Functional Analysis and General Concept of National Center for Educational and Vocational Research

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Introduction to the TVET:
Technical Vocational Education and Training (TVET) in Afghanistan is composed of the formal and informal TVET; Deputy Ministry of TVET of the Ministry of Education is providing both that (formal and informal) while other ministries e.g. Ministry of Higher Education is offering TVET courses at the community colleges level and Ministry of Labors Socials, Martyrs and Disabled Affairs offer vocational courses of 3-9 months.

The TVET under the ministry of education is composed of the following sectors each consisting more than 5-10 trades

- Agriculture, livestock and veterinary education (formal)
- Technical educations (formal)
- Information and Communication Technology (formal)
- Construction and Engineering (formal)
- Art and Musical Studies (formal)
- Business Education
- Vocational courses (informal)
- Special and Inclusive Education (formal)

The formal TVET trades under the sectors are arranged into three types of the academic periods: three year (grade 10-12), five year (grade 10-14) and two year (grade 13-14); while the informal TVET courses span from 1-12 months;

Rationale:
Although a lot has been done in making TVET accessible, but Quality and standard of the TVET being delivered in Afghanistan is very low and not aligned to economic growth, labor market and international and regional standards. There are concerns about the dynamism of the labor market and lack of innovation in the TVET delivery.
• TVET lacks the brain to think and envision. It is a functional body without a brain to guide and strategize.

• There is no research base TVET Education now, our aim by establishing and promotion of research activities are to develop research base TVET Education, which has to be Demand Driven and Relevant.

• The TVET Curriculum Development is not well supported in the current traditional system therefore, the research center would be the Arm to the curriculum development activities. The Labour Market Study needs to be conducted and the results of the study should be used to review the current TVET curriculum and further improvement should be based on the findings of this study. The teachers’ training programme and the learning materials development should also be accordingly based on these findings. An emphasis should be on the production of standard textbooks in the light of revised curriculum.

• To affiliate our academic activities with the national, regional and international organizations.

• Through the research and an innovative approach we are eager to develop IT equipped and a green TVET system.

The delivery of standard, quality and up to date TVET depends on dynamic and standard, market oriented curriculum, high quality teachers with up to date proficiency in subject areas as well as didactics and pedagogy. In addition to that there is a need of standard conducive delivery environment. However the responsibility of DM TVET does not end here. It is important to link DMTVET graduates to wealth generation, economic development and employability.

The whole system of TVET is in need of TQM and quality assurance. The need for developing quality standards in the qualification and certification is tangible and felt. There is also a need for studying and improving the procedures and regulations within the TVET.

Despite progress and initiatives\(^1\) in identifying and addressing capacity development needs, research capacity in Afghanistan remains quite low and there is little evidence of sustainable capacity.
development approaches in the TVET system. Research, monitoring and evaluation capacities and institutional framework for knowledge-sharing and information coordination across ministries and among national stakeholders still need to be developed. At operational level, the production and sharing of education resources has been so far conducted by individual training providers (NGOs), but there is high variability in the capacity of providers to do this effectively.

In this context; in 2013, the National Research Center has been approved as a new Directorate under the DMTVET. A large building in which to house the National Research Center has been planned and partially financed. The construction of the building is underway.

**Vision of the center**

To ensure the delivery of quality, standard, up to date, relevant, market oriented, dynamic and innovative TVET in order to produce employable and skilled wealth generating individuals.

**Mission of the Center**

- To institutionalize ambidexterity and innovation in TVET. (innovate or die)
- To discover innovative approaches to the challenging issues of the TVET system and sector
- To be the shoulders and arms to the Academic Activities in Term of Curriculum Development and Innovative approaches on TVET Education
- To enable the Management of TVET to take informed decisions VIA outcome based research activities and surveys outcomes
- To be the center of excellence and innovative approaches on TVET Education
- To conduct and coordinate all TVET research activities;
- To maintain a record of all of the research activities carried out in Afghanistan;
- To acquire a record and make it available to the users of all best practices carried out in TVET;
- To establish linkage between TVET institutes and markets/industries;
• To carry out research activities to focus on enhancing quality, improving access, facilitating sustainability and improving marketability /employability of the pass outs;
• To engage the TVET graduates and internees to conduct research;
• To carry out periodically market research in order to assess the demand for the different trades;
• To disseminate information on the TVET facilities and make the youth and the community members aware of the significance of these programs;
• To maintain a reliable, valid and timely information on TVET activities in the country;
• To carry out annual census of the TVET institutes and keep the data and information updated for the use in planning, management, decision making and research;
• To liaise with other ministries/ organizations and acquire data and information on non-formal and informal TVET programs;
• To conduct periodic workshops for users of TVET EMIS data;
• To conduct training courses for the managers and teachers of institutes and schools to acquaint them with the new and innovative techniques to be used in enhancing efficiency of the system;
• To establish an effective M&E system for the institutes and schools to ensure the daily attendance of teachers and students;
• To ensure that effective teaching learning and skill development process takes place in the institutes and schools.

**Scope of the Center:**
This is a national research. It will work at the country level for the whole of the TVET sector. A clear mandate for the centre has to be approved from the Government and initially the scope should be confined to certain limited areas.

The integration of formal TVET and non-formal and informal TVET programmes; and the gender mainstreaming in TVET, TVET demand and supply, labour market information analysis, public
private partnership, databases development of consultants and collection of resource materials are some of areas to be initially considered for the research activities.

**Strategic Functions of the NCEVR:**

1. Clearance
2. Production
3. Quality Assurance
4. Networking
5. Innovation and Development
6. Resourcing

**Strategic Functions Decomposition:**

1. **Production:**
   a. Conduct research with emphasis on problem oriented research
   b. Research Capacity development leading to further improvement in the TVET programmes
   c. A major focus should be on the development of capacity of the research staff.
d. research should not be limited to translation work of research activities carried out elsewhere.
e. An inventory of all relevant research carried out in the TVET sector should be developed so that to avoid any duplication or overlapping of research work in the same areas.
f. Peer reviewed research Journal
g. Translations

2. **Networking:**
   a. Association of Afghan inventors and Scientists
   b. TVET consortium
   c. Coordination and collaboration of the TVET providers inside and outside the country
   d. Coordination of public private partnership in delivery of TVET as well as the industry

3. **Innovation and development:**
   a. Ambidexterity in vocations and its delivery
   b. Exploration and analysis of emerging issues in TVET
   c. To keep an eye on the TVET programmes and make efforts to modernize them by incorporating all the best practices
   d. Localized research for local problems

4. **Resourcing:**
   a. Research facilitation (Supervision and facility)
   b. Research resources provision

5. **Clearing:**
   a. Procedures
   b. Regulations
   c. Peer reviewing
   d. Framework development for implementation of projects
6. **Quality assurance:**

a. Teachers didactics and pedagogy
   i. Teachers transformation from teacher to facilitators
   ii. Standards and mechanisms for Subject and teaching trainings
   iii. Qualification for taking trainings
   iv. Development of critically thinking
   v. Teaching Standards
   vi. Standards for teachers’ recruitment and qualification.

b. Curriculum development
   i. Relevance
   ii. Market orientation
   iii. Standards development

c. Learning and trades development
   i. Employability
   ii. Market orientation
   iii. Standards development
   iv. Procedures for mechanizing and modernizing present skills.
   v. Qualifications for licensing trades delivery
   vi. Standards for the delivery of non-formal trainings on trades.
   vii. Distance learning

d. Delivery environment
   i. Standards development for a conducive environment
   ii. Standards for Laboratories and workshops

e. Institutes and vocations development
   i. Private institutes licensing standards and qualifications
   ii. Vocations development and institutionalization of qualifications and standards
   iii. Public institutes establishment standards and qualifications.

f. Identification of Qualifications

g. TQM
   i. TVET MIS
   ii. M&E
The Research Board
The research center will be supervised and guided by a research board of nine members. Two of these members would be selected from the sector ministries (MoSAMD and higher Education), two from the industry, two from research institutions and the rest will come from the deputy ministry TVET. The persons selected for the research board should be authorities in research and professions. They should have strong academic background as well. The research center is governed, managed and run by the director of the research center and its functional structure.

Sections of the Research Centre
Management and Organizational Structure

Current Approved Structure

- Director
  - ANTRC
  - G2-1

- Executive Officer
  - G5-2

- Driver
  - G7-1

- Service Staff
  - G3-2

Deputy Director (Research)
- G3-1

Assistant Director (Agriculture & Veterinary)
- G4-1

Assistant Director (IT & Business Edu)
- G4-1

Resource Section (Technical & Industrial Studies)
- G4-1

Assistant Director (Academic M&E Certification Assessment)
- G4-1

Assistant Director (Academic and Professional Affairs)
- G4-1

Assistant Director (Standards & Accreditation)
- G4-1

Supporting/Researcher Staff
- G5-2

Supporting/Researcher Staff
- G5-2

Supporting/Researcher Staff
- G5-2

Supporting/Researcher Staff
- G5-2

Supporting/Researcher Staff
- G5-3

Supporting/Researcher Staff
- G5-2
Required Structure based on Functional Analysis

Deputy Ministry TVET
Directorate of National Center for Educational and Vocational Research
15 July 2014

Director
NCEVR

Council
NCEVR

Academic Board
NCEVR

Research Publication and Resourcing
Grade 3
- General Managers (6)
  Grade 4
- Supporting Staff (25)
  Grade 5, 6 and 7

Quality Assurance and Evaluation
Grade 3
- General Managers (6)
  Grade 4
- Supporting Staff (30)
  Grade 5, 6 and 7

Coordination and Networking
Grade 3
- General Managers (4)
  Grade 4
- Supporting Staff (20)
  Grade 5, 6 and 7

Standardization and Innovation
Grade 3
- General Managers (4)
  Grade 4
- Supporting Staff (20)
  Grade 5, 6 and 7
Functions:

Deputy Director: Research, Publication and Resourcing

1. **Production:**
   a. Conduct research
   b. Research Capacity development
   c. Peer reviewed research Journal

2. **Resourcing:**
   a. Research facilitation (Supervision and facility)
   b. Research resources provision

3. **Clearing:**
   a. Procedures
   b. Regulations
   c. Peer reviewing

Deputy Director: Quality Assurance and Evaluation

a. Teachers didactics and pedagogy
   iii. Teachers transformation from teacher to facilitators
   iv. Standards and mechanisms for Subject and teaching trainings
   v. Qualification for taking trainings
   vi. Development of critically thinking
   vii. Teaching Standards
   viii. Standards for teachers recruitment and qualification.

b. Curriculum development
   ix. Relevance
   x. Market orientation
   xi. Standards development

c. Learning and trades development
   xii. Employability
   xiii. Market orientation
   xiv. Standards development
xv. Procedures for mechanizing and modernizing present skills.

xvi. Qualifications for licensing trades delivery

xvii. Standards for the delivery of non-formal trainings on trades.

xviii. Distance learning

d. Delivery environment

xix. Standards development for a conducive environment

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e. Institutes and vocations development

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**Deputy Director: Coordination and Networking**

a. Association of Afghan inventors and Scientists

b. TVET consortium

c. Coordination and collaboration of the TVET providers inside and outside the country

d. Coordination of public private partnership in delivery of TVET as well as the industry

**Deputy Director: Standardization, Development and Innovation**

a. Ambidexterity in vocations and its delivery (Innovate or Die)

b. Exploration and analysis of emerging issues in TVET

c. Development of standards and Qualifications.