



United Nations
Educational, Scientific and
Cultural Organization

ANNEX 7

**INDUSTRY RELEVANT TVET:
APPROACHES TO PROMOTE INDUSTRY/ COMMUNITY/
INSTITUTION LINKAGES
in
PAKISTAN ADMINISTERED STATE OF AZAD JAMMU AND
KASHMIR**

Discussion Paper No. 1

**UNESCO-Islamabad
May 2009**

1. Introduction

Technical Education and Vocational Training programmes throughout Pakistan, including in Pakistan Administered State of Azad Jammu and Kashmir (AJK), are not fully catering to the needs of industry or indeed to the needs of the student population seeking education for employment.

The TVET¹ system throughout Pakistan can be described as ‘supply side’. Decisions concerning TVET programming are taken by officials within the various education administrations, based upon continuing approaches, and with little serious reference to local, provincial or national labour market needs and their future development. There are few mechanisms to use information about the needs of the labour market to redirect training programmes and there is little emphasis on renewal or revitalisation of training. There is an urgent need to develop mechanisms that allow a shift towards the ‘demand side’, which allow the end users of skilled labour to have a say in TVET.

The Government of Pakistan has released *Skilling Pakistan: The National Skills Strategy 2008-2013*, a comprehensive document which outlines strategies to reform the TVET system so that it can provide relevant skills for industrial and economic development, improve access, equity and employment, and assure quality. The Strategy recognises that if its objectives are to be met there is a need for two main paradigm shifts:

- The shift from time-bound, curriculum based training to flexible, competency based training, and
- The shift from supply led training to demand driven skills development by promoting the role of industry in both the design and delivery of TVET.

This paper outlines some of the issues and suggests some possible ideas to assist with the achievement of that second shift, which are equally necessary to ensure that the skills development options on offer in AJK support industrial and economic development. It is offered within an understanding that lack of industry relevance, whilst pressing, is not the only major challenge for TVET in AJK. TVET provision has not yet fully recovered from the catastrophic 2005 earthquake, and redevelopment and rebuilding remain key priorities.

Nonetheless, the Government of AJK is committed to implementing the ideas contained within the *National Skills Strategy*. It has already established a regional TEVTA, it has commenced the process of rationalising institutional administration, and it has been engaged with various experts on possible ways forward on a range of pressing issues. This discussion paper from UNESCO² is a further contribution to that process.

2. Industrial Profile of AJK

It is estimated that of the nearly 4 million people in AJK, almost 50 per cent live in poverty. The continuing unrest between Pakistan and India contributes to instability and lack of investment in the region. Economic and industrial activity has reduced even further since the devastating earthquake in 2005, which resulted not only in massive loss of life but also massive loss of livelihoods, and has contributed to an outflow of people from the region. Education levels are low, with only 35 per cent completing primary education.

¹ Whilst the anonym TEVT has been in common usage in Pakistan in the past, NAVTEC is now using the internationally more common term ‘TVET’. This paper adopts the new terminology.

² UNESCO-Islamabad thanks the officials from AJK TEVTA who contributed freely of their time and ideas to assist the development of this paper.

In 2008 there were 1465 businesses / industrial unit registered in AJK. The major industries include wood work and furniture houses, steel works, poultry farms, food, hotels, printing press, plastic, shoe industries, flour mills and steel mills.

The following table shows the number of businesses registered by industry. This table gives a clear indication of where labour is employed, although it is not completely comprehensive. There is a considerable extractive mining industry in AJK, for marble, coal, bentonite, gypsum, and graphite and yet mining does not show as a category. The table also does not show the number of people employed in each industry, which is important for effective TVET planning.

Established Industries by Type

S.N.	Industry type	Number	Industry type	Number
1	Poultry Farms	552	Ice Factories	11
2	Woodwork/Furniture Houses	255	Shoe Industries	10
3	Steel Works	151	Flour Mills	08
4	Crushing Units	109	Textile Mills	03
5	Food Industries/Bakeries	106	Steel Furnaces/ Re-rolling Mills	03
6	Main Hotels	41	Scooters/Bicycles	02
7	Printing Press	36	Plastic Industry	02
8	Pipe Industries	33	Cosmetics	02
9	Arms Factories	16	Paper & Paper Products	02

Source: Presentation to the Chief Secretary by Industries Department dated 23-11-08

Registered businesses are concentrated mainly in four districts. The highest number of registered businesses are in Bhimber (430 businesses) followed by Muzaffarabad (371), Mirpur (309), and in Kotli (235). In Pooch there are only 54 businesses registered, in Bagh there are 41 and in Sudhnoti, 25³.

3. TVET Profile of AJK

The profile of TVET in AJK can be characterised as being very small in scale, and fragmented in administration. There are currently 175 registered training institutions operating, all but 17 being publicly owned and managed.⁴ The large number of registered training institutes belies the size of the formal TVET sector. Many institutions (especially those for women and girls) have little more than one or two classes. Available statistics state that in 2005-2006 the number of TVET enrolments in total for AJK was around 5,000 students⁵. If these statistics were collected prior to the earthquake, the number now is likely to be lower.

Until very recently, TVET provision in AJK was administered by a number of departments/ organizations, each having responsibility for a number of institutions. The major players

³ Source: Presentation to the Chief Secretary by Industries Department dated 23-11-08.

⁴ Whilst it may be assumed that the number of public institutions is accurate, it is likely that there are many more than 17 private sector training institutions which were registered with TEVTA at the time of preparation of this paper.

⁵ AEPAM Pakistan Education Statistics 2005-06.

were the; Department of Industries, Commerce and Labour, Department of Social Welfare and Women Development and the Small Industries Corporation.

In line with national policy, the AJK Technical Education and Vocational Training Authority (AJK TEVTA) was established in 2007 and the TEVTA has exercised its mandate to bring all TVET institutions under one umbrella. However, despite transfer of some institutions to TEVTA the DSWWD and SIC still continue to run a number of institutions. The detail of TVET institutions run by TEVTA and other departments/ organizations is as follows:

Numbers of Institutions by Management Body

S.N.	Name of Institution	Number of Institutions		
		Male	Female	Total
TEVTA				
1	Polytechnic Institute	01	-	01
2	Vocational Training Institute	10	-	10
3	Industrial Training Centres	02	-	02
4	Vocational Youth Centre	06	-	06
5	Women Industrial Training Schools	-	34	34
6	Women Industrial Youth Centres	-	02	02
7	Women Multi-trade Centres	-	05	05
8	Skill Development Centres	21	21	42
Sub-Total under management of TEVTA		40	62	102
DSWWD				
9	Women Development Centres	-	21	21
10	Rural Household and Education Centres	-	5	05
11	Employment and Women Development Centres (New)*	-	14	14
12	Dar-ul-Falah	-	05	05
Sub-Total under management of DSWWD		-	45	45
SMALL INDUSTRIES CORPORATION				
13	Shawl Bafi Center	-	04	04
14	Carpet Weaving Center	-	05	05
15	Wood Working Center	02	-	2
16	Solar Energy Projects (Training Centres)	04	-	4
Sub-Total under management of SIC		06	09	15
17	Private Sector Institutions (Presently Registered with TEVTA)	N.A.	N.A.	17
Total of all registered institutions		46	116	179

The status and facilities of the sector remains low. Many institutions within the earthquake affected areas were substantially or completely destroyed, with classes now operating out of rented buildings or in tents. In such conditions, class sizes have dropped dramatically, from say, 20 down to 7 in some cases.

The duration of programmes offered by various institutions varies from 3 months in case of Skill Development Centres to 3 years in case of Polytechnic Institutes. Particular institutions tend to offer particular programme levels (in contrast to systems in developed countries whereby one institution may offer courses from the lowest level to the highest level).

The only polytechnic in public sector in AJK offers a 3-year Diploma of Associate Engineer in Civil Technology plus certificate courses in Civil Drafting and Surveying. The Vocational Training Institutes offer one year programmes of training (Certificate level) whereas Vocational Youth Centres run 6-months courses in different trades such as Electrical, Refrigeration and Air-conditioning, Radio-TV, Auto-mechanic etc.

The Women's Industrial Schools offer 1-year certificate and 2-year Diploma course in Tailoring, Hand & Machine Embroidery, and Hand & Machine Knitting. The Women's Development centres offer training in Repair of Household Electrical Appliances along with Tailoring, Embroidery and Knitting. The Rural Household and Education Centres offer training in tailoring, embroidery, knitting, agriculture (Kitchen Gardening and Poultry) and Child Care. These centres also offer 1-year Certificate and 2-year Diploma courses.

The Multi-Trade Centres offer training in traditional Kashmiri crafts like Gabba, Namda and Shawl Bafi.

4. Principles for development of a framework

Whilst working on the current challenges in TVET implementation, the Government of AJK is also committed to future improvement. The need for TVET to become more relevant to labour market demand has been nominated as a key issue. To guide the development of effective linkages the following principles are proposed:

- i. Industry will be involved in the formulation of policy, standards and programmes for TVET.*
- ii. The operation of the TVET institutions will be informed by regular and ongoing assessment of labour market industry developments, trends and issues and occupational analysis.*
- iii. TVET institutions will be responsive to industry requirements and involve industry and community in their operations. Decision-making regarding operation of TVET institutions will be devolved to local level.*
- iv. Private operation of TVET will be encouraged and private institutions will be monitored for compliance with national standards.*
- v. Learning by doing will be emphasized. Students will learn in settings that approximate the work environment and through participation in industry. Curricula will be derived from occupational analysis by practitioners from industry.*

5. Possible mechanisms for the future

Different strategies and mechanisms are suggested for implementation of the above. Whilst prompted by discussion within AJK the suggestions are oriented towards national adoption. They cover a broad range of interventions, all of which are broadly directed at bringing TVET closer to its clients: industry and individual learners.

5.1 Industry advisory forums

NAVTEC should periodically receive information from industry on trends and issues in industry training, on the national level as well as in provinces. The forum for this purpose to be constituted by NAVTEC and serve an advisory role on issues such as future demand

for training and could also advise on issues such as industry relevant competency standards which could be used to shape TVET programmes. These industry advisory forums may comprise industrialists and representatives from Chambers of Commerce and Industry and Small and Medium Enterprises Development Agency etc. as well as provincial TEVTA's, TVET experts, and heads of TVET institutions. The Forum should also include women active in CCI and TVET. The extent to which separate advice is necessary at the provincial levels need to be determined.

5.2 Subject Committees

Whilst industry should rightfully play a key role in determining what should be taught, professional educators are needed to develop curriculum, teaching materials and so on. Subject Committees could be constituted for each discipline or a combination of allied disciplines. Based upon advice from the Industry Advisory Forums the Subject Committees could manage periodic reviews of developments in the industry having implications for curriculum; consider and recommend changes needed in the subject scope, content, methods, and resources for the curriculum delivery. The Subject Committees should include relevant experts from industry, subject specialists and curriculum development experts. The Committee may be chaired by an industry representative, to ensure close relevance to industry need.

5.3 Research and development on industry/TVET connection

The TVET research section within NAVTEC needs to be strengthened and augmented with staff who have expertise in interpreting the labour market information produced by various federal departments, organizations, statistical and other agencies operating in Pakistan. The cell could also be responsible for the conduct of industrial sector-wide studies of occupational requirements, holding of forums and seminars with key industry leaders to interpret the impact of labour market issues for TVET, develop background papers for labour market/TVET seminars and so on. This type of function needs also to be available at provincial level. Whether this is best delivered by the national body, or by separate provincial bodies needs to be determined. Further, whether the research is best done in-house or by contracting with others outside of NAVTEC to provide the information can be determined.

5.4 Institution Management / Advisory Committees

The mechanism of having institutional management or advisory committees including members from industry, the local community and former students and so on is a popular way to provide information on local employment /industry conditions, to give feedback to institutions, to mobilize community and industry resources to assist institutions, and to link students with industry. Depending upon the governance structures in place it may be best for such committees to be management committees or advisory committees. Such committees can be very effective, and some way of harnessing local expertise to advise the TVET institutions in AJK is suggested. Given the small size of the individual institutions, it is clearly not sensible to establish individual committees for each institution. Nonetheless, the benefit of a committee for each of the main bodies managing institutes (TEVTA, DSWWD and SIC) could be considered.

5.5 Public Open Days

Once or twice a year, each TVET institution should hold Public Open Days. The purpose of these events would be to build community awareness about the educational

opportunities on offer at that institution and to boost enrolments. Such events also foster accountability to the community and to local industry and to encourage opening of community resources to the institution. Achievements of the institution during the previous year and its plans for the coming year will be highlighted and members of the public will be invited to comment upon these. Current students should be available on the day to speak to prospective students.

5.6 Competency Based TVET

To be truly more responsive to the needs of industry, TVET institutions should be using curricula which are based upon occupational standards and competencies. NAVTEC already have policies in this regard, and would need to play a leading role in achieving this. The competencies will be derived from occupational analysis involving industrial practitioners and curriculum development experts. This would be done at a national level. In AJK, some learning environment would then need to be adapted to better approximate an industrial setting.

5.7 Student Internship

A salient feature of most of the best TVET systems in the world is the mixture of on-the-job training alongside classroom learning. Student internship should be incorporated into each discipline in TVET, and made an integral part of the curricula. Necessary legislation shall be done to ensure industry's acceptance of internees. Systems to evaluate internship would need to be developed and they should be awarded credit. Institution Management Committees would assist in placement of students in industry / workplaces. Such a reform is likely to take quite some time. Institutions in AJK may consider, with TEVTA support, implementing student internship on voluntary basis.

5.8 Production Centres / Service Centres

In some settings, TVET production centres / service centres play a useful role in developing the skill of students towards production of products or services which meet market demand. Such production centres may be considered a feature of the learning environment, or may be a separate feature. While production centres may generate funds for the institution, the focus is on development of work skills, quality consciousness and good working habits among students. Establishing such centres needs comprehensive discussion. Whilst it is a mechanism which can bring industry and education closer together, care needs to be taken to ensure that the centre does not 'undercut' real local businesses.

5.9 Continuous Professional Education

The quality of TVET teaching needs to be raised. This is an urgent priority across Pakistan, and a number of comprehensive measures are needed. In terms of promoting closer links between industry and TVET, institutes could examine ways to allow teachers to 'return to industry' for periods of time to work in normal industrial settings. This requires flexibility in terms of allowing teachers time (perhaps a year) off to take a different job and then allowing them to return to their teaching job. It can be an effective way to promote greater industry relevance.
