INTRODUCTION:

The development of Technical and Vocational Education and Training (TVET) is an essential cornerstone for the recovery process and poverty alleviation in Afghanistan. In recent times, this sub-sector has been under stress from war and significant under-investment in both new knowledge and infrastructure. The Afghan labour market currently faces an acute demand for skilled and semi-skilled people in order to cope with the rapid pace of reconstruction of the country. However, unemployment remains persistent among young Afghans because many do not have the technical skills that are urgently needed for reconstruction efforts as well as the overall economic development of the country. In absence of sufficient local skilled labour the country has to hire skilled workforce from other countries and pay high wages out.

In spite of the reopening of all technical and vocational institutes (TVIs) in the country, TVET is still facing a number of serious issues and a great lack of resources. Access to TVET is severely hampered by the lack of sufficient and properly equipped learning spaces and facilities. Access to TVET is low with a total enrolment. The very low participation of girls raises issues related to the social constraints they are facing and the relevance of the training opportunities offered to them. The existing curriculum offered in the TVIs does not fully match the needs of the labour market and needs to be updated in order to strengthen the quality of TVET in the country. Other factors such as the low qualifications of teachers, low salary levels that make it difficult to recruit people with the necessary qualifications and professional experience and high pupil/teacher ratios also affect the current quality of TVET. Shortage of qualified teachers is a big challenge for the current TVET system in the country. In addition, the management capacity and systems that are necessary in order to respond quickly to the emerging needs from the central Ministry down to the school level are weak. The linkage between training centres and job market and industry is missing.

BACKGROUND:

Since 2002, the Government of Afghanistan has been instituting reforms including the reconstruction and renewal of the educational system at all levels. Assistance in this endeavor has been through the aid provided by the international community and the
return of some 3 million Afghan refugees with their skills, experiences and determination to rebuild the country. Investment has been made in infrastructure revision and upgradation of curricula, provision of learning materials and human resource development. Teaching began to be professionalized through formal and non-formal training and capacity building activities. In this changing milieu, the demand for education exceeded expectations and there was limited capacity to provide it.

Despite these gains, the literacy rate remains low at 21%. Afghanistan remains impoverished and is one of the poorest and least developed countries in the world. In 2008, 70% of the population lived on less than 2 dollars a day. The unemployment rate is high at 40%, with the number of non-skilled young people estimated at 3 million. Years of instability have resulted in formidable development challenges. At the heart of this development is the reconstruction and renewal of the educational system at every level. Technical Vocational Education is a crucial part of the Afghan National Development Strategy (ANDS). Furthermore, the Constitution of the country states that Education is a right of all citizens.

Education provision in most countries is divided into distinct but inter-linking sectors: pre-school, primary, secondary, technical-vocational and higher education. This paper will focus on the technical-vocational sector, a crucial site for the education and training of post-school mid-level personnel for the human resource development of Afghanistan.

**CURRENT PROVISION OF TVET:**

Existing statistics indicate the following data on the status of TVET provision:

1. NGOs: 30,000 students – basic vocational skills
2. Private Sector: 150,000 students vocational skills mainly in computer literacy, English, management & accounting
3. Public Sector:
   - Ministry of Labor, Social Affairs, Martyrs and Disabled (MOLSAMD) – 20 training centers providing short term courses for public sector employees
   - Ministry of Education (MoE) TVET: 55 technical high schools and institutes each offering 3 or 5 courses respectively with a capacity of 16,000. Among them are auto repair, machines, electrical fields; agriculture and veterinary high schools; National Institute of Management and Administration (NIMA), commerce high schools, vocational school for women, national music institute, the school for the blind. There is a concentration of the schools in Kabul (30%). The DMTVET workforce is comprised of 1,131 teachers, 278 employees with a male to female ratio of 8:2
4. Ministry of Higher Education (MOHE): 6,500 students enrolled in academic institutions, including the medical, agricultural and economic fields.
TVET TRAINING PROGRAMS:

NEED AND IMPORTANCE FOR TVET:

There has been a huge expansion in school enrollment in recent years from 900,000 in 2002 to almost 7 million in 2010. Many of these students who graduate from secondary schools will have to be provided with post-secondary education. In 2009, of some 80,000 high school graduates, only 30,000 were admitted to universities. Unless TVET education opportunities are provided to these graduates, they will remain unemployed and vulnerable to recruitment by extremists, criminal gangs, drug vendors etc. Moreover, a warning situation is that according to the growth rate of students’ enrolment to educational schools, after few years, the high schools graduates number will raise to around one million. From the other hand Ministry of Higher Education will not have the capacity to absorb those graduates to the Universities. In this case TVET system must have a very fast capacity and quality improvement there will be very serious
unemployment crises in the country. The particular advantages, benefits and challenges that face the TVET sector are the following:

- It costs considerably less to educate and train students than in the university sector; of the order of 20-25% of the costs of a university student.
- It offers a range of qualifications such as certificates, diplomas and associate degrees.
- It offers a wide array of courses and programs – carpentry, plumbing, motor mechanics, television repairs, electricians, photography, computer studies, music, languages and a myriad of other professional courses.
- Open and flexible admissions make them highly accessible to the students and members of the community of all ages.
- Many of the emerging graduates of the sector are ideally suited either to be readily employed or to develop the small, medium and micro-enterprises, one of the few sectors that is capable of generating significant levels of employment.
- The better performing students can transfer to universities with credits being awarded for courses already completed.
- Reverse transfer i.e., students who have completed a university degree in the humanities and social sciences can complement this with skills training of varying duration at the technical – vocational college.

In assessing the future of the TVET sector the dual nature of the modern economy has to be considered: (a) high skills, high technology occupations, the so-called knowledge workers driving corporate globalisation and employing a small segment of workers in the formal economy (b) small, medium and micro-enterprises (SMMEs) which provide employment for large numbers if the informal economy is included. The TVET sector has the potential for providing the necessary skills and knowledge for large numbers in the informal economy which includes the: the SMME sector, the unskilled and under skilled; high school drop outs, university dropouts and the unemployed.

The failure to attract students to the TVET sector in many countries is “rooted deeply in cultural attitudes that have been embedded historically in the education systems. Considerable emphasis and faith is being placed on ‘learnerships’ as a flagship solution to skills training for the economy. The real problem is the separation of job training from education. “As a result, one way to develop a more effective education and job training system would be to recombine them so as to link job training with educational programs, using the community colleges as the conduit between the two; vocational skill training, academic instruction integrated with occupational education, connecting activities between the classroom and the workplace.

OVERALL STRATEGY:

The Ministry of Education (MoE) and Ministry of labour and Social Affairs (MoLSA) is committed to training Afghanistan’s future technicians and other types of, skilled workers and civil servants by providing vocational and technical education and training.
opportunities in appropriate trades and management skills for all Afghans of both genders regardless of geographic location, ethnicity, language, religion or physical abilities in all 34 provinces of Afghanistan. This will be achieved over the coming five years through the expansion of the existing formal TVET system, through a closer partnership with the private sector and through the provision of short-term training courses in various technical and vocational fields that will be targeted at unemployed youth and young adults, both male and female. The training offered will be based on the existing educational backgrounds of the students and offer programmes for non-literate youth to grade 12 graduates. The programme will consider technical education for students with a stronger educational background and vocational training that will build basic productive skills. Technical education will touch upon the following fields: technical trades, public administration, construction, information and communication technologies (ICTs), agriculture and industry. Vocational training will be more practical skills based and will be offered in both urban and rural areas. These training programmes will not necessarily be offered through an official school based system but rather targeted more towards on-the-job training.

Given the pressing need for skilled workers, all the existing technical and vocational institutes should be rehabilitated and equipped and new ones will be opened according to the needs of the labour market. A reform of the curriculum and textbooks should be implemented based on modern TVET principles and a focus on the skills that will support economic growth and poverty reduction and that will encourage a larger and more skilled private sector, providing opportunities for people to enter self employment, particularly in the services and agriculture sectors. New teachers have to be recruited and trained in order to cope with the foreseen increased demand for TVET. Similarly, the TVET management structures and systems to be strengthened for the existing non-teaching staff and through incremental recruitment of administrative staff as the sub-sector expands. The MoE should seek to improve the low social status of TVET through a national communication campaign to sensitize the population to the benefits of TVET.

PRIORITY PROGRAMS:

The TVET Priority Programs will consist of the following components:

- Infrastructure and equipment
- Curriculum development
- Technical capacity building
- Teacher training
- TVE Management capacity building
- Short-term skills development training programs
- Establishment of Labour market and Industry linkage
- Labour market survey
- Development of Occupational standards
- Development of Qualifications Framework
CURRENT CHALLENGES:

I. Capacity – Poor Access

The current public TVET system has nearly 20,000 trainees while the higher education system has over 60,000 students and is earmarked for considerable expansion. In most developed countries the size of the TVET system is almost twice the size of the higher education system e.g., in the United States the higher education system has some 6-7 million students compared to its community college system that has about 12-14 million students. The TVET system is a lot more cost effective with its short, one and two year programs producing readily employable graduates. This is known as the “inverted pyramid” of the education system and it is classically the case with most developing countries. This is an opportunity for the international donor community to invest considerable resources in developing the TVET system in Afghanistan. The macro-plan makes a promising beginning. Approximately 60,000 students passed grade 12 in 2008 and this number will increase steadily over the next five years. The higher education sector will absorb less than a third of these students thus leaving over 40,000 students available to enter technical vocational institutions. The target enrolment for 2009/10 was 46,000 but current enrollment is 16,000. In the next five years the capacity of the public TVET system could potentially be increased to 150,000.

II. Size of TVET Institutions

There are some 60 public TVET institutions/schools offering technical vocational education across the country. Divided by 20,000 trainees this makes for an average institution size of less than 350 students. Undoubtedly, some are of considerably larger size while others are smaller. While it is important to have a good spread of institutions across the country, size does matter for the cost effectiveness of the sector. Taking into account that the country has 7 regions and 34 provinces, institutions should be rationalized into larger units, each having at least several thousand students or more. Multi campus institutions across the provinces and regions could be one approach in this regard. A projection would have to be made on the size of the TVET system in terms of the number of students to be admitted, the number, size and distribution of TVET institutions over the period 2008 – 2013 and beyond.

III. Private TVET Institutions

There are a large number of private institutions offering technical vocational training across the country – over 300 institutions with some 140,000 students. These institutions vary in size and quality. It is now widely accepted that private post-secondary education has an important role to play in contributing to the production of skilled human personnel for the socio-economic development of the country. However in order to protect students and ensure high quality technical vocational private education, the state and Afghan National Qualifications Authority (ANQA) must create an empowering and regulatory environment for the growth of private institutions. In particular, incentives should be
provided for the growth of not-for-profit TVET institutions. Both private and public institutions should be subject to the same National Qualifications Framework (NQF) and the same quality assurance system.

IV. Program Offerings / Curriculum of Current TVET Institutions

The curricular programs are not based on market requirements. Curricula guidelines are outdated and not meeting the existing and emerging educational needs. Many of the existing technical vocational institutions are either single discipline or several discipline institutions e.g., the National Institute of Management and Administration (NIMA) has three disciplines – management, accountancy and ICT. Most technical vocational institutions across the world are multi-disciplinary institutions. In some cases as in the community colleges a hundred different disciplines or more may be offered in one institution. There are a number of cogent reasons as to why the technical vocational institutions should be multi-disciplinary: the modern economy requires the development of numerous skills associated with different disciplines; solutions to complex problems require very often a multi-disciplinary approach; it broadens horizons in studying side by side with students from different disciplines; and, very importantly, it is much more cost effective – one administration, the sharing of teaching skills, common modules, English language teaching, the sharing of costly equipment etc.

V. Quality of TVET Provision

It is estimated that 70% of trainers in the TVET system are under or unqualified. Many of them are close to retirement and are using outdated teaching methodologies. Only a portion of the planned curriculum materials are developed and targets for training of teachers are low levels. There is little evidence that programs offered respond to current market demands. This in particular applies to the private providers who offer a very limited number of offerings confined largely to English language and computer science. Infrastructure provision such as classrooms, computers, laboratories, libraries and recreational facilities for both staff & students leave much to be done.

VI. Autonomy of TVET Institutions

There is a tendency in most developing countries to centrally control educational institutions with little institutional or academic autonomy. This is indeed the case in Afghanistan i.e., for the Ministry to micro-manage institutions. This is an outmoded concept and leads to inefficient bureaucracies impeding the development of efficient quality institutions. It should be a process and not an event. Nevertheless, a definitive plan has to be formulated to extend autonomy gradually but incrementally within a given time frame e.g., partial autonomy in five years and full autonomy in ten years. These changes must occur concurrently with developing both capacity and reform of the Ministry in charge of TVET. Legislative changes need to be promulgated in this regard.

VII. Government Responsibility for TVET
The responsibility for TVET is spread, essentially, across three ministries of the Afghan Government – MOE, MOHE and MOLSAMD. This in itself renders coordination between these line ministries a challenging task in developing a coherent strategy for the development of the TVET system. This leads to fragmentation in policy making, problems of coherence and collaboration. Three bureaucracies involved in providing leadership, management and administration do not lead to efficiency in the system. In most countries the responsibility is located within one ministry and TVET should be within one of the education ministries as it is about education and training. As part of its program of expansion, the MOHE is committed to establishing and developing community colleges – these are in essence technical vocational colleges. “This sector has the capacity to absorb large number of students and provide cost effective, relevant technical, vocational and university level education to students most of whom would be readily employable” (National Higher Education Strategic Plan: 2010 – 2014). The MOHE will establish five community colleges during the period 2010 -2014 to enroll 5,000 students by 2014. Either community college responsibility be relocated within the MOE or there has to develop a close working relationship between the two ministries.

VIII. Values of the TVET System

The notion of marketable and immediately employable graduates is emphasized and acknowledged. However, it is not only necessary to train and educate young students into caring, tolerant compassionate graduates who would be prepared to serve their country as good citizens by being critical participants in a democratic system and contribute to its socio-economic development. In a world of conflict, greed and self-enrichment, instilling these values differentiates between a technical and a humane educational system. In conflict affected societies, the instilling of these values assumes particular significance. Closely allied with instilling of values is the imparting of a set of soft skills – the ability to communicate effectively, develop critical thinking skills, problem solving and adapting to new avenues of employment in a rapidly changing technological world. Values referred to above and soft skills should constitute the generic aspects of any curriculum for technical vocational education.

IX. Workplace Learning

Very early in the development, it is essential for TVET institutions to establish partnerships with business, commerce, industry, public international organizations, civil society and government departments to ensure internships and work placements for students of the sector. Such experiential learning should be a central and integral part of the curriculum. Very importantly such placements should be well organized with employers, be monitored and evaluated. It should be a mandatory aspect of a qualification from the sector. In addition to providing experiential learning, it also provides the employer with potential for recruiting new graduates. In some cases it may be possible for students to earn a modest stipend for the work placement.

X. Teaching Staff
The lack of suitable teaching staff is often the principal constraint in the provision of technical-vocational education e.g., in the case of NIMA where some 1500 students are enrolled, almost the entire teaching staff is foreign. Afghan teachers undergoing training at NIMA would potentially provide a pool of teachers for the sector. For this to be realized, it is necessary to strengthen the quality of training. In addition to academic training, English language skills and training in leadership, management and administrative competencies to selected staff are necessary. There are several avenues for rapidly increasing the pool of qualified teachers for TVET institutions:

- Current teacher training institutions including the Kabul Institute of Education should devote a quota of places for TVET teacher training.
- A dedicated institution can be established for training of TVET teachers.
- Overseas TVET institutions could make a contribution to TVET teacher training by forming partnerships.

Consideration should also be given to training a limited number of students in graduate degrees in overseas universities. A number of foreign technical vocational colleges could make a contribution in this regard. For this purpose, it would be necessary to establish contact with foreign governments and donor agencies for support. One further issue needs to be addressed. The low salaries in the range of $250.00 / month are unlikely to retain especially the good teachers in the system. While realizing the knock-on effect of raising salaries in one sector, the government must nevertheless address the problem by either increasing the salaries or providing other reasonable incentives, particularly in the education sector.

**XI. Funding**

Currently, the major portion of funding for TVET sector is provided by foreign governments through the ARTF (Afghanistan Reconstruction Trust Fund), the World Bank and other bilateral and donor agencies, while this situation will continue in the short to medium term. However, most of the donors are not well prepared to invest on TVET sector on long term and sustainable projects, because of its nature of being very costly and taking longer time for obtaining results and outputs. Therefore, they are mostly interested to invest on short term and quick impact projects. Afghan Government must have a long term perspective of funding for the TVET system. In this regard the following framework for a funding policy for TVET has to be considered:

- A dedicated state resource allocation for the TVET system as part of its contribution for education and training to develop the required human resources for the country and to be supplemented by donor funding
- A mechanism should be developed as to how funds are to be allocated to institutions – this could be based among other factors on student numbers, types of programs offered, specific funding for capital development etc.
- In addition, a scholarship/bursary fund should be created to support students especially those from poor families
Incremental financial autonomy should be granted to institutions so that they could manage their allocated funding but are also accountable to the MOE.

Institutions should have the right to raise their own funds and retain them for developing the institutions.

Private sector and industry to be attracted for funding contribution to the training programs according to their needs and commitment for employment of the trained individuals.

AFGHAN SKILLS DEVELOPMENT PROJECT (ASDP):

ASDP is a five year project (2008-2013) implemented by the Government of Afghanistan (essentially MOE, MOHE and MOLSAMD) and financed by the World Bank and ARTF. The project development objective is to increase the number of immediately employable graduates through building a high quality TVET system that is equitable, market responsive and cost effective. It comprises the following components:

**COMPONENT 1**
The Development of a Regulatory and Quality Assurance Framework for TVET with three sub-components:
- Establish the Afghan National Qualifications Authority (ANQA)
- Development and Implementation of the Afghan National Qualifications Framework (ANQF)
- Establishment of Independent Awarding Boards for various levels of education and training programs – Boards of Primary Education, Secondary Education, National Vocational Education and Training, Islamic Education and Higher Education.

**COMPONENT 2**
Improve Relevance, Quality and Efficiency of TVET with three sub-components:
- Establishment of a new institute called the National Institute of Management & Administration (NIMA)
- Reform of a selected number of technical and vocational institutions
- Reform of the Deputy Ministry for Technical and Vocational Education & Training (DMTVET)

**COMPONENT 3**
Skills Development Program and Market Linkages with a Focus on Rural Areas with three sub-components:
- Vocational training packages for unskilled youth, destitute women and marginalized farmers
- Training of trainers for the business sector and productive skills officers
- Capacity building of the MOLSAMD / NSDP

**COMPONENT 4**
Research, Monitoring and Evaluation with two sub-components:
STRATEGIC PLAN:

It is essential to build on and bring together the various development strategies of all stakeholders into a comprehensive Strategic Plan for the TVET sector. NSDP has developed strategies for skills training programs and DMTVET also has developed strategies for development of TVET system and ASDP project. The existing National Education Strategic Plan, while containing some of the key elements, does not reflect in detail all the essential elements and issues that should constitute the integral parts of a comprehensive Strategic Plan for TVET. It is advisable that a comprehensive and coherent Strategic Plan should contain the following key elements:

- Introduction to the Afghan Educational System
- Current situation of TVET System
- Vision and mission statements
- Objectives
- Main challenges
- Values supporting the TVET System
- Strategic approach for solving unemployment challenges
- Sectoral Programs and sub-programs
- Appropriate and realistic costing and funding of the plan
- Implementation and action plan with a logical framework matrix
- Monitoring & Evaluation

The main challenges for the TVET system in Afghanistan could be as follows:

Institutional Level

- The State to develop the appropriate legislative framework regarding management, steering and funding of the TVET system
- Management Capacity building within DMTVET
- Decentralization of institutions and new funding arrangements
- Involvement of private sector in management of TVET institutions
- Construction, Rehabilitation and Reconstruction of the necessary infrastructure - buildings, classrooms, laboratories, IT, libraries and recreational facilities
- Teacher training institution specific for TVET schools and institutions
- Develop a market linked curriculum
- Provision of consumable material for practical works
- Creation of Industry linkage with the training centers

Students

- Develop a graduates employment strategy for TVET
- Establish equity criteria, focusing on access and gender
- Provide support mechanisms for students
• Employment support, guidance and counseling
• Housing and scholarships for eligible students
• Internship training programs
• Facilitate progression to higher education

Donors Community
• Provide funding and resources
• Provide technical assistance and expertise for the development of the TVET system
• Provide scholarships for the students
• Twining institutions
• Transferring best practices

THE WAY FORWARD:

In spite of efforts on preparation of separate working strategic plans in the past few years for TVET by different main stakeholders such as MoE, MoLSA and NSDP, there is a need of having a common strategic plan for TVET sector development to better coordinate the activities in TVET. Therefore, for the next steps, it is better to form a small task group to develop a comprehensive and coherent Strategic Plan for the Afghan TVET System. This team should be coordinated by the Deputy Minister for TVET in the MoE and should comprise representatives from the following main stakeholders:

• DMTVET
• MOLSAMD
• MOHE
• MOPH
• MOWA
• Donors Community
• Chamber of Commerce
• Afghanistan NGO’s Coordinating Board (ANCB)
• Afghanistan Builders Association (ABA)
• Afghanistan Association of Engineers (AAE)

RECOMMENDATIONS:

In order to provide oversight and direction, the Government of Afghanistan and the donor community have established development “clusters” composed of several ministries but under the leadership of a single minister per cluster, in order to provide oversight and direction. One of these clusters focuses on Human Resource Development and includes MOE, MOHE, MOLSAMD and the Ministries of Women’s Affairs and Public Health. This cluster aims at improving development of human resources that is essential for employment generation, socio-economic growth, security improvement and stability in
Afghanistan. TVET is a key component of this cluster. It is recommended that a national Strategic Plan for TVET sector could be framed within this cluster.

Further, to develop the TVET system the following recommendations to be considered:

1. Reconstruction of facilities and supply of equipments
2. Development and continuous revision of TVET curriculum according to the society needs and demands
3. Providing educational scholarships for professional training and capacity enhancement
4. Development, or establishment of different trades according to the job market needs
5. Designing proper practical work programs
6. Organizing technical and vocational capacity building seminars
7. Establishment of TVET teacher training centers
8. Introducing vocational courses into general education curriculum
9. Establishment of agricultural training schools in the provinces
10. Establishment of computer and information technology centers for professional awareness
11. Training teachers in advanced technical and vocational subjects
12. Establish teacher training institution specifically for TVET institutions
13. Develop a coherent strategic plan
14. Establishment of an autonomous coordinating body for TVET activities
15. Establishment of a National Qualifications Framework for Afghanistan
16. Establishment of an autonomous Qualifications authority to coordinate, maintain and develop National Qualifications Framework

CONCLUSIONS:

In order to reconstruct the existing technical and vocational institutions, huge amount of investment is needed for the following purposes:

1. To repair and maintain the school buildings
2. To establish and refurbish labs and workshops
3. To recruit and train academic and technical staff
4. To revise and develop adequate curriculum
5. To train skilled workers, technicians, experts in different technological and vocational fields
6. To establish a proper TVET system
7. To establish teacher training centers for TVET

Therefore, coordination of funding for development of TVET system is needed and would be very essential.