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# Skill Development in Punjab

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Abstract: Skill development has been essential component of the Punjab Government's policies in the recent past including Punjab Growth Strategy 2023 and forthcoming development prospects are significantly dependent on improving the human capital of the province. The study focuses to perceive the effectiveness of the Vocational and Technical trainings and assess the implementation of such innovative courses in leading TVET providing organizations of Pakistan especially Punjab like PVTC & TEVTA in order to boost the productivity and generate employment prospects for youth. The study further focuses to accord an insight into recent landscape of Pakistan and particularly Punjab through extraordinary emphasis on TVET sector, skills development, human capital development and entrepreneurship to recommend a forthcoming agenda to be implemented by the policy makers. Skill development as well as human capital development have been developed as influential elements for nation's socioeconomic growth. We state that expedite the development of fundamental transformation having much dependency on reconsideration and up-gradation of industrial policy, strengthening the Vocational and Technical institutions and strategic partnership between the public and private sectors. The study accomplishes that skilled human resource having significance in the progress of a nation and skilled workforce can contribute to economic and social progress of Punjab and Pakistan.

**Keywords:** Skill Development, TVET, PVTC, TEVTA, Vocational Training, Economic Growth, Punjab Growth Strategy.

## 1. Introduction

Generally, there is equivocation, mainly about even Vocational Training is truthfully tertiary education (Jakupec, 2013). Numerous Vocational courses presume learning and educational level of 10 years of formal education, indicate that most of the Vocational courses are secondary in level (Murray-Smith, 1965). It represents that a few will argue that Vocational Training would be explained by trainees' accomplishment on the completion of their trainings and skill development, relatively on trainees entrance to the TVET sector (Williams, 1965), not plentiful but considerably satisfactory.

Advanced technology and knowledge based products has been the international concentrated growth points and it has become obligatory for the survival of Pakistan and will flourish in the competitive circumstances of the global economy (Maha Khan, September 2016) And (Lall, The Challenge for Pakistan. ADB Institute-Pakistan Resident Mission Paper, ADB Pakistan Resident Mission, Islamabad, 2004).

Development Framework terminology emphasizes for modification of GDP to high value added industrialized and sophisticated services and the need for skilled workers. It is essential that manpower should be skilful which will effect in high productivity. (Amjad, Skills and Competitiveness: Can Pakistan Break Out of the Low-level Skills Trap?, 2005) Explained about skill importance that well educated, skilled labor force, higher value added, skill concentrated and technology innovative segments contribute in the growth of their countries. Skill should have been the preference, (Wagner, Productivity and Skills in Industry and Services - A British - German Comparison, 2005) emphasis that Vocational, Technical training are the key impact factor paradigm that have a significant impact on national effectiveness, she used the assessments that evidence of German-British industrial capability displaying precise associations between skill development through Vocational training, products and effectiveness as per matched plant evaluations.

Human resource growth principally developed skills impact relatively substantial economic growth and the efficiency levels. While research on efficiency resulting (Abramovitz, 1956) and (Solow, 1957) inspirational articles on bases of growth, emphasized the significance of human resource development, the autogenously philosophy of economic growth and development has carried human capital at the core phase of the growth procedure (Romer, 1993). Whereas the share of productivity headed to growth rate of GDP in Pakistan has been one-third, the progression in full characteristic efficiency has been additional to perform through holding up than the development in human resource development, foremost foundation of endure growth (Kemal A. R.-u., 2002). The pandemic characterized the COVID-19 (coronavirus) has aggressively spread internationally since the initial incident was informed in Wuhan China in the end of December 2019 (Rajput, April 17, 2020).

(Kemal A. R., 2005) Proposed that Human Development Index symbolizes discouraging score that the skill development has been ignored and due to general carelessness of the human resource development Pakistan displayed very low in the international Human Development Index. It has been expressed that Pakistan has not been able to expand Vocational and Technical skills and nor focused on the innovative and intellectual skills and grieved with the consequences of loss of export, output, and increase in unemployment with sluggish growth of living standards.

Policy establishment and emphasis on the excellence of products with many other factors have been responsible for carelessness and negligence which is emphasis on primitive expertise and the inadequate source of skilled workforces. It is unexpected but it is the reality that although, core beneficiaries of the skill enhancement and development are the manufacturers but they have shown a slight interest and struggle to expand the skills. It is the need of the time and much important to upgrade skills but it will only be happen if manufacturers themselves are influenced of the significant benefits from skills (Kemal A. R., 2005).

The Government of Pakistan (GOP) and especially government of the Punjab (GOPb) has been attentive and the core apprehension has been the economic influence of lockdown that left huge impacts on entire economy and targeted the poor segments of the society on the large scale and dented economy badly. Variation has been reported in the Pakistani Stock Market as the KSE-100 Index score jumped by above 25% in March consequently impact shifted to rupee by above 6%. The desperate economic and financial consequences has already been observed, long schedule of lockdowns, freezing the routine normal activities, major conventional industries exports became zero due to cancellation of their orders and massive numbers of daily workers and employees unexpectedly turned jobless (Ahmad Naeem Salik, May 2, 2020).

Distinguished by (Muhammad Salman Shabbir, 2018) it is important to recognize that Nations with the equal age, background, means and complications have been executing much more efficiently than Pakistan and achieved noble level in the international economic situation and (Amjad, Skills and Competitiveness: Can Pakistan Break Out of the Low-level Skills Trap?, 2005), Pakistan has lacked to provide advanced skills for too long and stayed in a low-level skills trap resulting in failure to deliver as per global skill requirement, this trap will be broken if Pakistan will move into innovation training and knowledge economy. Investment on the larger scale is required for skills development in Pakistan and especially in Punjab. Skill training institutes are working but innovative & demand oriented skill trainings are the need of the time with this recognition that significance of spending in manpower provides self-respect, integrity and fairness for working men and women.

#### Plan of the paper is as follows:

After the Abstract and Introductory section, the skill development in Punjab is reviewed in Section II. Technology and research and development are discussed in Section III. The strategy to skill development is reviewed in section IV. PVTC Initiatives and Contribution in Skills Development is reviewed in section V. And Skill development Roadmap outlined in the concluding section.

## 2. Skill Training and Development in Punjab

Punjab Vocational Training Council (PVTC) is the largest Vocational training provider in Pakistan, established in October 1998 by the Government of the Punjab & have the presence in all Tehsils of the Punjab. As PVTC is the premier Vocational training providing body which is imparting demand driven Vocational training to the youth from all sects and there is no discrimination of religion even large number of minorities, disable and transgender has been encouraged. Since inception, PVTC have trained approximately 899,021 young men and women in demand driven trades who are gracefully employed. According to EEA, USAID and IYF case study, PVTC has done remarkable job of improving access to training and employment for boys and girls who lacked the financial resources to receive vocational / technical training.

It is observed in multiple reports and especially in the Punjab Growth Strategy (P&D, 2022) that forthcoming development potentials are profoundly dependent on improving the human capital of the (Punjab) province. Irrespective of the sector, industrial, agriculture or services, the improvements to skills are important equally in terms of economic growth and employment. Main focus on skilling the youth of Punjab has been considered as a vital pillar of the prior Growth Strategy, the target was set to achieve 2 million skilled graduates training on the accomplishment of strategy period (Brief is tabulated below in Table-I).

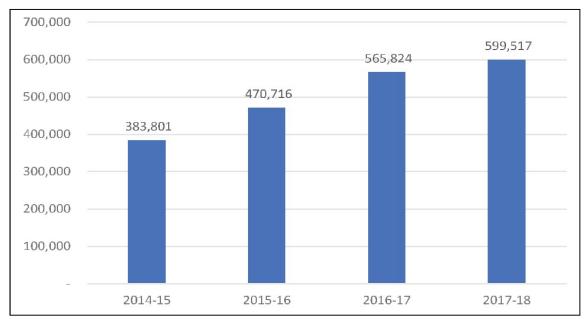


Figure-I: Number of Skills Trainings per Year 2015-2018 (numbers)

Source: Punjab Growth Strategy 2023, Government of the Punjab Punjab Skills Development Programme, Government of the Punjab

The government decided to extend the significant investments in the sector and with the efforts of all key players were able to achieve the goal by training 2.02 million skilled graduates. Per annum 16% (percent) training capacity of the period has been increased in the province by attaining nearly 600,000 in the terminal year. TVET sector institutions delivered 1.55 million trainings while 470,148 trainings has successfully been by sectoral departments.

Punjab Vocational Training Council (PVTC), Government of the Punjab and Technical Education and Vocational Training Authority (TEVTA), Government of the Punjab have been leading with the skill training of approximately 1.1 million skilled graduates. Punjab Skills Development Fund (PSDF) with 222,166 skill trainings, capacity enhancement with 95,833 and Private sector institutes with 135,406 skill trainings contributed to achieve the targeted goals (Brief is tabulated below in Table-II). For the human capital development to conduct such vital trainings as they improve the current human resource to become further productive and maintain their standard of life and promote themselves for more proficient positions.

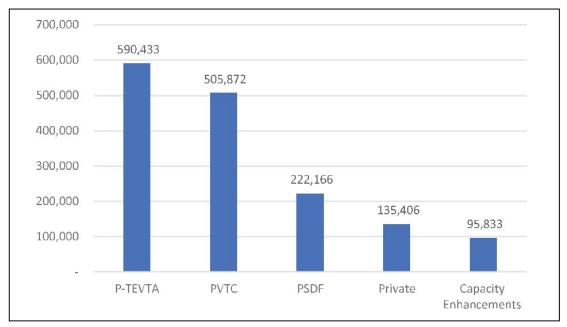


Figure-II: TVET Sector Institutions (Training Count) 2015-2018

Source: Punjab Growth Strategy 2023, Government of the Punjab Punjab Skills Development Programme, Government of the Punjab

All the set targets has successfully been achieved by the previous growth strategy with focusing the key trade's magnitude of skills that has been provided over the period of the prior Growth Strategy of PVTC & P-TEVTA is briefed below in figure I & II respectively.

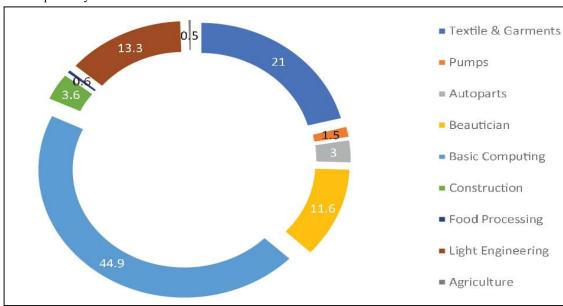


Figure-III: PVTC Training Delivered Magnitude (%) 2015-2018

Source: Punjab Growth Strategy 2023, Government of the Punjab Punjab Skills Development Programme, Government of the Punjab

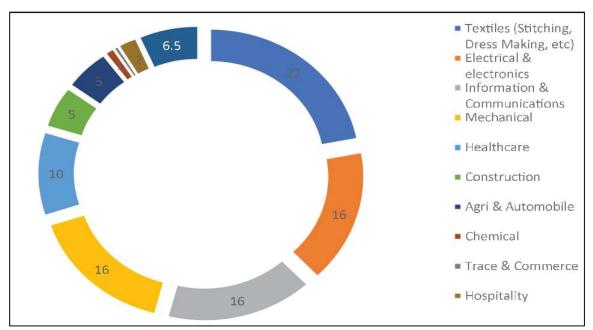


Figure IV: Magnitude of Trainings in P-TEVTA

Source: Punjab Growth Strategy 2023, Government of the Punjab Punjab Skills Development Programme, Government of the Punjab

It has been observed in Punjab Growth Strategy 2023 that the earlier growth strategy lacked in networking the demand side factors and it has been a solid supply push to jack up the numbers trained. Therefore, the training institutes resumed to organizing shorter period and easier trainings instead of going towards complex, high value or demand oriented trainings. After reviewing the potential trades the Government of Punjab has revised the map under its Growth Strategy and will take up to invest and ensure all support for the skilling of Punjab's youth and will differentiate from affirmative action delivery to a sustainable & extra growth-orientated policy over the next five years.

Quality is the foremost priority, with the origin of globalization, the progress will be highly depended on skills for manufacturing merchandises and services of superior feature at the economical prices due to high competition. Skill development is a process to maintain core capabilities in several fields, skill building is a consistent procedure and not an incident or exercise. Three key types of skill development are explained below:

- i. Vocational and Job Skills: Job and profession alternatives and Entrepreneurship.
- ii. Creative and Cognitive Skills: Developing problem-solving skills and action planning; as well as creative expression and action linking.
- iii. **Personal and Social Skills:** The following skills need to be developed; Conflict resolution, refusal skills, peer mediation, coping skills, facilitation skills, action planning, and navigation skills.

Training of various skills in Pakistan is impaled thru PVTC, P-TEVTA and many Vocational Training centres, Polytechnic, apprenticeship schemes, diverse training and vocational institutions underneath numerous ministries and departments, commercial schooling establishments and Ustad-Shagird device within the informal zone. The formal establishments produce a very small share of general increments to the professional paintings force and no longer necessarily in accordance with the call for and of requisite first-class. The setup of employer led bodies, Skill Development Councils (SDCs) has been arranged in Punjab for education needs evaluation (Training Need Assessment) and ensure the to fulfil the desires through making training arrangement with public and private training sector of skill training are anticipated to assist on this route.

PVTC in collaboration with GIZ, PSDF, UNICEF, JICA, British Council, and other National and International development agencies is extensively contributing towards the poverty alleviation through skill training.

World Employment Report (ILO I. L., 1998) indicates that education systems are a manufactured from the labour marketplace institutions and incentive systems in which they function and of the help they obtain from proprietors, workers and Governments. However, utmost skills established over a lifestyles time are acknowledged on the process, mainly in enterprises wherein human beings work in both the formal and the informal economic system. Key observations in a take a look at of competitiveness in South Asia by (Lall, Industrial Competitiveness.' The Challenge for Pakistan.

ADB Institute-Pakistan Resident Mission Paper, ADB Pakistan Resident Mission, Islamabad., 2004) Has also been tackled to overcome the gap of skill training.

Pandemic (Covid-19) realizes the importance of skill training & development the ILO Flagship Report (ILO I. L., 2021) indicates younger employees has been 2.5 instances more than that sustained by adult employees at certain phase in the pandemic. Such disparities in working-hour and employ sufferers have transformed into parallel disparities in remuneration losses across organizations of people and nations. Global labour income fell through 8.3% (US \$ 3.7% trillion) during 2020. Young, girl and decrease-skilled workers had been extremely affected. The loss of tolerable aid measures has directed to a good sized growth of poverty, especially in low profits and lower-middle-income international locations (Pakistan). The wide variety of employees living in intense or mild poverty, residing on a day by day profits of, respectively less than US \$ 1.90 or much less than US \$ 3.20 (in purchasing strength parity terms) that has been elevated between 2019-20 by means of more than 100 million to 700 million. Thus successfully overturn 5 years of development towards the elimination of poverty.

# 3. Technological Up-gradation

Technological progression is important for reaching effectiveness within the international economic system. Innovation functionality extensive method having the capability to take advantage of new technology. This comprises competencies of nations to expedite innovation accomplishments with the utmost results of the desired such proceedings (Shagufta Shabbar, December 27, 2021) It is the need of the time of the countries performs poorly in innovations to enrich cantered regions of development as with low literacy and on the job training.

Although Pakistan nonetheless lags at the back of in technology index, there are substantial advancements in the past few years. However, many Pakistani corporations remain on the lesser side of technology. National corporations can be expedited to strive in the international market thru technological up-gradation, funding, progressive & innovative competencies. Innovation is a revolutionary movement that has been arisen from firm's inner skills to expand a brand new product inside the marketplace. Many manufacturers will be benefited from Innovation by multiple ways.

Research & Development management report (Daniel I. Prajogo, 2006) indicates that concrete connotation that can be extracted from the outcomes is to acquire excessive innovation achievement, businesses first want to broaden the developmental and traditional perspective and procedures adopted for innovation and merely in such helpful atmospheres it would be feasible for businesses to expand innovative competency in Technology, Research & Development and improvement which will result in an efficient way to deliver innovation results with performance.

Indication from the experience of the Asian economies which include Japan, Korea, and Singapore states that the anticipated intervention with the convenient resource of the authorities on the aspect of comprehensive public-private partnership are helpful in developing a huge variety of innovative industries that may compete efficaciously in the international markets. It is very much important that manpower improvement programmes be extended with excellent enough financing for the implementation of Science, Technology and Innovation. The R&D bodies should be independent with greater autonomy, monetary and administrative. Perfection in tool and different centres, modernizing the machine and skills constantly to maintain well-informed the modern day and advanced techniques and technology. Beautiful mixture with the private sector in the matters of organizations with healthy involvement, demonstration and representation at the big forums like in the board of governors and advisory committees to strengthen the relationship.

## 4. Strategies for Skill Development

Skills and information are important operator of macro-economic progress and socioeconomic strength. Convenient procedures for the skill enhancement conquer a leading spot in the improvement of financial gadget and development economy. As stated in Punjab Growth Strategy, P&D Board has established competitive desires and aggressive goals to attain quicker and sustainable monetary boom and economic growth of the state. Punjab Growth Strategy focused on demographic dimensions with its importance and impact that Pakistan & especially Punjab should transmit sufficient and advanced skills to its team of workers. With the worldwide demand and the need of time Skill development has developed as country wide priority concern due to that plentiful processes have been taken and in way for destiny (P&D, 2022).

Skill development has been demand driven with this assessment that survey should be conducted to analyse the current and future demand for skills in Pakistan & especially in Punjab. This survey will surely be helpful in ascertaining the gap

of the skills. Skills development is a consistent process depending upon multiple factors (Wagner, Productivity and Skills in Industry and Services - A British - German Comparison., 2005) a few has been explained below:



Figure V: Productivity and Skills in Industry and Services; A British - German Comparison

Skill development is a distinguished procedure through which trainees and the all sects of life including all the working age community will be benefited with the entrance to skill, dexterity and functionality, career ethics, aptitude and decent working attitude with the provision of skill training, expertise development, setting up expertise standards, and further concerning activities.

- The scope of learning which permits entities to perform tasks in every department.
- The design of comprehensive national curriculum with features to moral understood across the sector.
- The lively position of business enterprise associations in outlining what is going to be studied to with this
  assurance that it will be intensive to their requirements and in supervising the procedure thru the Chambers of
  Commerce that offer an impartial assessment of all trainees in accordance with national standards.
- It is very much important to consider both the aspects practical as well as theoretical components in the examinations in result people must respond that they are capable to execute all of the key functions in the industry before the completion of their training.
- All the welfare & trade union and work councils be involved for the securities to make sure that the National requirement and safeguards has been followed.
- Qualified and professional trainer are the dire need to oversee the excellence of the on-the-job training.
- Network of informal sector which is the backbone of Skills development is essential to be strengthened.
- Introduce mobile units well-found through ample relevant technical tools and equipment and accompanied with trainers may offer skill training in the areas of targeted manpower.

- Free / Subsidized tools and equipment should be provided to informal sector manpower which will not only
  improve their skills but also familiarize them with the modern technology and efficient method of production.
- Along with public sector, Private sector have to encourage to increase the aforementioned contribution in the field of Vocational and Technical training.

This has been the Strategy over the long term for Vocational training and Technical education should be two-fold programmes through which outstanding Vocational, basic and technical education has been delivered and also the specialized training thru institutions controlled watchfully to achieve desired outcomes by the proprietors in particular industries and on the job training

## 5. PVTC Initiatives and Contribution in Skills Development

Punjab Vocational Training Council (PVTC) ((PVTC), n.d.) is the premier public sector vocational training provider organization, which was established in October 1998 by Govt. of Punjab through PVTC Act 1998. It is an autonomous corporate body of Government of the Punjab. Key initiatives are enlightened below;

- 5.1 **Life Skills:** Keeping in view the importance of Life Skills, PVTC has incorporated it into its entire courses. This course broadly include;
- Communication Skills
- Conflict Resolution
- Stress Management
- Work Ethics
- Interview Skills
- Office Decorum
- 5.2 **On Job Training:** 2 months On Job Training (OJT) is mandatory.
- 5.3 **Job Placement:** According to a recent study carried out by DG M&E (P&D Department) (DG M&E Directorate General Monitoring & Evaluation, December, 2017), 84% of PVTC graduates are either employed or doing their own businesses.
- 5.4 **CBT&A:** PVTC is having paradigm shift in training to enhance training quality form conventional to Competency based training & Assessment (CBT&A) courses.
- Skill training to religious Minorities, Disable & Transgender: PVTC has the exceptional emphasis to provide skill training to religious minorities, disables & transgender along with the deprived youth of Punjab. 300 transgender trained in collaboration with GIZ and literacy department. 1,000 youth from the minority segment of the society has been trained under the project "@ Socio-Economic Support for Minorities through Special Grant" and training of 40 Sikh youth financed through Baba Guru Nanak Scholarship in collaboration with Evacuee Trust Properties Board (ETPB) and Planning & Development board. PVTC has established 08 VTIs in Special Education Department buildings to impart vocational training to disabled /special children and destitute youth.
- 5.6 **Child Protection:** VTI has been established in Child Protection and Welfare Bureau in 2015 which is imparting training to the destitute at their doorstep.
- 5.7 **Life Skills and entrepreneurship:** This is the integral part of each course and students are trained and encouraged to be entrepreneurs. Grant to 20 successful trainees of youth from Minorities (Rs.200, 000/each) has also been provided in lieu of Entrepreneurship/self-sufficiency drive.
- 5.8 **IT Literacy Training:** has been given in IT labs of 300 Schools of School Education Department most of which are in the rural areas.
- 5.9 **Cooperative Vocational Training:** Cooperative Vocational Training has been emphasized. It has been started in 13 industries across the Punjab in regular courses and in 36 industries under Minorities Training Project.
- 5.10 **Vocational Training in Deeni Madaris:** 25 Vocational Training Institutes have been established in Deeni Madaris to mainstream this important segment.

- 5.11 **Vocational Training to Swat Operation affected youth:** PVTC imparted training to the youth of Swat with the help of Pak Army. A Vocational Training Institute (Sabaoon) has been set up in Swat in October 2013.
- 5.12 **De-radicalization of Youth:** Young boys, released by Pak Army from militant's shackles have been given vocational training in Lahore to become useful citizens.
- 5.13 **Women empowerment:** More than 51% enrolled trainees are female. Program in collaboration with Women Development Department. This program started in July 2016 and so far we have trained 1,230 domestic workers out of which considerable number is gainfully employed.
- 5.14 Access to Micro Financing: PVTC encourages its graduates to be entrepreneurs rather than to be a job seeker. PVTC has arranged Micro Financing for our graduates from following organizations including Prime Minister's Youth Loan Scheme
  - Akhuwat Foundation
  - Jazba Foundation
  - Kashf Microfinance Bank
  - Tameer Microfinance Bank
- 5.15 Sustainable Economic Empowerment Program (SEEP): The Zakat & Ushr Department, Government of Punjab has launched a program called 'Sustainable Economic Empowerment Program (SEEP)' An initiative to enhance employability and economic empowerment through Zakat Funds for the poorest of the poor of Punjab Province in partnering with Punjab Vocational Training Council (PVTC) due to its predominant capabilities in vocational training because, vocational training aims at reducing unemployment among the youth and thus helps solving the giant problem of unemployment. Under this program, pass out trainees of VTIs of PVTC are provided up to Rs. 100,000/- (one hundred thousand) to start their own income generating business.
- 5.16 **The Golden triangle:** The golden triangle consisting of Sialkot, Gujrat and Gujranwal, is a vibrant and strong industrial base producing for domestic and international markets and representing the highest SME base of Pakistan employing millions of skilled workforce and among highest per capita income in the country. The triangle holds its unique importance because of its production of highly value-added commodities being both exported and locally traded. This is pertinent to have skilled human capital for exploiting the unrealized potentials of unique economic golden triangle of the country which can help boost the economic growth and employment opportunities. PVTC in this regard has the following network of VTI's in this golden economic triangle:

Gujranwala	Gujranwala	Opposite Haider Memorial Hospital, 204-Gill Road, Gujranwala
	Kamoke	Old Boys High School No.2, G.T. Road Kamoke, Distt: Gujranwala
	Kamoke (Sapraye Campus)	Village Sapraye, Artali Virkan Road, Tehsil Nowshehra Virkan, Distt: Gujranwala
	Wazirabad	Vocational Training Institute, Old Hostel Building, Govt. Molana Zafar Ali Khan Degree College Near Guru Kotha Wazirabad
	Wazirabad (Ferozwala Campus)	Vocational Training Institute, Old Hostel Building, Govt. Molana Zafar Ali Khan Degree College Near Guru Kotha Wazirabad
	SVTI Qila Dedar Singh	Qila Dedar Singh, Hafizabad Road, Gujranwala
Gujrat	Gujrat	Railway Road, Opp: Bashir Hospital Decent Street
	Gujrat (Mehmooda Aajiz Campus)	2nd floor, Kidney Center, opposite Govt. Christian High School, west circular road, Gujrat

	Lalamusa	Mohalla Syda Gol Khwas Pur Road Near Baba Masoom Shah Darbar
		LalaMusa
	Lalamusa (Kotla Arab Campus)	Merrarian Chock Near Noor Masjid Kotla Arab Ali Khan, Tehsil Kharian
Sialkot	Pasrur	Vocational Training Institute Pasrur (VTI Pasrur) Near Govt. Boys High School # 01, Opposite Railway Station Pasrur District Sialkot Punjab Pakistan
	Sialkot	Small Industries Estate, Near Round About, Sialkot
	Sialkot (Sambrial Campus)	Mohallah Dar Ul Islam, Opposite Railway Station, Near Awami Muslim High School, Sambrial
	Sialkot Female	Haider Park, Moh. Tibba Kakay-E-Ziyan, Sialkot

## 6. Skill development Roadmap

Punjab Growth Strategy 2023 (P&D, 2022) recommended below key recommendations and Government strategy for the enhancement & improvement of Skill Development with the strong institutional structure & better governance and proficient procedure of resources and partnerships to deliver.

#### 6.1 **Policy & Institutional**

- TVET policy will be developed & approved by the Punjab government according to the approved Federal government's policy.
- Demand oriented and competency based training related courses will be developed and Institutional capacity for certification and accreditation will be strengthen.
- All the TVET institutes will be regulated by Punjab Skills Development Authority (PSDA).
- To streamline the coordination and PVTC will be moved under the Industries, Commerce, Investment and Skills Development Department.
- For the delivery of extraordinary value and development skills with high market price PSDF have to be strengthen.

## 6.2 Supply Side

- The TVET universities will be established.
- The PVTC and P-TEVTA will have establish and upgrade self-employment and industry related trades.
- The PVTC and TEVTA along with PSDF will have to develop Modular based training programmes from Level 0 basic level modules to the advanced level.
- The Government have to establish partnerships with the large industry players for the development of future oriented courses.
- Establishment and Up-gradation of CPEC related trades.
- Enlargement of female oriented trades.
- The Government will overcome the hurdles of private sector and facilitate them for the investment in TVET sector for the establishment of state of the art TVET centres under PPP mode.
- Soft skills and employability skills will be the core part of all level of trainings.
- The PVTC and P-TEVTA will develop and upgrade the courses with the partnership of private sector for the existing employed community to enhance the productivity.

## 6.3 Demand Side & Industry Partnerships

- Establishment of Partnership with the industries for the enhancement & development of demand-oriented and sector-specific courses.
- The PVTC will have to use the framework alike P-TEVTA for the development and enhancement of industry-partnered training courses.

• The PSDF will have to pursue to develop partnership with the bigger national players & establish a mechanism to provide the innovative skills in the market.

#### 6.4 Information and Coordination

- The government will capitalize and strengthen the career counselling aptitudes and modern methods of ICT will
  be used and ensure the optimal use of ICT with the support for job placements and involving employers with
  trainees of the TVET sector.
- Provincial level information portal be developed to explore the opportunities register detailed information of employers and graduate trainees.
- NAVTTC developed National information portal be strengthened.
- For the integration of women in the job market Job Asan portal will be expanded across the province.

## 6.5 Next Generation Skills and the Knowledge Economy

- The government have to facilitate the private sector for the establishment of future oriented and demand driven training institutes with the perspective of next generation skills requirement particularly in the advanced technology field and ICT sector.
- E-Commerce and online entrepreneurship regulatory will be planned.
- Cost sharing ventures will be provided by the government for dedicated courses that will promote the human capital of Punjab for upcoming generation employment.

#### 6.6 Export of Human Capital

With the leading initiative of PSDF the government will develop the relationships between the important diaspora community in the UAE and the Middle East through PVTC, P-TEVTA and PSDF for the development of vital future demands skills in regions (concerned) and particular targeted programmes be developed and designed for export of human capital.

#### 6.7 Entrepreneurship, Self-Employment & Affirmative Action

The government will have to initiate a self-employment fund with the objective to maintain funds regarding employment and entrepreneurship that will target the skills graduates specified in trades that have the potential and have a natural path into becoming service suppliers. Skill Training of such graduates will be implemented in entrepreneurship and small loans will be offered for the commencement of their business. Participation of more women, disables and religious minorities will be encouraged.

#### 6.8 Piloting and Expanding the Dual Training & Education System

The initiative of pilot the dual education and skills training programme has been taken by the government through its public schools and institutions with this intention of improving and scaling up the system for the growth of human capital efficiency of its future labour force.

#### References

- (PVTC), P. V. (n.d.). Retrieved from https://www.pvtc.gop.pk/
- Abramovitz, M. (1956). Resource and Output trends in the United States. American Economic Review.
- Ahmad Naeem Salik, N. R. (May 2, 2020). *Impact of Covid-19 on Economy of Pakistan*. Institute of Strategic Studies Islamabad.
- Amjad, R. (2005). Skills and Competitiveness: Can Pakistan Break Out of the Low-level Skills Trap? *The Pakistan Development* .
- Amjad, R. (2005). Skills and Competitiveness: Can Pakistan Break Out of the Low-level Skills Trap? . *The Pakistan Development*.
- Daniel I. Prajogo, P. K. (2006). Relationships between innovation stimulus, innovation capacity, and innovation performance. Wiley online Library.
- ILO, I. L. (2021). World Employment and Social Outlook Trends, ILO Flagship Report. ILO, International Labour Organization.
- ILO, I. L. (1998). *Employability in the global economy: How Training Matters*. Geneva: International Labour Office (ILO), Geneva.
- Jakupec, V. &. (2013). Impact of the Martin Report on Technical and Further Education, in L. V. Meek & G. Harman (Eds). *The Binary Experiment for Higher Education: an Australian perspective*.
- Kemal, A. R. (2005). Skill Development in Pakistan. The Pakistan Development Review.
- Kemal, A. R.-u. (2002). Global Research Project Pakistan Country Report, Pakistan Institute of Development Economics, Islamabad.
- Lall, S. a. (2004). Industrial Competitiveness.' The Challenge for Pakistan. ADB Institute-Pakistan Resident Mission Paper, ADB Pakistan Resident Mission, Islamabad.
- Lall, S. a. (2004). The Challenge for Pakistan. ADB Institute-Pakistan Resident Mission Paper, ADB Pakistan Resident Mission, Islamabad. *Industrial Competitiveness*.
- Maha Khan, U. (September 2016). The Diversification and Sophistication of Pakistan's Exports: The Need for Structural Transformation. *The Lahore Journal of Economics*, 99–127.
- Muhammad Salman Shabbir, ,. U. (2018). Entrepreneurship and Skills Development for Socioeconomic Growth; Entrepreneurs, Present Landscape and Future Agenda for Pakistan. *Academy of entrepreneurship Journal*.
- Murray-Smith, S. (1965). Technical Education in Australia: a historical sketch, in E. L. Wheelwright (Ed.). *Higher Education in Australia*.
- P&D, B. (2022). Punjab Growth Strategy 2023. Planning & Development Board, Govt. of the Punjab.
- Rajput, S. (April 17, 2020). External Account Troubles. The Friday Times.
- Romer, L. (1993). Main source of differences in living standards among nations is differences in human capital.
- Shagufta Shabbar, K. I. (December 27, 2021). Innovation Deficiency in Pakistan. The Express Tribune.
- Solow, R. (1957). Technical Change and Aggregate Production Function. . Review of Economics and Statistics .
- Wagner, K. (2005). Productivity and Skills in Industry and Services A British German Comparison. *The Pakistan Development*.
- Wagner, K. (2005). Productivity and Skills in Industry and Services A British German Comparison. *The Pakistan Development*.
- Williams, H. (1965). The Technical Colleges, in J. Wilkes (Ed.). Tertiary Education in Australia. Sydney: Angus and Robertson.