

Tracing Institutional Role of Technical and Vocational Education and Training Skills for Socio-Economic Development of Women in Baluchistan

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Abstract

This paper has assessed the tracing institutional role of technical and vocational education and trainings (TVET) for socio-economic development of women in rural and urban areas of Baluchistan. In this descriptive study, a sample of 178 TVET qualified women via three stage stratified sampling technique revealed the role of TVET institutes for socio-economic uplift of women in Baluchistan. The analysis of data reveals that factors like, TVET institutional set-ups, skills qualifications, general education, social/tribal institutes, regions, ethnicity, self-employed status, parents' education, household head characteristics, and TVET trade selection/preferences play roles in enhancing socio-economic development of women in Baluchistan. However, both the non-supportive social/tribal institutions and weak TVET institutional set-ups for women hinder their socio-economic developments. The findings suggest for investment in establishing TVET institutional set-ups for enhancing human capital formation of women. Moreover, to enhance their levels of living there is a need to align TVET policies with the constraint social/tribal institutional se-ups in rural and urban Baluchistan.

Keywords: TVET Skills, Women Socio-economic Development, TVET Institutes

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Introduction

The institutional set-ups of skills development like, technical and vocational and trainings (TVET) plays vital roles in human capital formation and human resource development in most of the economies of the world. TVET has an imperative role for economic and social development in a society. It adds to the human capital formation, earning scenarios, jobs opportunity, personal and social returns, and many other socio-economic determinants of the economy. TVET importance for socio-economic and demographic development has been also recognized through sustainable development goals for both the genders of a society, community, population, economy, and developing countries of the world (Ahmed et al., 2018; 2020; Tan, 2014; among others). Skill acquirement and its growth is also vital for upright work, occupational earnings, preserving minimum level of esteem and reverence, efficiency, and its contribution to overall well-being for individuals at work place and society alike (Ahmed, Wadood & Mohammad, 2020; UNESCO-UNEVOC, 2016).

The first aspect of the seven posts of Pakistan Vision 2025 corroborates social and human capital development and empowering women to achieve sustainable development goals of poverty reduction, education enhancement, gender equality, and health improvements for resident of country. Notwithstanding, TVET contribute to the women empowerment in terms of working intrinsically with their male counterparts in labor markets for all economic sectors of Pakistan (Aziz et al. 2018). This is nonetheless stated that women are not mainstreamed with male counterparts, in the working sectors of the country.

It has been documented that almost 70-75 % of young women are not employed in the under developed region of the province (Baluchistan Youth Policy, Government of Baluchistan, 2015) A key socio-economic aspect related to unemployment can be attributed to the low skill development and wanting level of its provision for women of Baluchistan (Ahmed et al., 2020).

It is noted that there is gap for working on the assessment of TVET on the labor market wherein impacts of skill development on the earnings can be gauged. Also, field based surveys for this motive may be helpful to cover the gap in the direction. This will aid to the average estimated value of coefficient of skill development and human capital formation therein guiding policy makers. Women Development Department (2017) of the province attempts to obtain the empirical estimated for policy formulation for the development of women in Baluchistan.

Labor economics, as a comparatively distinct field of economics, spotted on both theoretical and empirical counts, has put forth the

significance of TVET in its literature as widely as possible in recent years (Becker, 1994; Mincer, 1974). Economic theory gives importance in placing the role of education in theoretical frameworks from simple to complex model(s) specifications vis-à-vis earnings therein a further exploration needed empirically as well as descriptively (Acemoglu & Pischke, 1998; Becker, 1994; Heckman, Lochner, & Todd, 2003; many among others).

The present work is an extensive work to Ahmed et al (2020) in which the role of TVET institutional set-ups is assessed to highlight empirically socio-economic impacts of women skills development in rural and urban areas of Baluchistan.

Literature Review

Skills development plays a very important role in human resource development. Skills development via TVET is an emerging area of research in the literature on labor market outcomes, human capital formation, labor policies, employability, and wage variations in the fields of labor economics and economics of education. The TVET institutional set-ups that provide skills to people in contemporary literature suggest to have mostly positive socio-economic impacts across the genders, segments of population in most of the developed and developing economies of the world.

The present section summarizes the discussion of some recent literature related to the topic especially focusing on the role of institutional set-ups of TVET with other determinants and therein the impacts on socioeconomic development across the states and societies. Also, the TVET institutional set-ups have multi-dimensional links with the socio-economic factors which will be unearthed in the existing literature. This will help to find out the contemporary gaps in the state of the art literature vis-à-vis the sample selected in this study.

Ahmed et al (2020) highlighted the case of women's skills development in selected rural and urban areas of Baluchistan. The study reveals that skills development and general education complemented by social and cultural support plays significant importance in women empowerment in many fields of their lives. The study gives hints of the following cited studies to further strengthen and enhance the TVET skills importance in many different circumstances of skills acquisition impacts on socio-economic development of people across the globe. The study also highlights and suggests to further explore the role of TVET institutional set-ups for women socio-economic empowerment in as many scenarios as possible to paw ways for consensus building among theories and empirical

evidence of skills development and socio-economic development of women in literature concerned.

Akinpelu (1984) examined the role of vocational training and education in the three African economies selected. He noted that these trainings have had a profound impact on the development of the earnings of rural areas. Also, poverty and productivity concerns found to be improved with these educational and trainings based efforts, *ceteris paribus*. He suggested augmenting the culture of educational and skill enhancing trainings in the rural peripheries of the country.

Hill (2002) assessed the earnings prospects with some socio economic and geographic determinants in USA. The sample of the study has been divided into the female labor who trained themselves at earlier stages and those who were trained during their jobs at latter stage of the careers. The results indicated a clear difference in the earnings of these two groups where female labor who were trained earlier were getting higher earning as compare to the other labors. This implies for the role of trainings in the growth of the lifetime earnings of the female labor in USA.

Cooke (2004) examined the linkages of earnings of vocational and other labor for Germany. The study used panel data over the period of 1984-1997. The wage differential of female labor found to be lower as compare to male labor. The results showed positive linkages among the educational and vocational trainings and earnings for both of the groups of young labors. The findings also corroborate that labor with both general educations with vocational trainings have a higher value of earnings than those who were less educated with the similar type of trainings. These findings highlight the importance of both general education as well as vocational trainings to improve productivity and earnings.

Böckerman et al.(2009) documented that there is an increase in the employment of the graduates having polytechnic education which were updated in vocational colleges. The results showed that pre reform performance of the vocational trainings showed less growth of employment and that changing the vocational education with the polytechnic education significantly adds to the opportunity in the Finnish market.

Galdo and Chong (2012) assessed the earnings prospects of the Peru over the years 1996-2004. They noted that TVET type trainings add to the earnings of the labor and create opportunity to penetrate in the market. The study employed many variables related to the TVET to provide a big picture of the impact of these trainings on the earnings of the labor.

Ben-Halim et al. (2014) noted that there exist some inequalities in skill based jobs in France. They found that women with skill trainings get low income as compare to male labor. These finding suggest for policy

improvement to reduce these earnings differentials. Likely, Pavlova (2014) documented that TVET are significantly improving the productivity of labor, income and therein employment opportunities. They based their analysis on the data of Asia and Pacific regions for finding out the results.

Kazmi (2007) estimated the relationship among the skill enhancement, capital formation and human capital improvements via TVET education in the Pakistan. The findings corroborate the pivotal role of TVET in the country as these variables showed a positive link with the labor market.

Mustafa et al. (2005) assessed the relationship among the aggregate economic output with vocational trainings indicators including institutions, number of enrolled students and trainers at those institutes. The findings have demonstrated significant relationships for these vocational trainings on the changes in the output growth of the country.

Ahmed and Baloch (2015) defined the role of skill development in the context of standard of living enhancement. They also highlighted the importance of skill development for women especially in Baluchistan. The findings suggested that poverty reduction and development are closely associated with skill development in the province.

Hence, lesser learning rates for women, untrained work force and lesser average efficiency of labor, inadequate skill growth for the regional work force have pretended serious concerns for appropriately examining skill expansion and their socio-economic and demographic influences for females in Baluchistan. Role of institutional framework for these TVET needs to be assessed on empirical counts to find out date based evidence in this regard. The current study attempts to cover this crack of the existing literary contributions on the subject debated in Baluchistan.

Ahmed and Baloch (2015) has shown less development in case of education and human resource development in Baluchistan. The demographic and political constraints have limited the development process in most of the sectors of the provincial economy.

Thus, following the arguments of the above mentioned studies and extension of Ahmed et al (2020); the present study traces to assess institutional role of TVET for socio-economic development of women in rural and urban areas of Baluchistan.

Research Methodology and Data Collection

The non-availability of institutional set-ups of TVET, women skills qualifications, constraints of tribal and social set-ups and insufficient data records of both the federal TVET institutes and provincial TVET allied

departments; the researchers employed tracer study approach to generate original and reliable data set for the basic purpose of this study. The data insufficiency is track-checked with incomplete sources of NAVTTC (2016) data-sources of TVET data availability. Furthermore, the research methodology for this study follows the academic convention of Schomburg (2016), pioneer of tracer study approach.

Research Design: The research design encompasses tracer study approach following Maseda (2017), Schomburg (2016), and ILO (2003) and Ahmed et al (2020) that is conducted step by step. In the first instance, available sources are sorted out including research review and data availability for the purpose of this study. Upon knowing non-availability of relevant data about the variables of interests, the TVET institutional set-ups are identified due as second step. The TVET institutional framework has been taken as a starting point for tracing the TVET qualified women as respondents for data collection. A detailed questionnaire was then designed for collecting relevant data for this study. Data is then analyzed with the help of statistical package of SPSS-23 version for producing meaningful tabulations of the results. Results are then discussed for concluding remarks and policy recommendations. Rest parts of the research methodology are described below.

Field Survey: Field survey is conducted for primary data collection to get quantitative information from the main respondents following Maseda (2017), Schomburg (2016), and ILO (2003).

Sample Size: A sample size of one hundred and seventy-eight (178) TVET skilled women are traced out via TVET institutional set-ups for data collection.

Sampling Technique: Three stage stratified sampling technique is used for this study. The first stage was TVET departments, the second stage was based on durations (3-months to 3-years) of TVET skills acquisitions and the third stage was based on rural and urban areas in selected districts of the province.

Research Instrument

The questionnaire has eighty-four (84) items distributed in different sections related to sections like, socio-economic, institutional, labor market responses, employability, household, personal and suggestion for

others. Pre-testing of the questionnaire is exercised by cleaning it to getting final version of data for the analysis segments of this study.

Institutional Framework of TVET for Skills Development of Women:

Tracer nature of this study required a mapping of the institutional framework of TVET system for women in the province. TVET system has set the objectives of skill development also including the women segment of population, prepare skilled youth for mega projects and economic corridors, manage existing TVET system, promote skilling Pakistan, bring information about TVET and its linkages with labor market outcomes, aimed at achieving employability, earnings, increased productivity, sustained economic growth, socio-economic and demographic development, targeting a milestone of 20 million TVET skilled labor force by 2025, up-skilling and re-skilling, export of skilled labor, and achieving labor market demand for skilled workers according to documents of Government of Baluchistan (2012) and Government of Pakistan (2015). Both the TVET set ups at national and provincial levels disseminate provision of skill trades for employment, earnings, and other socio-economic and demographic prospects both for men and women in the province.

TVET Comparison: Baluchistan vs Other Provinces: The provincial level statistics for TVET qualified, TVET enrollment, and TVET institutions are weaker for Baluchistan than for any other province of Pakistan. The limited number of TVET trades especially for women, and number of TVET institutions are not up to the mark for the province to keep abreast with the local market needs and socio-economic and demographic development through TVET aspects of human resource development, especially for the case of women in Baluchistan. TVET qualified individuals for Baluchistan were estimated at less than 2000 and for Punjab and Sindh were estimated at 170,000 and 66000, respectively, in numbers during the year 2014/15. The TVET enrollment for Baluchistan was less than 3000 and that for Punjab and Sindh was 110000 and 64000 respectively. The number of TVET institutions for Baluchistan is less than 120 both in public and private sectors while for Punjab and Sindh the number exceeds 1800 and 600 respectively. The number of trades are also very limited in numbers to enhance socio-economic and demographic conditions and empowerment of women to work at par with men counterparts for the growth of the least developed province of Pakistan (NAVTTTC, 2016).

Public Sector TVET System: Mainly, there are four public sector departments, namely, the Colleges, Higher and Technical Education Department (CHTED); Social Welfare, Special Education, Literacy, Non-Formal Education and Human Rights Department (Social Welfare Department or SWD); Labor and Manpower Department (L&MPD); Commerce and Small Industries Department (C&SID); the Women Development Department (WDD), the NAVTTC regional directorate, and one partially functional B-TEVTA for the provision of TVET skills and education both for females and males in the province. Brief discussion of these departments with their related aims and objectives are explained beneath (Baluchistan, 2011; C&SID, 2017; CH&TED, 2017; L&MPD, 2017; NAVTTC, 2016; SWD, 2017; WDD, 2017).

TVET in Private Sector: There are more than three hundred institutions registered with L&MPD for the promotion of vocational trainings in the province. However, more than 70% of these are non-functional. These institutions are working for limited number of conventional trainings subject to getting funds and/or sponsorship by NGOs and organizations like, NAVTTC, BRSP, Mercy Corp, and UNICEF, to mention a few. These institutions are private and run by NGOs like community based social organizations. They only provide vocational trainings in basics of computer and IT, beautician, tailoring and knitting, cooking, and handicrafts mostly for women and three months' basic courses in electrical, mechanical, computer and IT, and wood works for men in rural and urban set ups of their respective locations in the province. No regular programs for the mentioned vocational trades have been run, regularly, by these TVET institutions. There has been discontinuity in functioning of these institutions and their programs throughout the institutional existing period till the time of registration cancellation by the affiliate patron department (BRSP, 2017; L&MPD, 2017; NAVTTC, 2016). Other three out of the four TVET departments do not have such mechanism for registration of the private sector to work for provision of vocational and technical trainings in the province. However, a few number of NGOs are registered with SWD and working for vocational trainings to the vulnerable groups of imprisoned and children in very selective and limited extent (SWD, 2017).

Distribution and Deficiency of TVET Skill Trades for Women: TVET statistics from different departments show only one polytechnic college out of eight functional for women in Baluchistan. There are only six TTCs/VTCs for women out of a total of 20 in both the rural and urban

areas of Baluchistan. The numbers of TVET institutions are more for women in departments like C&SID and SWD but the number of skill trades provision is very limited for women in these TVET institutions throughout the province (Table 1). The TVET statistics also show that there are many skill trades missing and not being provided to the women/female segment in Baluchistan when compared to number of skill trades offered to women at national level. Better socio-economic and demographic prospects of TVET for women requires increasing number of skill trades provision for women segment of the population so that they can be mainstreamed in the labor force for overall growth and development of Baluchistan (Table 2).

Descriptive Analysis

For showing the role of TVET institutional set-ups for socio-economic development of women in Baluchistan, the descriptive approach of cross tabulations is calculated with the help of “Stata-23 version” for constructing results of the study.

Table 1

Distribution of Public & Private Sector TVET Institutions

Name of Department	No. of Male TVET Institutes (functional + non-functional)	No. of Female TVET Institutes (functional + non-functional)	Total no. of TVET Institutes (functional + non-functional)
Department of Labor & Manpower	14	6	20
Department of Social Welfare	6	38	44
Department of Education	8	1	9
Department of Commerce & Small Industries	60	69	129
NAVTTTC Regional Office Quetta	Mostly Co-educational	Mostly Co-educational	35

Sources: Field Survey Visits: Four Departments & Regional NAVTTTC Office Quetta-2018/19

Table 2
TVET Skills Deficiency: Comparison with National & Provincial Level

TVET Trades Distribution by Qualifying Time	Total No. of TVET Trades: National Level: (Both Male & Female)	Total No. of TVET Trades: Provincial Level (Both Male & Female)	Total No. of TVET Trades for Female in the Province	Total No. of Missing TVET Trades: Provincial Level:(Only Female)
3/6 Months	98	15	8	7
1 year	38	24	7	17
2 years	9	1	1	0
3 years	33	9	3	6

Sources: Field Survey Visits: Four Departments & Regional NAVTTC Office Quetta-2018/19

Table 3
Summary Statistics for Selected Variables

Variables	Observations	Mean	Std. Dev	Min/Max
Age	178	26	7.3	17/50
Edu	178	11	2.9	0/16
TVET edu	178	15	12.74	3/36
Experience	178	3	3.9	0/20
Employment	59	1	1.8	0/6
Home Cost	178	44224	24551	10000/220000
Earning	138	25115	13481	5000/85000
Working hrs	141	7	1.6	2/10
Working days	142	5	.58	1/2/7
Gap	125	2	1.24	1/10

Source: Stata Calculation: Field Survey Data-2018/19& Ahmed et al (2020)

Summary Statistics

Data in Table 3 shows that women range from 17 to 50 years have TVET education along with educational requirement ranging from no formal educational background to sixteen years of education. The TVET level program can take time duration from three months to three years. Experience profile varies and reaches to twenty years, starting from zero.

TVET will certainly provide employment opportunity up to six (6) employees by qualified women entrepreneurs, self-employed and own business operators in the province. Women earn PKR 5000 up to PKR 85000 from their TVET in rural and urban areas of the province respectively. Working hours exerted by women range from minimum of two hours per day up to ten hours, two working days up to whole week labor exertion in the local labor market. Different socio-cultural and economic constraints affect getting an employment status after the completion of TEVT skills and ranges from minimum of one year to a maximum of ten years for women in the province. Results and discussion are highlighted in the following section of our study.

Skills Institutional Set ups and Skills Duration: TVET skills provide different levels of education and trainings. Education Department mostly provides 36 months of technical trainings to women in Baluchistan. Social Welfare Department and NAVTTC provide mostly three and six months of vocational trainings. Small Industries Wing provides mostly three, six and 12 months of vocational trainings. Directorate of Manpower Training provides mostly TVET levels of six and 12 months both in technical and vocational skill trades in the province.

Educational Institutions and Women Skills Development: TVET types are technical education and vocational trainings. Technical education counts for 48.68%, the highest, for 12 years of general education. The percentage of vocational training is highest (i.e. 33.66%), for ten years of general education. It proves that women, who have higher level of general education, prefer technical diplomas rather than vocational trainings. On the other side women who have no formal education have little or no acquisition of both the types of TVET as compared to educated women in the province. The data also shows TVET skills are highly demanded by the women that have medium level of education (neither very high nor very low). Very low and very highly educated women are less equipped with TVET skills as compared to matriculation and intermediate levels of educated women in the province. Women with matriculation, intermediate, and bachelor levels of education report higher acquisition of TVET qualifications with 27%, 36%, 17.42%, respectively, as compared to very low (no formal to 8 years of education) and very high (16 years of education) level of general education.

Skills Types& Earnings of Women: Technical education equipped women has same chances of earning related to vocational trainings for women in Baluchistan. The results find out that technical education has

25% and 16% chances for earning PKR 20000 to 30000 per month and PKR 40000 to 50000 per month, respectively. Whereas, the results for vocational training shows that 40% and 34.57% for women to get income of PKR 20000 to 30000 per month and PKR 30000 to 40000 per month, respectively in Baluchistan. It implies that technical education can provide livelihoods of higher income earning as compared to vocational training equipped women in both rural and urban labor markets of Baluchistan.

TVET Diplomas/certificates and Earnings of Women: A TVET different phase provides difference of earnings for TVET equipped women in the province. Empirical data presents that 80% of the women possessing three years of TVET skills earns PKR 60000 or more per month. The impacts of 1-year TVET skill provides a Maximum of 31.58% for earning opportunities ranging from of PKR 30000 to 40000 per month. The earning chances of PKR 10000 to 20000 are evident 34.15 and 29.27% for women having three to six months of TVET training equipped. It shows that the more the level of TVET the higher are earning chances of income for women. Further, the results find out that 50% of women gets less than 10000 having three years TVET equipped training, which shows that less number of employment prospects for higher level of TVET equipped women because of few Socio- economics and demographic hurdles which blocks mainstreaming women portion in labor markets of Baluchistan.

Skills in Relation to Women Job Experience: According to the profile of experience and TVET level, 35.59 percent of women have no work experience and 8.82 percent have more than 6 years of work experience, respectively, with 36 months of TVET qualification. Women with a six-month TVET qualification have a job experience profile that is nearly identical to that of women with a 36-month TVET qualification. In this study, women with more than 6 years of work experience are shown to have 20.59 percent and 35.88 percent of TVET qualifications, respectively, and women with no work experience are shown to have 13.36 percent and 20.34 percent of TVET qualifications, respectively. It suggests that highly skilled women are more than just newcomers to Baluchistan's work sector

Impacts on Women Employment Status: According to the TVET employment status of women, 68 out of 178 are paid employees, with 32.22 percent of women having completed 36 months of TVET training. For unemployed women with six and twelve months of TVET, the numbers are 35.48 percent and 24.19 percent, respectively. For six and twelve months of TVET qualifications, the figures for self-employment

are 37.30 percent and 29.17 percent, respectively, which is higher than the statistics for three months and 36 months of TVET credentials

Skills Impacts on Women Jobs Diversification: The private sector employs the most TVET qualified women (63), followed by the government sector (26), self-employed or other autonomous firms (30), and other diversified businesses (12) in the province. According to the data, three-month TVET qualifications account for about identical amounts (i.e. 23%) of job placement in both the public and private sectors. Six months of TVET qualification is responsible for 66.67 percent of job placement in a variety of industries. Women with a 12-month TVET qualification have 30 percent job placement in the government sector, and women with a 36-month TVET qualification have 34.92 percent employment placement in the private sector

Women Employment Status and Earnings: For paid employees earning prospects are indicated as not reaching PKR 60000 per month, with 33.82 percent and 35.29 percent, respectively, for earning categories of PKR 10000-20000 per month and PKR 20000-30000 per month in the public and private sectors. According to the report, 6.45 percent of self-employed women make more than PKR 60000 per month, while 30.65 percent earn between PKR 20000 and PKR 30000 per month by women in rural and urban labor markets of the province.

Women Skills Trade Choice: In comparison to the shown percentages of “NO” choice for self-selection, the responses of choice for self-selection of specific skill trade for 3, 6, 12, 24, and 36 months of TVET qualification are 16.98 percent, 25.79 percent, 31.45 percent, 2.52 percent, and 23.27 percent in affirmation (i.e. in “Yes”), respectively. It suggests that women in the province are limited in their ability to self-select a specialized skill trade in TVET institutes of the province.

Ethnic Institutions and Women Skills Levels in Baluchistan: According to the distribution of women's ethnic affiliation and different levels of TVET qualification, 34.21 percent of total 76 Baloch women have a 36-month TVET qualification, whereas 36 percent of total 25 Pashtun women have a six-month TVET qualification, In rural and urban parts of Baluchistan, 31.71 percent of a total of 41 Panjabi women have a six-month TVET qualification, 17 women are Sindhi, with 35.29 percent having a six-month TVET certification, and the remaining 19 women belong to other ethnic groups in Baluchistan.

Rural/urban Distribution of Women Skills in Baluchistan: The distribution of TVET certified women in rural and urban areas in the province shows that 108 women are traced out in urban areas and 70 in rural areas in their respective job markets. In rural and urban settings, the distribution is 18.37 percent and 15.74 percent for three months of TVET qualification, respectively, and 27.14 percent and 24.07 percent for six months of TVET certification, respectively. In rural and urban settings, 27.14 percent and 30.56 percent for a 12-month TVET qualification, 4.29 percent and 2.78 percent for a 24-month TVET qualification, and 22.86 percent and 26.85 percent for a 36-month TVET certification, respectively. It means that in the province, rural women have fewer opportunities to obtain a TVET qualification in the province of Balochistan.

Marriage Institution and Women Skills Development: Women's marital status reveals that 73 are married and 105 are unmarried. According to the distribution of married women, 32.88 percent have completed 12 months of TVET. In this study, the distribution of single women is highest (i.e. 31.43 percent) for 36 months of TVET qualification. Thus, showing marriage institution and its role of skills development for women in Baluchistan.

Suggestion of TVET Qualified Women to other Women for Getting TVET Qualification: Verbatim Analysis

Suggestion to other Women for TVET Trade/skill: The suggestion options from TVET qualified women is explored in one of the two options of “Yes” and “No” for the question asked as, “do you suggest your acquired TVET skill trade to others?” if yes/no, tell the reason(s) for suggesting/not suggesting.

Table 4

Suggestion to other Women for TVET Trade/skill

Suggestion	Frequency	Percentage	Cumulative
Yes	101	56.74	65.74
No	77	43.26	100
Total	178	100	

Sources: Field Survey Visits & Authors Calculations-2018/19

Reasons for Suggestion in Yes: Tracer survey data in Table 4 shows that 56.74% of respondents suggested in “Yes” to answer the query phrased as: “Do you suggest the same course /diploma to anyone who seeks your

suggestion for TVET choice?" The summarized version of the reasons is briefly explained in the following discussion.

Opportunities of Home Businesses in Environment of Social Constraints: Most of the women state that home business for females is easy. At home cooking, tailoring, beautician, and other related skills are socially acceptable for the family either to run business or work voluntarily and free of cost as their domestic responsibility to their family members and friends. It is stated that skills acquisition is necessary for women not only for business running but also for their social and domestic status building among the family members to posture themselves as responsible and productive women in domestic affairs. It is necessary for home business development, earnings, and employment gaining for women. TVET qualification is helpful for productive time utilization at home in rural set ups. TVET is also helpful for home unpaid services (i.e. home production) and can save household expenditure and can increase household savings. There are suitable TVET trades provisions for girls in the province. TVET trade skills are productive for women allowing time for work and family in socially constrained societies.

Employment, Market for Women-made Products, CPEC & Exports: There is good market for ladies tailoring, handicrafts, and carpet and high demand for female skills in rural Baluchistan. There is market demand for women's self-produced goods in Pakistan. There is opportunity for getting private jobs and it is easy for a TVET certificate/diploma holder female to get a job in both the public and private sectors. Reference based jobs are also available for TVET qualified females. Women TVET skills are needed for the province especially for exporting its women made production. TVET trades for women are necessary for upcoming private jobs opportunities in the wake of CPEC opportunities in future. There is huge potential of exporting local handicrafts to Arab States, Europe, and USA made by provincial TVET qualified women. TVET is essential for CPEC projects, export of local products, self-sufficiency, and growth of the province. Jobs availability in both public & private sector and jobs in CPEC are good prospects for qualified women in future. Skills based on modern technologies, hospitality, office management, food technology, and information technology are areas for women to excel for uplifting their socio-economic and demographic status in the province. TVET should work for meeting overall future demand of new technologies and development of women entrepreneurship and overall economic development of women in the province.

Reasons for Suggestion in No: Survey data Table 4 shows that 43.26% sampled respondents replied in “No” to answer the query for suggesting their acquired TVET skill trade to other women if asked from herself. The summarized version of the reasons is briefly explained in the following discussion.

Social Constraints: There are numerous social, tribal, religious, economic, and gender-based hurdles for women to work at par with their men counterparts in the local labor markets and business centers. Most of the unemployed women state that there are less opportunities for females to find jobs due to low female quota, male dominancy, biasness, corruption, undue recommendations, and reference culture prevalent in the jobs market and earning norms prevalent in the socially constrained and backward province of Baluchistan. Some of the training schemes particularly “Skilling Pakistan Program” of NAVTTC are not delivering its announced vocational trade/skills properly. Incomplete courses and practical work with insufficient workshops are being taught at most of NAVTTC programs. Jobs are not well rewarded in the province. There is no functional textile & silk handloom industry in the province. Most of the female TVET skills are low paying in the market. There is no full time and four seasons demand for female skills in local labor markets and it is mostly seasonal. Some of the women state that higher education and general schooling are more rewarding in terms of job opportunities, earnings, promotion, and adaptability to new technology as compared to TVET. There are constraints for females to work in markets, business start-ups, and other private business centers in the province. Some of the women say that government jobs are very limited in case of females with TVET qualification in the province.

Conclusion & Recommendations

It is shown that TVET institutional framework and skills provisions to women plays a very important role in women empowerment in the areas of their socio-economic development. The study conducted in rural and urban areas of Baluchistan suggest that TVET ensures labor markets outcomes of better jobs, employment opportunities, human capital formation in terms of both general education and TVET skills acquisitions, livelihood earnings, support to household expenditure sets, and give positive returns on women’s social, economic and demographic statuses. The study also highlights social and tribal constraints that have socially institutionalized the constraints role of women in tribal set-ups of the province Baluchistan. The suggestive roles of TVET qualified and skilled

women give impetus to suggest skills acquisitions to other women in rural and urban areas of Baluchistan pave ways for their inclusion into policy making spheres of Baluchistan. The weak and insufficient, both in number and extend, institutional framework of TVET institutes was one of the hurdles for their socio-economic development in the province of Baluchistan.

Recommendations: The following recommendations are put forth for socio-economic development of women via TVET skills provision in the province of Baluchistan.

1. Investment in establishing and strengthening TVET institutes for women in the province should be enhanced.
2. Skills development outreach must be assimilated with the tribal/social norms/values of the province so that most of the women could potentially be included in TVET programs.
3. Financial constraints of women skills acquisition must be financed partially and/or fully by scholarships, stipends, fee concessions and other types of supportive programs in the province.
4. TVET allied departments of the province must collaborate with both the B-TEVTA and VANTTC to devise and provide comprehensive TVET institutional set-ups for skills development of the provincial women.
5. Relevant skills trades must be identified and then provided by TVET institutes to women in the province for better labor market outcomes of employment and earnings in local labor markets of Balochistan.
6. Private sector must also be incentivized via subsidies or/and any other supportive programs to play its complementary role with public TVET sector for women skills development in the province.
7. For unskilled and unemployed TVET qualified women; their parents and family members must be encouraged to relax their tribal/social constraints/limits for TVET skills acquisition for their socio-economic development.
8. Labor market laws must ensure equal opportunities for mainstreaming women into employment opportunities, decent work, livelihood earnings and other aspects of socio-economic development in the province of Balochistan.

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References

- Acemoglu, D., & Pischke, J.-S. (1998). Why do firms train? Theory and evidence. *The Quarterly Journal of Economics*, 113(1), 79-119.
- Ahmed , D, Wadood D Mohammad D . (2020). Tracer Study of Socio-economic and demographic Impacts of Technical and Vocational Education and Training (TVET) for Women in Baluchistan. *PAKISTAN SOCIAL SCIENCES REVIEW* ,4(3),824-838, doi:10.35484/pssr.2020(4-III)58
- Ahmed, M., & Baloch, A. (2015). Political Economy of Baluchistan, Pakistan: A Critical Review. *European Scientific Journal*, 11(14).
- Ahmed, A., Khan, A. H., Shehnaz, L., Muhammad, W., & Ullah, S. W. (2018). Human resource development through technical and vocational education and trainings (TVET) system in Baluchistan: A critical SWOT analysis.
- Ahmed, A., & Khan, A. H. (2018, September). SWOT analysis of institutional framework for engineering diplomas in technical and vocational education and training system in Pakistan. In *IOP Conference Series: Materials Science and Engineering* (Vol. 414, No. 1, p. 012011). IOP Publishing.
- Ahmed, A. (2019). Impacts of Vocational Training for Socio-economic Development of Afghan Refugees in Labor Markets of Host Societies in Baluchistan. *Journal of International Migration and Integration*, 20(3), 751-768.
- Akinpelu, J. (1984). Post-Literacy and Vocational Training in the Context of Rural Development and Income Generation in Africa. *International Review of Education*, 30(3), 315-328.
- B-TEVTA Act no. II of 2011, (2011). Government of Balochistan, Quetta
- Baluchistan, G. o. (2012). *The Baluchistan Government Rules of Business, 2012*. Services and General Administration Department, Quetta: S&GSD (Regulation Wing).
- Baluchistan, G. o. (2015). *Baluchistan Youth Policy 2015*. Environment, Sports & Youth Affairs Department. Civil Secretariat. Quetta.
- Bank, A. D. (2009). *Education and skills: Strategies for accelerated development in Asia and the Pacific*. Retrieved from Manila, Philippines:

- Becker, G. S. (1994). Human capital revisited *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education (3rd Edition)* (pp. 15-28): The University of Chicago Press.
- Ben-Halim, Chusseau, N., & Hellier, J. (2014). Skill premia and intergenerational education mobility: The French case. *Economics of Education Review*, 39, 50-64.
- Böckerman, P., Hämmäläinen, U., & Uusitalo, R. (2009). Labour market effects of the polytechnic education reform: The Finnish experience. *Economics of Education Review*, 28(6), 672-681.
- BRSP. (2017). *Livelihood Program: Skill Development. Baluchistan Rural Support Program*. Quetta.
- C&SID. (2017). *Commerce and Small Industries Department. Rules of Business, 2012*. Quetta.
- CH&TED. (2017). *Colleges, Higher and Technical Education Department. Rules of Business, 2012*. Quetta.
- Commission, P. (2015). *Pakistan Vision-2025*. Islamabad.
- Cooke, L. P. (2004). The gendered division of labor and family outcomes in Germany. *Journal of Marriage and Family*, 66(5), 1246-1259.
- Department, W. D. (2017). Women Development [Press release]
- Fleishera, B. M., & Wang, X. (2004). Skill differentials, return to schooling, and market segmentation in a transition economy: the case of Mainland China. *Journal of Development Economics*, 73(2004), 315– 328.
- Galdo, J., & Chong, A. (2012). Does the quality of public-sponsored training programs matter? Evidence from bidding processes data. *Labour Economics*, 19, 970-986.
- Heckman, J. J., Lochner, L. J., & Todd, P. E. (2003). *Fifty years of Mincer earnings regressions*. Retrieved from
- Hill, E. T. (2002). The Labor Force Participation of Older Women: Retired-Working-Both. *Monthly Lab. Rev.*, 125, 39.
- ILO. (2003). *Education and Training: Skills for Employability Including the Challenge of Youth Unemployment. Global Employment Forum*. Retrieved from <http://www.ilo.org/public/nglish/employment/geforum/skills.htm>

- Kazmi, S. W. (2007). Vocational education and skills development: A case of Pakistan. *SAARC Journal of Human Resource Development*, 3(1), 105-117.
- Khan, A. R., & Bibi, Z. (2011). Women's socio-economic and demographic empowerment through participatory approach: a critical assessment. *Pakistan Economic and Social Review*, 133-148.
- L&MPD. (2017). *Labor & Manpower Department. Rules of Business, 2012*. Quetta.
- Maseda, M. R. (2017). *Implementing Tracer Study: practical steps and tools*. Retrieved from ETF expert © European Training Foundation, ETF/Martine Smit, ETF/Joanna Anstey:
- Mincer, J. (1974). Schooling, Experience, and Earnings. *Human Behavior & Social Institutions* No. 2.
- Mustafa, U., Abbas, K., Saeed, A., & Anwar, T. (2005). Enhancing Vocational Training for Economic Growth in Pakistan [with Comments]. *The Pakistan Development Review*, 567-584.
- NAVTTTC. (2016). *National Skill Information System*. Sector F-5/1, Islamabad: NAVTTTC.
- Pakistan, G. o. (2015). *National Skill Policy. Skills for Growth & Development: A Technical and Vocational Education and Training (TVET) Policy for Pakistan*. Ministry of Federal Education and Professional Training, Islamabad.
- Pavlova, M. (2014). TVET as an important factor in country's economic development. *SpringerPlus*, 3(1), K3.
- Rauf, A. (2015). [Personal Communication].
- Schomburg, H. (2016). *Carrying out tracer studies: guide to anticipating and matching skills and jobs: volume 6*. Luxembourg: Publications Office of the European Union.
- Schueler, J., Stanwick, J., & Loveder, P. (2017). A framework to better measure the return on investment from TVET.
- Statistics, P. B. o. (2015). *PSLM (2013/14)*. Retrieved from Statistics Division, Government of Pakistan, Islamabad:
- SWD. (2017). *Social Welfare Department. Rules of Business, 2012*. Quetta.

Tan, E. (2014). Human capital theory: A holistic criticism. *Review of Educational Research*, 84(3), 411-445.

UNESCO-UNEVOC. (2016). *Strategies for Technical and Vocational Education and Training (TVET): (2016-2012)* Retrieved from <http://unesdoc.unesco.org/images/0024/002452/245239e.pdf>

WDD. (2017). *Women Development Department. Rules of Business, 2012*. Quetta.

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