate will have a standard format and the same appearance whether awarded in Hambantota or Killinochchi.

If an experienced worker wishes have recognition for prior learning (RPL), he or she can request for an on-the-job assessment. On-the-job assessments can be carried out exclusively in the work place by registered assessors.

With the assistance of the Skills Development Project and in collaboration with the Vocational Training Authority, Department of Technical Education and Training and National Apprentice and Industry Training Authority and a few selected private and NGO providers, TVEC is currently coordinating a pilot project with the aim of demonstrating the feasibility of

the NVQ concept and awarding at least 100 NVQ certificates in the process. The target for the awarding of these certificates is December 2004.

Table 2. The Set of Occupations Identified by the Skills Development Project for Development of National Skills Standards

Automobile Repair and Maintenance
1. Automobile Air-conditioning Mechanic
2. Automobile Electrician
3. Automobile Mechanic
4. Automobile Painter
5. Automobile Tinker
6. Motor Winder
7. Motor Cycle Mechanic

Agriculture and livestock

Art & Media

Aviation, Aeronautics & Navigation

Building Construction
8. Aluminum Fabricator
9. Bar Bender
10. Carpenter (Buildings)
11. Carpenter (Furniture)
12. Electrician
13. Household Electrical & Electrical Equipment Repairer
14. Industrial Plumber
15. Mason
16. Painter (Buildings)
17. Plumber
18. Surveyor (Technical Officer – Surveying

Electrical
19. Radio, TV and Allied Equipment Repairer

Electronics and Telecommunication

Finance and Management

Food and Beverages
20. Baker
21. Fruit and Vegetable processor

Gems and Jewellery
22. Jewellery Manufacturer
23. Jewellery Stone Setter

Hotel and Tourism

Handicraft and Cottage Industry

Information Technology
24. Computer Graphic Designer
25. Computer Hardware Technician
26. Computer Network Technician
27. Computer Programme Operator
28. Computer Typesetter

Leather and Footwear
29. Footwear Maker (Leather)

Metal and Light Engineering
30. Fabricator (Metal)
31. Machinist (General)
32. Tool & Die Maker

33. Welder
Mechanical
34. Boiler Operator
35. Pneumatic Technician
36. Refrigeration & Air Conditioning Mechanic
37. Tea Machinery Mechanic
Marine Shipping & Fisheries
Medical & Health Sciences
38. Medical Technician
Office Management
39. Store Keeper
Printing and Packaging
40. Offset Machine Operator
Rubber & Plastic
41. Plastic Processing Machine Operator
42. Rubber Processing Machine Operator
Textile and Garments
43. Industrial Sewing Machine Operator
44. Work Study Officer
Personnel and Community Development
45. Beauty Culturist

Wood Related

Appendix 2 Unified VET system in Sri Lanka (Draft development plan 2004, TVEC)

The public sector providers are only one part of the TVET domain. In fact, private and NGO providers constitute 50% of the training providers registered with the TVEC. The responsibility of the MTET and the TVEC extend to the full TVET domain that includes all training providers, skill seekers, employers or industries, funding organizations, and other organizations. The elements of a unified system of TVET for Sri Lanka is as follows:

(a) A universe of training providers (public, public-private, private, and NGO) which is self-regulated through an association/s of training providers.
(b) Emerging training providers who may not necessarily be a part of an association.
(c) A universe of industry sector councils taking ownership of skill development in their respective areas.
(d) Independent industries and small and medium enterprises (SMEs) that may choose to remain independent
(e) Skill seekers (individuals and organizations)
(f) The Human Resource Endowment Fund (HREF) to be established through industry levies. A voucher program to ensure access to the needy will be a component of the HREF.
(g) A Human Resource Investment Fund (HRIF) through which treasury funds and additional donor funds will be awarded to the public sector through performance-based funding mechanisms.
(h) Miscellaneous other organizations such as the Foreign Employment Bureau, Jobsnet and Census and Statistics.
(i) TVEC as the apex body that coordinates and supports the activities of the above stakeholders, as necessary.

The other two parts of a unified system are the national qualifications framework, and the TVET information system. A national qualifications framework is given in Appendix I. That qualifications framework is centered on the world of work, with on-the-job-training as the main mode of training and institution-based education and training playing a supportive role. This view takes into account

the reality that the bulk of the vocational training happens informally in the work place, and that the work-placed based training, if provided in a structured manner, can be superior to institution-based training.

Statistical Indicators 2004

Institute	Year Established	Total No. Of Students @			Total Income (Rs.Mn.)		Total Expenditure (Rs.Mn.)	
		Intake	Completed	Dropped	Govt. Grant	Fees & Other	Capital	Recurrent
Dept. of Technical Education & Training (DTET)	1893	11713	8081	n.a.	497.40	-	120.6	394.4
Vocational Training Authority (VTA)	1995	22353	18010	4068	229.85	18.61	17.58	280.85
National Apprentice & Industrial Training Authority(NAITA)	1971/1990	11155	7812	3264	241.05	17.11	25.00	224.30
National Institute of Business Management (NIBM)	1968	2361	n.a	n.a	-	115.01	9.95	100.78
Ceylon German Technical Training (full tine)	1959	348*	245	106		11.20		52.20
(CGTTI) (part time)		2157**	1891	266	40.70	13.60	1.50	9.50
INGIN Institute of Printing & Graphics Sri Lanka Ltd.(INGRIN)	1997	1094	860	186	-	13.02	0.21	11.10
National Institute of Technical Education of Sri Lanka (NITEL)	1999	1649	1643	6	16.95	14.42	10.10	33.49
TOTAL		52830	38542	7896	1025.95	202.97	184.94	1106.62

@ - Provisional

*   - Full time courses

**   - Part time courses

n.a. - not available

Recruitment and Completions in selected public sector training organisation 2004

Institute	No. of Centres	No. of Courses	Strength of Employees

		Part time	Full time	Academic	Non academic
Department of Technical Education and training (DTET)	36	14	44	571	1836
Vocational Training Authority of Sri Lanka (VTA)	209				
Rural Training Centres	191				
District Training Centres	14				
Special Training Centres	-				
National Training Centres	4	16	555	841	509
National Apprentice and Industrial Training Authority (NAITA)	205				
National Institutes	3				
Provincial Offices	9				
No. of other Training Institutes	43				
No. of Inplant Training Institutes	150	49	-	302	332
National Institute of Business Management (NIBM)	4	148	5	22	68
Ceylon German Technical Training Institute (CGTTI)	2	31	12	158	87
INGRIN Institute of Printing & Graphics Sri Lanka	2	23	-	15	10
National Institute of Technical Education Sri Lanka (NITESL)	1	5	14	31	70

Source: http://www.nipunatha.gov.lk/Statistical_Indicators.htm