Sector Skills Study – Garments Sector

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Punjab Skills Development Fund - PSDF

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Prepared by:

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Lastly, AASR would like to thank the management of PSDF, Garments Sector Entities, TSPs and Sector Experts, who assisted us during execution of this assignment, for their kind cooperation and support.

List of Abbreviations and Acronyms

Acronyms	Particulars
AASR	Anjum Asim Shahid Rahman
DACUM	Developing a Curriculum
DFID	Department for International Development
EU	European Union
FGDs	Focus Group Discussions
GSP	Generalised System of Preferences
IAG	Industry Advisory Groups
MOU	Memorandum of Understanding
NAVTTC	National Vocational & Technical Training Commission
NCA	National College of Arts
NTU	National Textile University
NVQF	National Vocational Qualification Framework
PHMA	Pakistan Hosiery Manufacturers and Exporters Association
PIFD	Pakistan Institute of Fashion Design
PKTI	Pakistan Knitwear Training Institute
PPP	Public Private Partnership
PRGMEA	Pakistan Readymade Garment Manufacturers and Exporters Association
PRGTTI	Pakistan Readymade Garment Technical Training Institute
PSDF	Punjab Skills Development Fund
PVTC	Punjab Vocational Training Council
SFJ	Skills for Jobs
SFM	Skills for Market
SSC	Sector Skill Councils
TEVTA	Technical Education & Vocational Training Authority
TEVTIs	Technical Education and Vocational Training Institutes
TIP	Textile Institute of Pakistan
TORs	Terms of Reference
ToTs	Training of Trainers
TSPs	Training Service Providers
TEVT	Technical Educational and Vocational Training

Table of Contents

List of Tables

List of Figures

1.0 EXECUTIVE SUMMARY

Punjab Skills Development Fund (PSDF) is a not-for-profit organisation, set up by the Government of the Punjab (GoPb) in collaboration with the Department for International Development (DFID), United Kingdom (UK). In the wake of the recent award of Generalised System of Preferences (GSP) Plus status to Pakistan by the European Union (EU), PSDF, through its Accountable Grant programme, commissioned a sector skills study on Garments Sector of Punjab to identify quantitative and qualitative skills deficiencies. The study aimed to develop a future roadmap for PSDF so as to enable the organisation address the identified deficiencies by designing and implementing focused training schemes. The objectives of the study were achieved by conducting a structured survey of sector stakeholders; including Garments sector entities, Training Service Providers (TSPs) and Garments sector experts. The data collected from these three stakeholder groups was correlated and analysed to arrive at recommendations for effectively meeting the technical skills requirements of Garments sector of Punjab.

The report discusses different dimensions of Garments sector and accordingly, has been structured into various sections. The first section maps the sector on the basis of the views obtained from the surveyed Garments sector entities, TSPs and sector experts. It provides information on factors like legal statuses, demographics, sizes, etc. of the surveyed entities; along with their business details like product lines, revenue trends, capacity enhancement plans, etc.

The Garments sector is broadly classified into Woven and Knitwear sub-sectors. Major industrial clusters are located in Lahore, Faisalabad, Sialkot and Gujranwala. Each of these clusters specialises in specific products; Lahore mainly produces denim products; Faisalabad mainly produces hosiery items (Knitwear) while Sialkot and Gujranwala produce sports and technical wear garments in both knit and woven categories. Majority of the entities in Garments sector comprises of Small and Medium entities (SMEs) with few large vertically integrated units.

The survey revealed that Garments sector is a growing sector; 87% of the surveyed entities were established during the last three decades. Average annual growth rate during this period was found to be 29%; however, growth trend, although remaining positive, shows a declining trend. During the recent decade, the sector grew at an annual growth rate of 18%; compared to 36% during the preceding decade. The decline is attributable to issues like energy crisis, deteriorating law and order situation in the country and global recession. The historical revenue growth of Garments sector during the last three decades was found to be on a rise. Major (85%) share of revenues of the surveyed entities is contributed by exports. Sector's current average capacity utilisation was found to be 70%. Majority of the surveyed entities were found to hold optimistic views about sector's future growth, indicated by their plans for capacity enhancement. On an average, the entities were found to have plans to increase their existing capacity utilisation by 22%; along with new investment in infrastructure for enhancing the installed capacity by 24%.

Majority i.e. 64% of Training Service Providers offering technical training courses related to Garments sector is clustered in Lahore. Other important cities offering these training services are Faisalabad, Islamabad, Gujranwala, Rawalpindi, and Gujrat. 60% of these

institutes operate in private sector, 28% are Public sector institutes while the balance 12% have been established and are managed on Public-Private Partnership (PPP) model.

Situation of infrastructure in the training institutes was found to be unsatisfactory. 52% of the surveyed TSPs were found to operate without adequate infrastructure. The institutes usually do not offer full range of garments-related skills training programmes. TEVTA, PRGTTI, and PKTI are the institutes which are relatively better performers in this regard. It is desirable that cluster specific courses are introduced in TSPs located in different cities of Punjab; in line with the potential of those cities for producing a specific range of Garments. Garments sector experts to be interviewed for the survey were selected from diverse backgrounds and comprised of 76% industrial experts, 18% faculty members and 6% researchers.

As part of skill gaps assessment exercise, commonly existing departments in Garments sector entities were identified. Stitching department was found to exist in 97% and Cutting department in 94% entities. Other important departments, found in more than 80% entities, were Finishing, Production Planning & Control and Quality Control departments. Finance and Accounts was the most commonly found support department; existing in 94% surveyed entities. Highest share of workforce existed in Stitching department; and was found to account for 52% of the total workforce. Female representation of 16% was also the highest in Stitching department. Apart from Stitching, Finishing & Packing and Fashion Designing were identified as the other more preferred departments for female employment.

The survey also looked into the workers compensation patterns in Garments sector. It was found that a majority of 55% workforce in the surveyed entities work on piece rate basis. The proficiency level of workforce was rated at 63% or more by the entities. A similar view on this factor was also presented by sector experts when 46% of them rated the workforce to possess average skills. The finding calls for the need to design and organise the training programmes based on the international standards so as to bring the proficiency level of local workforce at par with that of emerging economies like China, Bangladesh and Vietnam.

Criticality level of technical skills used in different departments was also rated. Most of the core departments were rated as of high or medium criticality by more than 95% respondents except for Fashion Designing, Laundry/Washing and Finishing & Packing which were rated as less critical by 8%, 12%, and 10% respondents respectively. For soft skills, the relative percentage of respondents which assigned low criticality rating was higher than that for technical skills. For communication and team working skills, 25% and 16% respectively rated the criticality level of these two skills as low. The analysis indicates that the entrepreneurs assign a higher perceived importance to technical skills than that to soft skills.

66% entities reported an increasing trend in employment. A gap was found to exist between the skilled workforce demand and supply and the availability was assessed to be less than the needs. Total vacant positions in all the departments of the surveyed entities were calculated to be 10,187 along with 3,841 hard-to-fill positions. These figures indicate the shortage of skilled manpower in the surveyed entities. Common reasons for the vacancies to be hard to fill were found to be lack of demand driven skills, incompatibility of curricula with industry needs, flight of skilled workforce and lack of career guidance. This

finding was also supported by 46% sector experts who said that workforce availability in Garments sector was poor.

Workforce requirements for next two years were projected on the basis of the expansion plans of the surveyed entities as per which they are to increase their installed capacity by 24%. The current workforce capacity of the surveyed entities sector was worked out as 185,704 employees. On this basis, the incremental workforce requirement of the surveyed entities, which are about 41% of total population, for the next two years was calculated to be 44,047 persons which when extrapolated over the whole population came out to be 133,022.

Key reasons for lack of adequate skills in the workforce passing out from TSPs were identified as the lack of coordination between industry and training institutes for curricula design and job placement, inadequate and outdated infrastructure of institutes, untrained trainers and insufficient government support. In view of this, it is important to increase interaction between industry and TSPs to enhance practical exposure of trainees, design modern curricula in line with industry's needs and implement a rigorous system to train the trainers.

Assessing the training capacity of the surveyed entities and TSPs, it was found that only 32% entities had a formal system to train their workforce. This translates into coverage of only 4.36% of the total existing workforce. Only 33% entities had a system of specifically allocating a training budget. 52% of the entities not having a formal training system did not even believe in the need for any in-house training and considered it to be waste of organisational resources. Lack of resources was the other important reason for not undertaking in-house training. These findings flag a discouraging situation in terms of perceived importance of training activity for Garments sector entities. It is important to initiate efforts to create awareness in this regard.

Garments sector entities were found to be using three training modes for training their workforce; including vocational training institutes, on the job training and apprenticeship programs. The most common training mode, being used by 49% entities, was identified as on the job training. Most of the entities were unable to use their preferred training modes; lack of resources being the major limiting factor in that regard, mentioned by 64% entities. Other factors quoted in this regard include lack of management commitment and disconnect between industry and service providers.

The survey revealed that only 26% entities and 24% TSPs offered apprenticeship programmes. Assigning such a low importance to apprenticeship programs is not an encouraging sign. Hiring apprentices is a useful practice for the industry as it provides the opportunity of acquiring skilled workforce at low wages during the apprenticeship period. The apprentices satisfactorily completing the training are retained by the organisations as regular employees. Only 26% organisations were found to prefer retaining their apprentices. However, within this group, the ratio of conversion of apprentices into regular employees was an encouraging 65%. The most common duration for apprenticeship programmes was found to be three months.

Analysing the job placement prospects of trained workforce, it was found that depending upon the course, 72-91% students managed to get a job within sixty days of passing out from the institutes. This trend is encouraging as well as a confirmation of the fact that there is a high demand of skilled workforce in the Garments sector.

68% TSPs provide support to their passing out students to get a job by holding recruitment seminars and exhibitions, developing linkages with industry and using personal references. Preferred steps to improve job placement prospects were also analysed. 64% quoted development of training material and 64% said that developing industrial linkages are as the key initiatives in this regard.

During the survey, TSPs identified courses that required updating/improvement. The most important option for improvement was identified as reviewing the existing curricula. TSPs' opinion was validated by sector experts when 28% of them rated the existing curricula as outdated and 46% rated those as average. Only 26% sector experts were satisfied with the existing curricula and rated those as good.

The study revealed that there is no common and coherent strategy for curricula development of technical education either at national or provincial level. Different institutes execute training programs based on self-made curricula. Majority of the institutes offer only a limited range of skill sets which are unable to cover the industry needs in totality. It is important that curricula development is carried out in close liaison with industry, industry experts, academia and government. This approach will ensure that the recommended courses and curricula are demand-driven and capable to meet the industry's demand of technical workforce; both quantitatively and qualitatively. In the context of Punjab, it is recommended to set the UK TEVT system as the base for the development of the indigenous curriculum development system. This system has already developed Sector Skill Councils (SSC) along with Industry Advisory groups (IAGs) to bridge the skill gaps.

2.0 INTRODUCTION AND BACKGROUND

2.1 Punjab Skills Development Fund (PSDF)

Punjab Skills Development Fund (PSDF) is a not-for-profit company set up under the Companies Ordinance 1984 by the Government of the Punjab (GoPb) in collaboration with Department for International Development UK. Established in 2010, it is a GBP 50 million training fund set up with the objective of financing 135,000 individuals by stimulating a market for training services.

PSDF initiated its operations for the residents of four districts of Southern Punjab i.e. Bahawalpur, Bahawalnagar, Muzaffargarh and Lodhran. In 2013, PSDF's geographical coverage expanded to eleven new districts: Chiniot, Faisalabad, Gujranwala, Khanewal, Lahore, Narowal, Rahim Yar Khan, Sargodha, Shiekhupura and Vehari. In these fourteen districts, PSDF is pursuing its skills promotion efforts to achieve inclusive growth by focusing on employment intensive productive sectors.

PSDF aims to provide skills and vocational training opportunities to the poor and vulnerable population of Punjab to build/improve their capacity to find work, help them progress in their current employment or start up their own business entities. The Fund aims to up-skill those in 'low-skills-low-returns' jobs and enhance their earning potential. It also provides resources to help private sector entities and partnerships develop/offer high quality vocational training courses. Through its multiple interventions, PSDF focuses on establishing a training market which can effectively respond to the training needs of individuals and various industrial sectors of the province. It's funding and incentive structures ensure an active responsiveness from private, public and not-for-profit training providers. PSDF is currently associated with over 120 Training Service Providers (TSPs) which are implementing multiple vocational trainings programmes under different PSDF schemes. Till February 2015, PSDF has successfully trained over 52,000 men and women in more than 150 different trades.

2.1.1 Vision of PSDF

Improve income generation opportunities for the poor and vulnerable population of selected districts of Punjab by enabling skills development through promotion of a competitive skills training market.

2.2 The Consultant - Anjum Asim Shahid Rahman, Chartered Accountants (AASR)

Anjum Asim Shahid Rahman (AASR) is one of the leading firms of Chartered Accountants in Pakistan, employing over five hundred people and having offices in Karachi, Lahore and Islamabad. Internationally, AASR is the member firm of Grant Thornton International, one of the world's leading organisations of independently owned and managed accounting and consulting firms providing advisory, assurance, tax advice to their clients. Being the member firm of Grant Thornton, AASR is able to combine the knowledge and experience of its local market place with those available globally through a network of member firms operating worldwide. Besides auditing and accounting as one of its core services, the management consulting practice of AASR is one of the most active practices in Pakistan,

providing a wide range of services in different areas; including surveys and sector studies, strategy and growth, corporate finance and business risk services.

2.3 Background and Objectives of the Study

GoPb has identified the Garments Sector as a potential growth sector which calls for a coordinated and focused strategy to fully benefit from the emerging export opportunities. Garments and Textile Sectors are the Pakistan's largest foreign exchange earners accounting for 60% of total exports. The two sectors are also the most significant contributors to total employment. The Garments Sector, in particular, contributes more to value-addition and is more labour-intensive than the Textile Sector.

The recent award of Generalised System of Preferences (GSP) Plus status to Pakistan by the European Union (EU), is envisaged to increase Pakistani Garments and Textile exports and create more jobs in this sector. In the wake of this opportunity, PSDF has commissioned this sector skills study to identify the existing and potential skills deficiencies and propose a roadmap to overcome the identified issues; so as to enable the sector capture a bigger share of international garments market. In the backdrop of this, PSDF hired the services of AASR to administer a comprehensive Garments sector skills study. The subject study has been based on the opinions of the key stakeholders including the garments sector entities, Training Service Providers and key Business Experts.

2.3.1 Outcome of the Study - Report on Skills Study of Garments Sector

This report is divided into the following sections:

Section 1: Executive Summary

Section 2: Introduction and Background

Section 3: Study Objectives and Methodology

Sections 4-9: These sections provide perspectives of Garments Sector Entities, TSPs and Sector Experts vis-a-vis Garments Sector mapping, skills gaps and up-skilling strategies, vacancies, emerging challenges and allied strategies, training and development activities, apprenticeship and job placement programmes, and review of courses and curriculum development activities. All the sections have been presented with a view to identify existing and potential gaps, to draw conclusions and to suggest viable recommendations. Additionally, all the discussions in these sections have been summarised under conclusions and recommendations at the end of each section.

Section 10: This section contains Annexure A - H.

3.0 STUDY OBJECTIVES AND METHODOLOGY

3.1 Study Objectives

The prime objective of this Study is to review the level of existing skills and training opportunities available in the Garments sector of Punjab and identify gaps. This objective has been achieved through interviewing the Garments sector entities, TSPs and sector experts. The study presents a coordinated view of the findings emanating from these three stakeholder groups. The recommendations of the report would enable PSDF to design focused training programmes to address skills deficiencies identified during the study.

This assignment aims at administering three different survey tools designed to obtain information for each of the aforesaid dimensions. The findings have been used to:

a) Assess current skill levels (both vocational and professional) in the Garments sector of Punjab

b) Inform PSDF's plan for strengthening the skill potential of workforce for the Garments sector including identification of trades in demand, training courses required and delivery options

c) Identify sector level skills delivery gaps and the required contribution of other players

d) Develop a medium to long-term roadmap for human resource development for the Garments Sector focusing on vocational and technical skills.

3.2 Study Methodology

In view of the terms of reference and objectives of the Study, AASR designed a comprehensive execution methodology, a snapshot of which is shown in Figure 1.

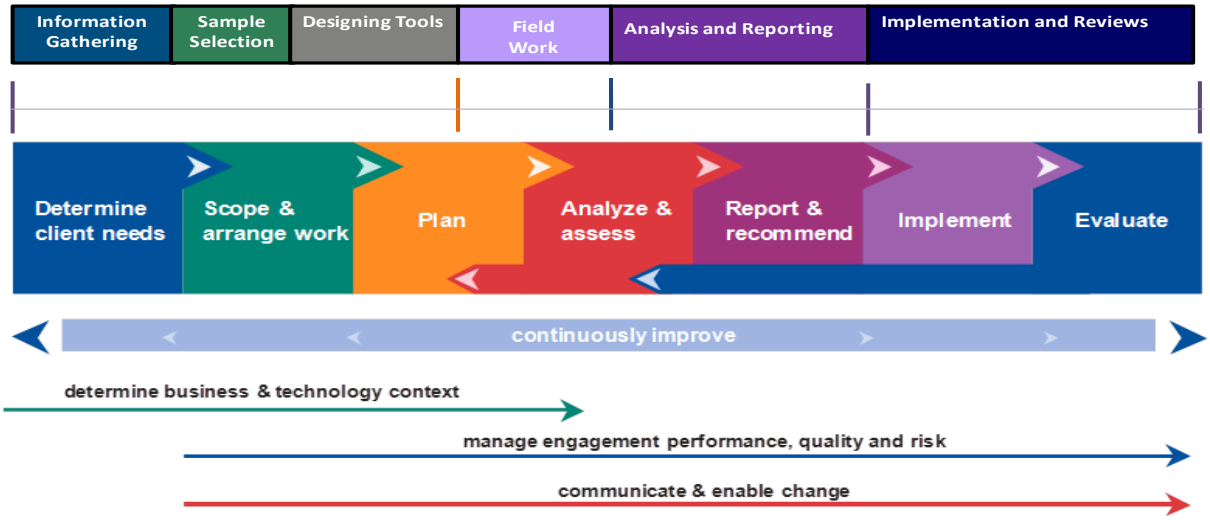

Figure 1 – Study Methodology

The fundamental approach for achieving the Study objectives was laid on the following pillars:

- Adopting a rigorous strategy during all of the stages of the study including planning, executing, analysis and report writing stages
- Engaging the stakeholders in a productive and transparent manner and seeking their fair opinion so as to ensure a high quality end product
- Engaging highly motivated team members having adequate knowledge and experience of Garments sector and possessing skills set required for conducting surveys and interviews to obtain high quality data during the field survey
- Ensuring that the objectives of the Study are fully met and that the resulting report includes focused policy recommendations to meet the set development objectives

For this, the assignment was divided into two phases:

3.3 Phase - 1: The Survey

3.3.1 Inception Meeting and Finalisation of Work Plan

The Study commenced with the target of clearly defining, aligning and reiterating a well-structured work plan for the assignment. It was done with the aim of sharing and confirming our understanding of the overall assignment and obtaining initial feedback from the client. In the first kick off meeting with the Client, key inputs and linkages required for the study were identified. The anticipated role of the three stakeholder groups was discussed at length and agreed with the Client. Point persons for the study from AASR and Client were identified. In addition, methodology and work plan were discussed in detail and finalised. The final outcome of this exercise was an Inception Report presented to the Client, which contained detailed execution methodology, work plan and Table of Contents (TOC) of the draft report. Inception Report was approved by the Client.

3.3.2 Review and Analysis of Existing Studies

The project team carried out a comprehensive review of the available reports on Garments Sector and on previously done skills job assessment studies. The review enhanced the level of understanding of the project team about the Garments sector and the technical and vocational training landscape of the province of Punjab. It also contributed towards developing a representative sampling plan and designing focused survey tools. List of the reviewed documents and reports is provided in Annexure G.

3.3.3 Business Sectors Identification and Sampling Plan

3.3.3.1 Demand Side Assessment

- Primary and secondary research tools were employed for carrying out the demand side assessment of the sector. Secondary research was carried out by reviewing the selected reports and useful insights were obtained. These findings were kept in perspective during the next phases of the study including field survey and information analysis.
- Primary research was carried out by interacting with the key sector stakeholder groups, including:

  - Garments sector entities
  - Chambers of Commerce and business and trade associations (Pakistan Readymade Garments Manufacturers & Exporters Association (PRGMEA), Pakistan Hosiery Manufacturers & Exporters Association (PHMA))
  - Garments sector experts
- The demand side assessment aimed at aligning workforce planning efforts with the current and the future business requirements and forecasting workforce needs based on various assumptions. It involved gathering and analysing specific information about the departments, workforce employment levels, skills sets and core competencies needed in the workforce.
- To define the workforce needs and requirements within the Garments sector, skills mapping was carried out. This map was developed to identify the current status of existing workforce, its need, skill deficiencies and the sector's future workforce requirements by skill type, numbers and gender. Moreover, skill deficiencies were identified in the existing workforce who helped in identifying employers' requirements. This formed the basis for projecting the overall workforce requirement.
- To conduct field survey, a representative sample of Garments sector entities was drawn with the mutual agreement of AASR and PSDF. Judgment-Based-Sampling technique was primarily followed leading to selection of a balanced mix of large, medium and small scale entities. Considerations in the selection of sample mainly included the following:
  - Entity size with respect to revenue and production capacity
  - Profile of business activity including type and number of units
  - Future growth and expansion plans
  - Employment profile of the entity and employment growth prospects

On the basis of the sampling mix of entities, profile of the Garments sector of Punjab was developed. Reviews of previous reports and discussions with various stakeholder groups (including Sector experts and representatives of relevant trade associations) revealed that majority of the Garments sector entities are located in three main clusters; Lahore, Faisalabad and Sialkot (included Gujranwala).

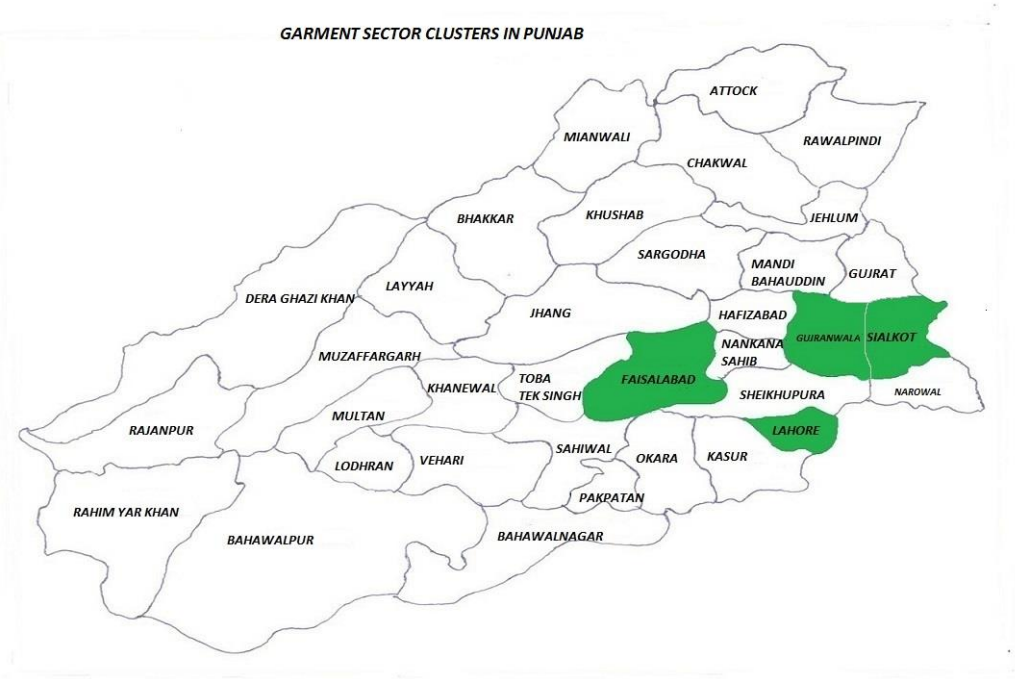

Figure 2 – Garments Sector Clusters in Punjab

Primarily, the sector was sub divided in the Woven and Knitting sub-sectors. The Woven sub-sector is predominantly represented by PRGMEA whereas the Knitting sub-sector is represented by PHMA. It was further revealed that there existed a significant number of entities operate in informal sector. Therefore, the overall sample included entities which were members of PRGMEA and PHMA as well as the ones which were small and operated informally.

List of two hundred and fifty (250) Garments sector entities covered during the survey is presented in Annexure D.

3.3.3.2 Supply Side Assessment

3.3.3.2.1 Assessment of Educational and Training Institutions/Training Service Providers (TSPs)

In parallel with the demand side assessment, an assessment of supply of skills was also carried out, which determined whether the training and education of human resource was market driven and trainees were adequately skilled and employable upon completion of their trainings. The skill side assessment included developing a profile of institutions providing skills development and training for Garments sector. This involved identifying all the major Garments sector TSPs operating in private and public sectors. This information was gathered using primary and secondary research tools. Information available with relevant ministries, R&D organisations in public and private sectors, key Chambers of Commerce and Industry and Industry and Trade Associations was gathered by the field team. Previous reports on workforce and skills development were also consulted for obtaining the desired information.

A skill mapping of the provision of skilled workforce for the Garments Sector was also initiated. In this regard, TSPs were inquired about the offered courses and their levels to judge the current competence and skill level of the workforce. Taking into account the future needs of the Garments sector, information about the existing infrastructure and its enhancement/expansion plans were gathered. Moreover, the mapping enabled us to determine the skill set of trainees being trained and their acceptability in the Garments sector.

The list of twenty five (25) TSPs surveyed during the study is provided in Annexure E.

3.3.3.2.2 Review of Training Models and Existing Curriculum

The survey was designed to look into the strategy adopted by TSPs to impart training to enhance the employment potential of the graduates. The survey also assessed the effectiveness of the support provided for job placement in the Garments Sector. TSPs were contacted in order to assess their curriculum to verify if that was in accordance with current requirements and job opportunities in the formal and informal sectors. This helped to identify gaps where curricula development was needed in line with the skill requirements to cater for the skill gaps and address the issue of unemployment.

3.3.3.2.3 Assessment of Independent Views of Experts

Sector experts were also interviewed to correlate the responses received from demand and supply sides. The expert opinions obtained through this exercise added further depth to the analysis and provided useful insights to come up with demand driven, focused recommendations for the sector. Sector experts were carefully identified and selected based on their knowledge, experience, competence and the positions held in Garments sector.

The list of fifty (50) sector experts interviewed during the survey is shown in Annexure F.

3.3.4 Designing of Survey Tool and Data Collection

3.3.4.1 Questionnaires and Databases

Three sets of questionnaires and databases were designed. Each set of survey instruments contained open-ended and close-ended questions to obtain and analyse understanding of Garments sector entities, TSPs and sector experts on different aspects of the study. These tools were discussed at length with PSDF team and were finalised through a series of discussions and interactive sessions.

Structured questionnaire was used for getting quantitative data while interviews and Focus Group Discussions (FGDs) were used for obtaining qualitative insights on relevant issues. AASR teams were trained to conduct interviews and FGDs asking targeted questions for getting the required information to satisfactorily meet the objectives of the study.

- **Interviews:** Interviews were held with sector stakeholders to gather the required information.
- **Focus Group Discussions:** Two FGDs were conducted with leading Garments sector entities and sector experts in Lahore and Faisalabad for obtaining useful insights.

These interviews and FGDs helped us to understand skill related issues acting as constraints to growth of Garments sector entities.

The three sets of questionnaires developed for Garments Sector Entities, TSPs and Sector Experts are provided in Annexure 10.10.1-3

3.3.5 Survey Tools Pretest

The developed tools were tested by AASR in the field to iron out inconsistencies and to note the time taken to fill in the information. Based on the results of the pilot test, appropriate modifications were made in the tools to make them more effective.

3.3.6 Selection and Training of Enumerators

Experienced enumerators were selected on the basis of past experience of conducting similar surveys, their knowledge about the Garments sector and fluency in Punjabi and/or Urdu. Final survey tools were discussed in a central training workshop with the enumerators. Trainings were provided by the Skill Gap Assessment Expert along with Field Survey Manager keeping in view the observations made during pre-test stage. Training sessions also included mock tests with real time data of the field situation for enumerators to undertake the experience and situation on board. Mock tests were also conducted on the field with a visit planned for one district to give better understanding to the enumerators.

3.3.7 Field Surveys and Monitoring

Field teams, comprising of survey coordinator and enumerators, were sent out into the field to collect the required quantitative and qualitative data from the identified sources. To ensure comprehensive control and quality management, constant and rigorous supervision and monitoring of all field activities was carried out. AASR Project Managers conducted field back checks of respondents and field editing of the collected data on random basis. A random sample of the filled questionnaires was analysed at the initial stages of editing and data entry to detect any errors. AASR kept the management of PSDF updated at every stage of the survey and invited them to witness activities carried out in the field.

3.4 Phase - 2: Data Compilation, Analysis and Reporting

3.4.1 Data Entry and Compilation into Unified Databases

As per the system developed at the inception of the project for receipt, compilation and analysis, the data received from the field was concurrently fed into the system. The team members, upon completion of everyday tasks, entered data onto a pre-specified reporting format and reported back to the Field Survey Manager who assembled the data into three sets of databases specifically designed for the purpose of compilation and tabulation of results.

3.4.2 Data Analysis and Reporting

The entered data was checked for completeness and accuracy. Data analysis was carried out to draw conclusions to meet the set objectives of the study. The findings were analysed and recommendations were formulated. Results were presented in the final report.

3.4.3 Quality Control/Progress Monitoring of the Study

Quality Control was ensured at all stages of the study. The information gathering process was checked for quality and correctness by the Field Survey Manager. Quality of data collection and its entry into databases was monitored by Field Monitoring Manager and Skill Gaps Assessment Specialist. In addition, sector experts also independently reviewed the results of the study to ensure that these are in line with its objectives. Any identified discrepancies, anomalies or mistakes were rechecked by the survey team and corrected as and when required during the survey.

4.0 GARMENTS SECTOR'S PROCESS FLOW & SKILLS REQUIREMENTS

Garment manufacturing includes number of processes from order receiving to shipping the finished garments. Basic flow of garment manufacturing process is shown in Figure 3.

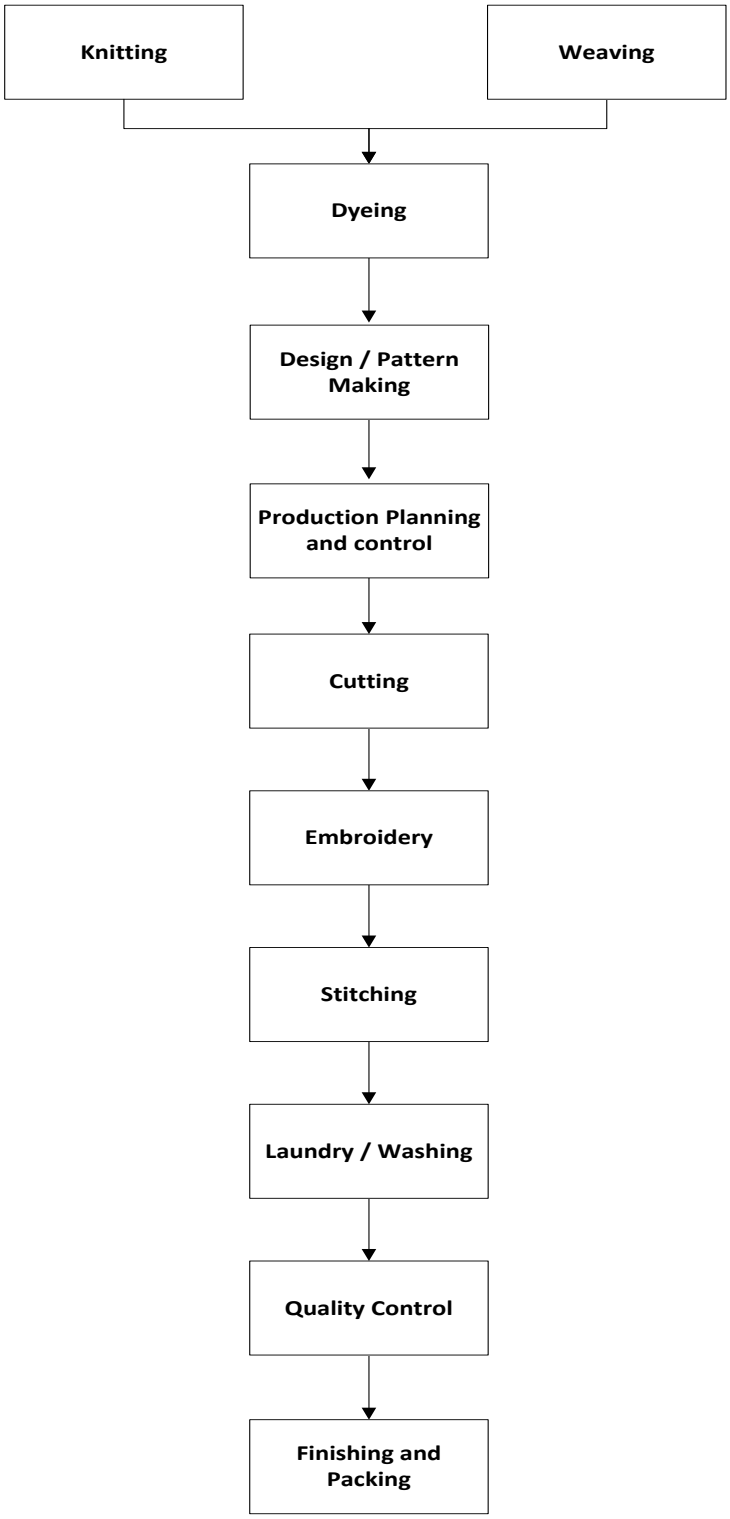

Figure 3 – Process Flow of Garments Industry

4.1 Knitting

Knitting is the process of converting yarns or threads into fabrics. A knitted fabric may be made with a single yarn which is formed into interlocking loops with the help of hooked needles. According to the purpose of the fabric, the loops may be loosely or closely constructed. As the loops are interlocked in a knitted fabric, it can stretch in any direction even when a low-grade yarn with less elasticity is used. Knitting technique can make fabric with versatile properties; such as wrinkle-resistance, stretch ability, better fit, etc.

4.1.1 Required Skills in Knitting Department

Following is a broad based list of skills required in Knitting Department:

- Using the basic knit and purl stitches to create more complex, detailed patterns, including the seed and basket-weave stitches
- Reading a basic pattern, including charts and common pattern abbreviations
- Creating purl ridges using the knit and purl stitches
- Using wet block and steam block

Table 1 shows the job positions that are generally found in Knitting Department; along with their required knowledge and skills levels.

Table 1 – Skills Required in Knitting Department

Job Positions	Level as Per NVQF*	Required Knowledge	Required Skills
Knitting Master	Level 3	Broad knowledge	Broad range of skills
Knitting Machine Operator	Level 2	Basic knowledge	Basic skills
Knitting Machine Mechanic	Level 2	Basic knowledge	Basic skills
Knitting Helper	Level 1	Elementary knowledge	Limited skills
QCA	Level 3	Broad knowledge	Broad range of skills
Assistant	Level 2	Basic knowledge	Basic skills

4.2 Weaving

Weaving is a method of fabric production in which two distinct sets of yarns or threads are interlaced at right angles to form a fabric. The weaving process consists of five basic operations i.e. shedding, picking, and beating-up, left off and taking up. These operations must be synchronised to occur in the correct sequence and not interfere with one another. The full sequence is repeated for the insertion and interlacing of each weft yarn length with the warp yarns, and is therefore called 'The Weaving Cycle'.

Following is a broad based list of skills required in Weaving Department:

4.2.1 Required Skills in Weaving Department

- Indicating harness size, number of harnesses required, type of heddles, number of warp ends per inch, and sequence in which warp ends are to be drawn through harness and reed
- Preparing loom change instructions indicating changes in loom shedding, picking, beating-up, warp let off, and cloth take-up motions according to weaving design
- Supervision and coordination of activities of workers engaged in weaving cloth.
- Preparing and issuing instructions to drawing-in department.
- Scanning cloth during weaving for defects in yarn, design, and loom setup

Table 2 shows the job positions that are generally found in Weaving Department; along with their required knowledge and skills levels.

Table 2 – Skills Required in Weaving Department

Job Positions	Level as Per NVQF*	Required Knowledge	Required Skills
Weaving Master	Level 3	Broad knowledge	Broad range of skills
Weaving Machine Operator	Level 2	Basic knowledge	Basic skills
Weaving Machine Mechanic	Level 2	Basic knowledge	Basic skills
Weaving Helper	Level 1	Elementary knowledge	Limited skills

4.3 Dyeing

Dyeing is the process of imparting colours to a textile material through a dye (colour). Colour is applied to fabric by different dyeing methods for different types of fibres and at different stages of the textile production process. These methods include direct dyeing; stock dyeing; top dyeing; yarn dyeing; piece dyeing; solution pigmenting or dope dyeing; and garment dyeing etc.

Following is a broad based list of skills required in Dyeing Department:

4.3.1 Required Skills in Dyeing Department

- Deciding which chemical dye formula would create the right colour
- Working out the right dyeing method and temperature for the fabric
- Making up a sample dye and checking to ensure it produces the right results
- Producing a final formula for use in the manufacturing process
- Recommending any special finishes or treatments to be applied after the dyeing process.

Table 3 shows the job positions that are generally found in Dyeing department; along with their required knowledge and skills levels.

Table 3 – Skills Required in Dyeing Department

Job Positions	Level as Per NVQF*	Required Knowledge	Required Skills
Dyeing Manager	Level 4	Comprehensive knowledge	Professional level of skills
Dyeing Master	Level 3	Broad knowledge	Broad range of skills
Dyeing Machine Operator	Level 2	Basic knowledge	Basic skills
Laboratory Assistant	Level 2	Basic knowledge	Basic skills
Sampling Man	Level 2	Basic knowledge	Basic skills
Assistant	Level 2	Basic knowledge	Basic skills

4.4 Designing/Pattern Making

Pattern making is an art of manipulating and shaping a flat piece of fabric to conform to one or more curves of the human figure. Pattern making is a bridge function between design and production. A sketch can be turned into a garment using a pattern which interprets the design in the form of the garment components. Pattern making involves three methods drafting, draping, and flat pattern making. For industrial production, different patterns are made for different sizes and a marker is made with these different patterns for a large-scale production. After that, many cloths are cut at a time and finally garments are made by large number of workers in garments industry.

Following is a broad based list of skills required in Designing/Pattern Making Department:

4.4.1 Required Skills in Designing/Pattern Making Department

- Knowledge of designing and developing garments
- Designing of current trends as per the market requirements
- Pattern Drafting and Grading
- Analysing fashion trends in the key markets
- Study elements of design, basics of costing, fabric study, pattern making and draping
- Monitoring/assessing performance of self, other individuals, or organisations to make improvements or take corrective action.
- Analysing needs and product requirements to create a design
- Using mathematics to solve problems
- Determining the kind of tools and equipment needed to do the job
- Knowledge of CAD/CAM i.e. Gerber Grading or any other software

Table 4 shows the job positions that are generally found in Designing/Pattern Making department; along with their required knowledge and skills levels.

Table 4 – Skills Required in Designing/Pattern Making Department

Job Positions	Level as Per NVQF*	Required Knowledge	Required Skills
Supervisors Sampling Master	Level 3	Broad knowledge	Broad range of skills
Sampling Expert (Assistant)	Level 2	Basic knowledge	Basic skills
Coordinators	Level 2	Basic knowledge	Basic skills
Quality Control Assistant	Level 2	Basic knowledge	Basic skills
Cutting Assistant	Level 2	Basic knowledge	Basic skills
Stitching Assistant	Level 2	Basic knowledge	Basic skills
Sewing Assistant	Level 2	Basic knowledge	Basic skills
Helper	Level 1	Elementary knowledge	Limited skills

4.5 Production Planning & Control

In the context of apparel manufacturing, primary role of the Production Planning & Control (PPC) department is job/task scheduling, material resource planning, loading production, process selection & planning, facility location, estimating quantity and costs of production, capacity planning, line planning, follow up and execution.

Following is a broad based list of skills required in Production Planning & Control department:

4.5.1 Required Skills in Production Planning & Control Department

- Overseeing the production process
- Drawing up a production schedule
- Ensuring that the production is cost effective
- Making sure that products are produced on time and are of good quality
- Working out the human and material resources needed
- Drafting a timescale for the job
- Estimating costs and setting the quality standards
- Monitoring the production processes and adjusting schedules as needed
- Liaising among different departments, e.g. suppliers, managers

Table 5 shows the job positions that are generally found in Production Planning & Control department; along with their required knowledge and skills levels.

Table 5 – Skills Required in Production Planning & Control Department

Job Positions	Level as Per NVQF*	Required Knowledge	Required Skills
Deputy PPC Manager	Level 4	Comprehensive knowledge	Professional level of skills
Any other (Assistant)	Level 2	Basic knowledge	Basic skills

4.6 Cutting

Cutting is an essential part of garment manufacturing that requires high precision skills. With the help of spreading machines, fabric is stacked on one another in reaches or lays. The fabric is then cut as per the desired patterns by cutting machines, selected according to fabric types. Precise cutting is very important for reducing fabric wastages.

Following is a broad based list of skills required in Cutting Department:

4.6.1 Required Skills in Cutting Department

- Accuracy
- Care
- Layering
- Grading of seam intersections
- Clipping
- Notching

Table 6 shows the job positions that are generally found in Cutting department; along with their required knowledge and skills levels.

Table 6 – Skills Required in Cutting Department

Job Positions	Level as Per NVQF*	Required Knowledge	Required Skills
Cutting Master / Assistants	Level 3	Broad knowledge	Broad range of skills
Fabric Layer Operator	Level 2	Basic knowledge	Basic skills
Tracer	Level 2	Basic knowledge	Basic skills
Cutting Machine Operator	Level 2	Basic knowledge	Basic skills
Bundle Maker	Level 2	Basic knowledge	Basic skills
Any other (QCA Cutting Inspectors)	Level 3	Broad knowledge	Broad range of skills

4.7 Embroidery

Embroidery is the handicraft of decorating fabric or other materials with needle and thread/yarn. Embroidery may also incorporate other materials such as metal strips, pearls, beads, and quills. Embroidery is done by a sewing machine or embroidery machine to create patterns on fabrics. It is used commercially in product branding, corporate advertising, and uniform adornment. There are multiple types of machine embroidery. These include free-motion sewing machine embroidery which uses a basic zigzag sewing machine. Most of the commercial embroidery is still done with link stitch. The patterns may be manually or automatically controlled. Modern computerised embroidery may have multiple heads and threads, and are controlled with a computer to operate on embroiders' stored patterns.

Following is a broad based list of skills required in Embroidery Department:

4.7.1 Required Skills in Embroidery Department

- Understanding of needle arts
- Understanding of the various computerised embroidery programmes
- Understanding of various types of embroidery machines
- Knowledge of both traditional sewing techniques
- Knowledge of computer design programmes such as Adobe Illustrator, Acrobat, and Photoshop, Wilcome etc.
- Strong sense of creativity

Table 7 shows the job positions that are generally found in Embroidery department; along with their required knowledge and skills levels.

Table 7 – Skills Required in Embroidery Department

Job Positions	Level as Per NVQF*	Required Knowledge	Required Skills
Designer	Level 3	Broad knowledge	Broad range of skills
Sampling Man	Level 2	Basic knowledge	Basic skills
Machine Operator	Level 2	Basic knowledge	Basic skills
Supervisor	Level 2	Basic knowledge	Basic skills
Applique Cutter	Level 2	Basic knowledge	Basic skills
Mechanics	Level 2	Basic knowledge	Basic skills
Helpers	Level 1	Elementary knowledge	Limited skills

4.8 Stitching

Garment panels are stitched together in sewing section using sewing machines. 2D fabric patterns are converted to 3D forms. An operator runs the machine and joins the unstitched garment parts using threads. Various types of sewing machines are used for sewing which are selected according to the seam and stitch requirement. The sewing machines in Stitching department are generally placed in an assembly line layout. Cut parts are fed at the first station of the line, passed through different processes at intermediate stations till a complete garment is produced at the final station of the assembly line. Each machine is run by an individual operator who sews only one or two parts of the garment.

Following is a broad based list of skills required in Stitching Department:

4.8.1 Required Skills in Stitching Department

- Alter garment and join parts, using needle and thread or sewing machine, to form finished garment
- Sew buttons and buttonholes to finish garment
- Confer with customer to determine type of material and garment style desired
- Position pattern of garment parts on fabric, and cut fabric along outlines, using scissors

Table 8 shows the job positions that are generally found in Stitching department; along with their required knowledge and skills levels.

Table 8 – Skills Required in Stitching Department

Job Positions	Level as Per NVQF*	Required Knowledge	Required Skills
Production In charge	Level 3	Broad knowledge	Broad range of skills
Supervisor	Level 2	Basic knowledge	Basic skills
Line Supervisor	Level 2	Basic knowledge	Basic skills
Quality Checker	Level 2	Basic knowledge	Basic skills
Machine Operator	Level 2	Basic knowledge	Basic skills
Sewing Machine Mechanic	Level 2	Basic knowledge	Basic skills

4.9 Laundry/Washing

Garment washing is normally done after stitching. The type of washing required for different types of apparel products is specified by the buyers. Each type of wash has different appearance on the fabric surfaces. The primary objectives of garment washing include, removing starch that is applied during fabric manufacturing, softening the garment hand feel and improving bulkiness, removing dirt, spots, oil stains that accumulate to garment during manufacturing processes and removing any chemical used during printing and embroidery processes.

Following is a broad based list of skills required in Laundry/Washing Department:

4.9.1 Required Skills in Laundry/Washing Department

- Knowledge of the chemical composition, structure, and properties of substances
- Knowledge of the chemical processes and transformations
- Uses of chemicals and their interactions, danger signs, production techniques, and disposal methods
- Time management
- Operation monitoring
- Different types of washes

Table 9 shows the job positions that are generally found in Laundry/Washing department; along with their required knowledge and skills levels.

Table 9 – Skills Required in Laundry/Washing Department

Job Positions	Level as Per NVQF*	Required Knowledge	Required Skills
Washing Master	Level 3	Broad knowledge	Broad range of skills
Laboratory Assistant	Level 2	Basic knowledge	Basic skills
Washing Machine Operator	Level 2	Basic knowledge	Basic skills
Hydro Operator	Level 1	Elementary knowledge	Limited skills
Steam Operator / Dry Operator	Level 1	Elementary knowledge	Limited skills
Mechanic	Level 1	Elementary knowledge	Limited skills
Dryer	Level 1	Elementary knowledge	Limited skills
Oven	Level 1	Elementary knowledge	Limited skills
Scraping	Level 1	Elementary knowledge	Limited skills
Spray	Level 1	Elementary knowledge	Limited skills
Helper	Level 1	Elementary knowledge	Limited skills

4.10 Quality Control

In the garments industry, quality control is practiced at all stages of garment production. Product quality is measured in terms of quality and standard of fibres, yarns, fabric construction, colour fastness, surface designs and the finished garment products. Quality expectations for export are related to the type of customer segments and the retail outlets.

Following is a broad based list of skills required in Quality Control Department:

4.10.1 Required Skills in Quality Control Department

- Quality requirements
- Understanding of the customer requirements
- Knowledge of international quality standards in garments sector
- Knowledge of in line and final quality testing procedures
- Ability to understand and prevent defects

Table 10 shows the job positions that are generally found in Quality Control department along with their required knowledge and skills levels.

Table 10 – Skills Required in Quality Control Department

Job Positions	Level as Per NVQF*	Required Knowledge	Required Skills
Inline Quality Checker	Level 2	Basic knowledge	Basic skills
End of the Line Quality Checker	Level 2	Basic knowledge	Basic skills
Supervisor	Level 2	Basic knowledge	Basic skills
Assistant QCA	Level 2	Basic knowledge	Basic skills
Dispatcher	Level 1	Elementary knowledge	Limited skills

4.11 Finishing and Packing

In finishing, all stitched garments are rechecked for quality and appearance. The products are sorted on the basis of design and size, folded and packed in poly packing. The garments are then packed in cartons and sent for distribution to buyers and retail outlets.

Following is a broad based list of skills required in Finishing and Packing Department:

4.11.1 Required Skills in Finishing and Packing Department

- Manage the Finishing operations of the facility (pressing, packing, scanning, finished goods warehouse management, loading)
- Coordinating with key operation departments (sewing, printing and washing) to ensure adherence to production schedules
- Study production order to ascertain type and quantity of product, containers to be used, and other packaging requirements
- Inspection of products prior to packaging and return rejected products to production departments
- Maintain and ensure compliance to packaging schedule and assign specific tasks to all employees and monitor all packing equipment and supplies
- Coordinate with quality and warehouse departments to monitor routine activities of units and ensure efficient working of both manufacturing and packaging department and ensure continuous improvement in same

Table 11 shows the job positions that are generally found in Finishing and Packing department along with their required knowledge and skills levels.

Table 11 – Skills Required in Finishing & Packing Department

Job Positions	Level as Per NVQF*	Required Knowledge	Required Skills
Packing In Charge	Level 2	Basic knowledge	Basic skills
Finishing In Charge	Level 2	Basic knowledge	Basic skills
Button, Rivet Machine Operator	Level 1	Elementary knowledge	Limited skills
Thread Cutter	Level 1	Elementary knowledge	Limited skills
Press Man	Level 1	Elementary knowledge	Limited skills
Inspector	Level 2	Basic knowledge	Basic skills
Alter	Level 1	Elementary knowledge	Limited skills
Helper	Level 1	Elementary knowledge	Limited skills
Salvager	Level 1	Elementary knowledge	Limited skills

5.0 MAPPING OF GARMENTS SECTOR

This section maps the Garments sector of Punjab by providing profiles of Garments sector entities and those of Training Service Providers in the province. The profiles have been based on the samples selected for conducting the skill study. Profiles of the sector experts contacted during the study is also provided in this section.

5.1 Garments Sector Entities Profile

5.1.1 Garments Clusters

The survey findings revealed that Lahore, Sialkot, Gujranwala and Faisalabad are the main clusters of Garments in Punjab. Figure 4 shows that largest concentration of the Garments sector is in Lahore, representing 38% of the total sample surveyed, whereas 35% entities were situated in Sialkot and Gujranwala and 26% in Faisalabad.

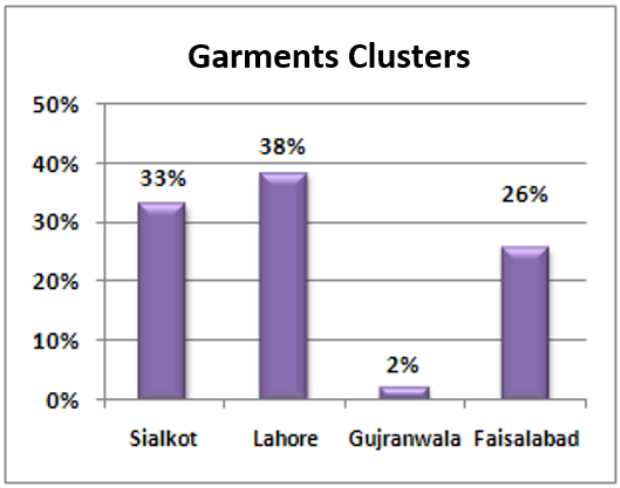

Figure 4 – Garments Clusters

During the survey, it was found that each of the cities covered specialises in specific products. Lahore predominantly produces Denim products, Sialkot and Gujranwala are adept in Sports Goods and Technical Wear, whereas Faisalabad mainly produces hosiery products.

5.1.2 Years of Establishment

The age of the entities represents their maturity level over time and helps in the identification of growth periods of a sector. Figure 5 shows that Garments Sector in Punjab has mainly evolved during the last three decades registering establishment of 88% entities in this period and only 12% entities formed prior to this period of growth. During these three decades, the sector has grown at an average rate of 29%. However, the trend, although positive, is declining as the growth during the most recent decade has been 18%; compared to growth of 36% during the previous decade. The decline is mainly attributable to internal and external crises being faced by the country.

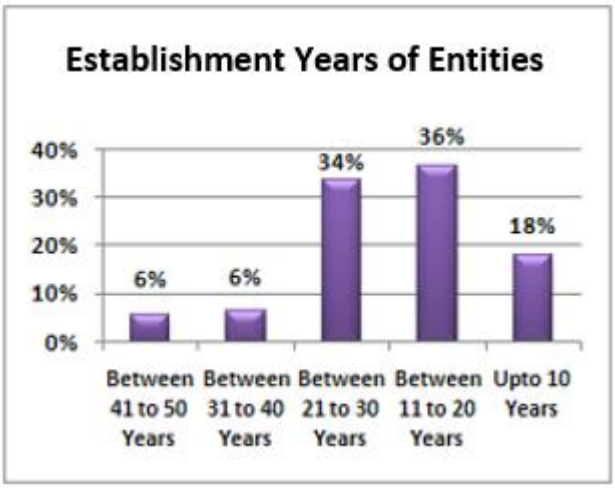

Figure 5 – Establishment Years of Entities

5.1.3 Legal Status of Entities

The survey respondents consisted of 51% corporate entities, 29% sole proprietorships and 20% partnership firms.

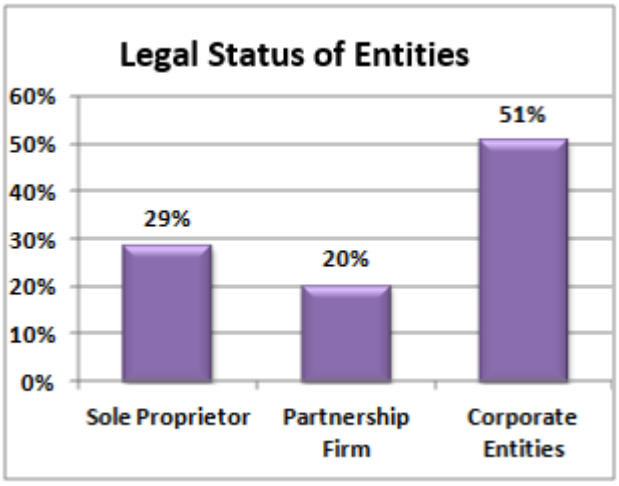

Figure 6 – Legal Status of Entities

This division of the sample has been reflected in Figure 6 showing that majority of the Garments Sector consists of formal corporate entities, which are either members of PRGMEA or PHMA or both.

5.1.4 Classification of Entities w.r.t. Nature of Business

Another way of analysing the composition of Garments Sector Entities was to classify them according to the nature of their businesses. As shown in Figure 7, survey respondents consisted of 82% manufacturers and exporters, 10% manufacturers and local traders and the remaining respondents represented a combination of either of the above or both. This trend highlights the fact that prime focus of the Garments sector entities is on exports, which is a good indication in the wake of emerging opportunities connected with award of GSP Plus status to Pakistan.

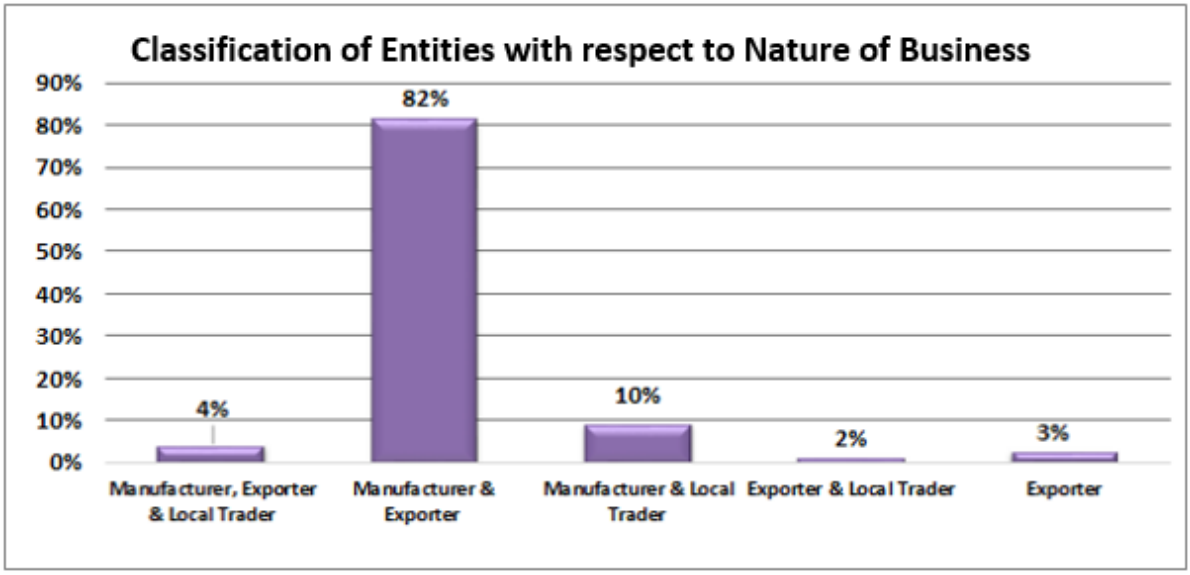

Figure 7 – Classification of Entities with respect to Nature of Business

5.1.5 Entity Size[1]

The respondents were categorised into three sizes based on their annual revenues. entities with annual revenues exceeding PKR 400 million were categorised as large; those with annual revenues ranging between PKR 75 million and PKR 400 million were considered medium and those having revenues lower than PKR 75 million were classified as small.

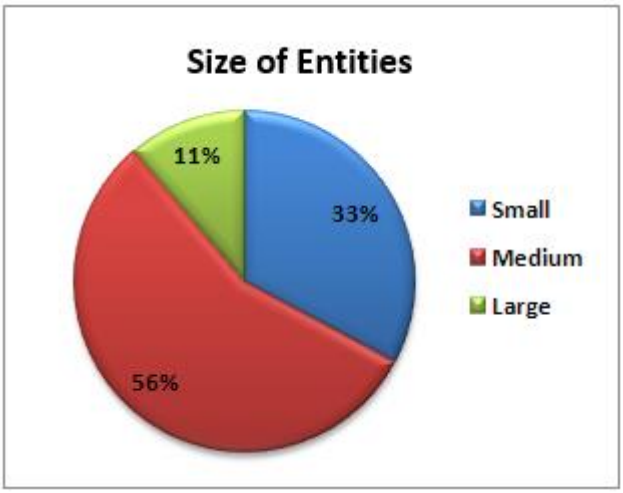

Figure 8 – Size of Entities

Figure 8 shows that approximately 89% of the Garments sector entities were found to be SMEs (small and medium entities); with 33% small and 56% medium entities.

5.1.6 Sub-Sector Bifurcation

The survey sample was designed to ensure representation of entities dealing both in woven and knitted garments. The sample consisted of 51% entities dealing in knitted and

[1] Categories for Small. Medium and Large were defined on the basis of discussions with Garments sector stakeholders

28% dealing in woven garments. The remaining 21% dealt in both the garments categories.Figure 9 shows the sample distribution.

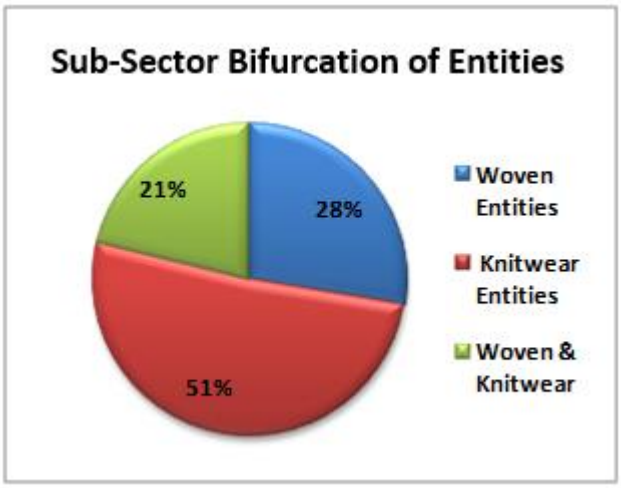

Figure 9 – Sub-Sector Bifurcation of Entities

5.1.7 Categories of Woven and Knitwear Garments

The survey findings revealed the key product categories for woven and knitwear sub-sectors. Figure 10 shows the range of woven garments (Sportswear, Denim garments, Casual wear, Twill wear and Fashion wear) and the percentage of entities dealing in the identified products. Maximum number of entities (51%) were found to be dealing in Sport wear. Denim garments was the second largest product being produced by 37% respondent entities. Technical wear was found to be the least common product manufactured only by 11% entities.[2]

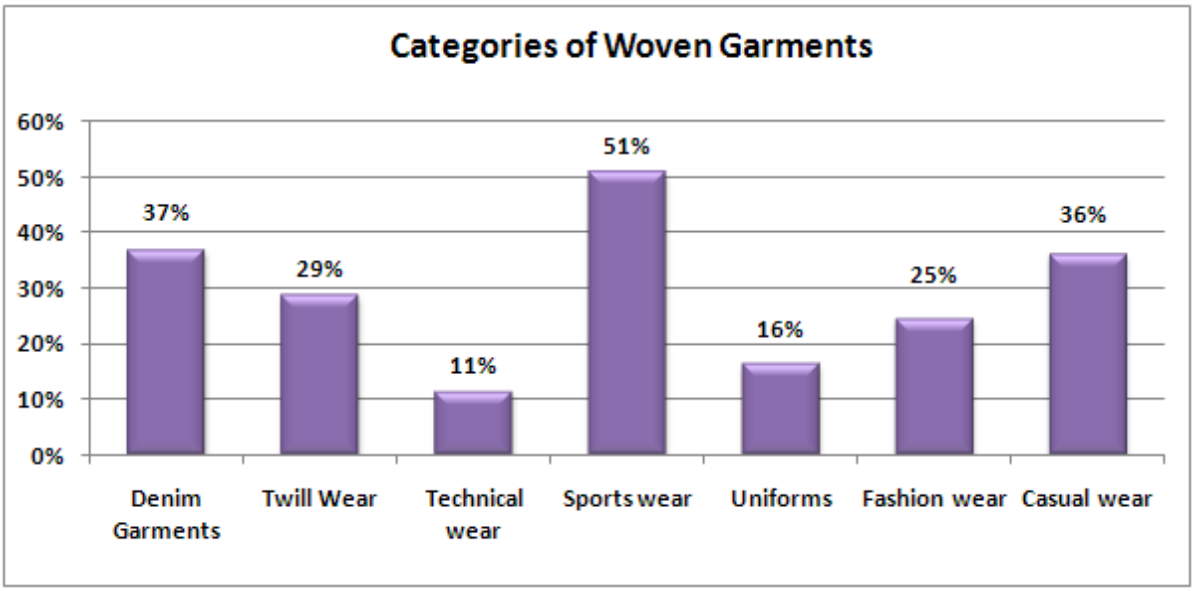

Figure 10 – Categories of Woven Garments

[2]*Entities were found to produce multiple products in a range of products due to which the total exceeds 100%*

Figure 11 shows the range of Garments offered by Knitwear Sector (Sports Wear, Casual wear and Undergarments) and the percentage of respondent entities dealing in the identified products.

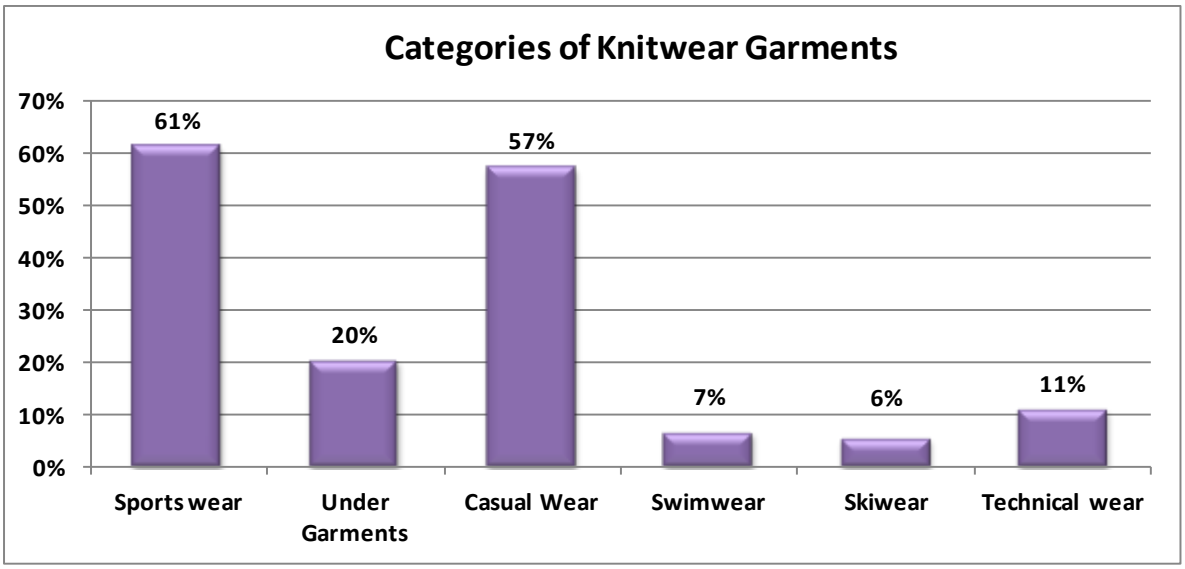

Figure 11 – Categories of Knitwear Garments

Maximum number of entities (61%) were found to be dealing in Sport wear. Casual wear was the second largest product being produced by 57% respondingentities. Skiwear, Swimwear and Technical wear was found to be the less common products being manufactured only by 6%, 7% and 11% entities respectively.

5.1.8 Product Portfolio - Woven and Knitwear Sub-Sectors

The data obtained from entities visited during the field survey revealed that approximately all of them were engaged in producing more than one products.

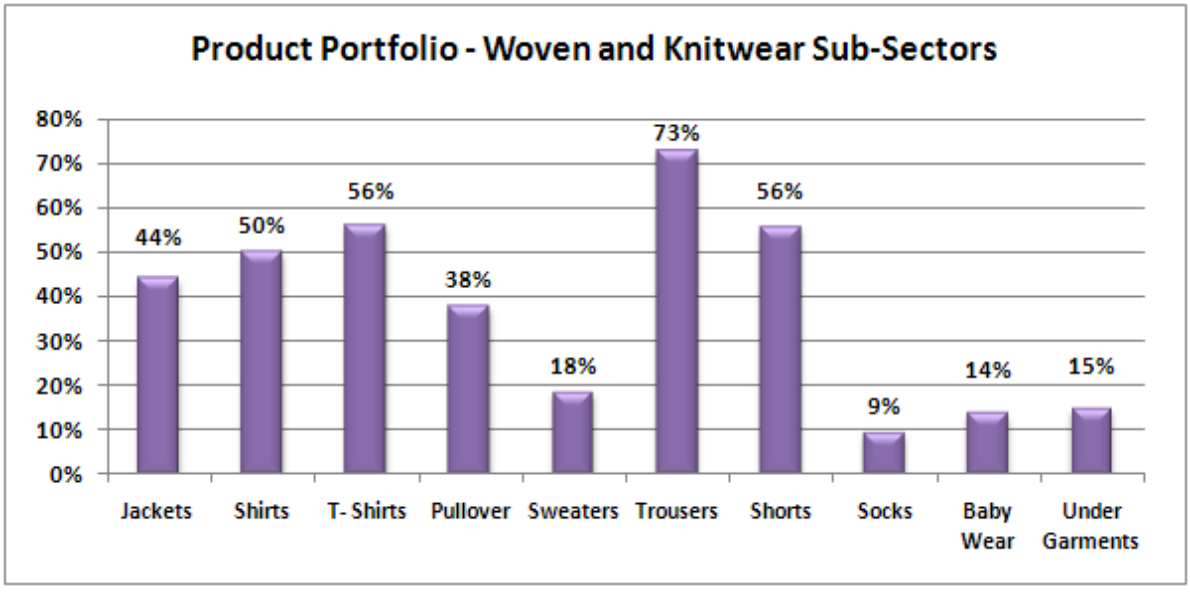

Figure 12 – Product Portfolio – Woven and Knitwear Sub-Sectors

Trouser was found to be the most common product manufactured by 73% of the respondents. Shorts and T-Shirts was the next two most common products manufactured by 56% respondents. Socks was the least common product produced only by 9% entities. Other less common products were babywear (14%) and undergarments (15%). Figure 12 shows the percentage entities producing ten different types of garments.

5.1.9 Revenue Mix

The respondententities reported sources of their revenues through exports and domestic trade in the ratio 85% and 15% respectively.Responses are shown in Figure 13.

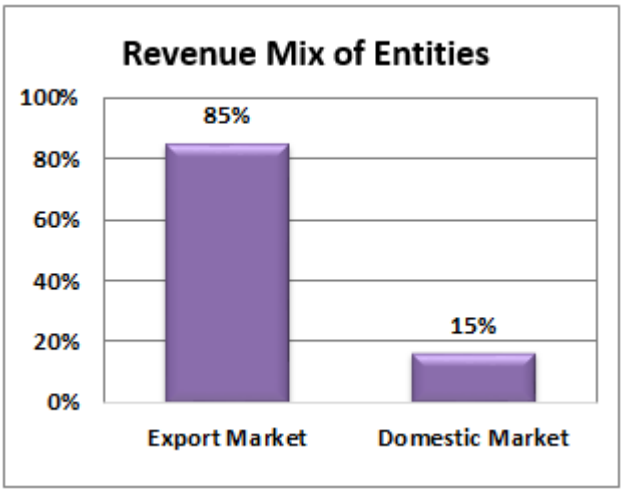

Figure 13 – Revenue Mix of Entities

5.1.10 Revenue Growth Trends

Figure 14 and Figure 15 show the percent entities in terms of revenue growth of Garments sector during the previous two years with respect to exports and local revenues.

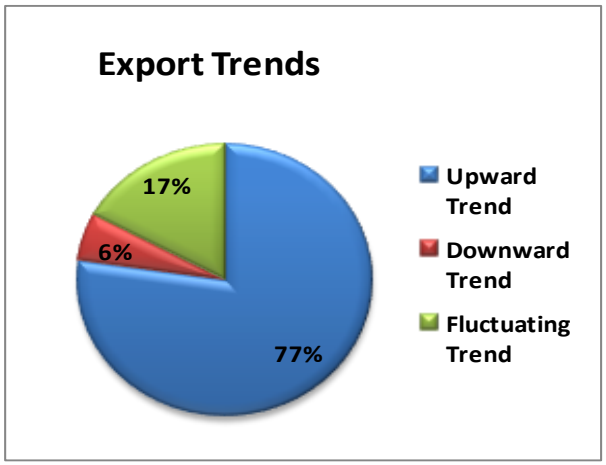

Figure 14 – Export Trends

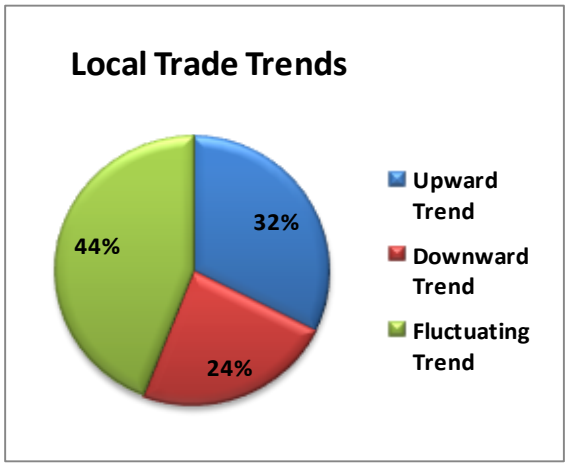

Figure 15 – Local Trade Trends

The results of the analysis show that the entities selling in export markets have grown at a higher rate compared to the ones selling in local market. 77% of theentitieswere found to have an upward trend in exports revenue whereas the similar figure for local market was only 32%.Only 6% of the surveyed entities showed a downward revenue trend in export market while 24% entities operating in local market showed a downward trend.

Thus, the Garments sector has been growing historically well in the exports market with promising growth prospects in future, owing to award of GSP Plus status.

5.1.11 Capacity Utilisation

Current capacity utilisation is the total level of output or production that an entity could achieve in a given time period in comparison to its installed capacity. The survey revealed that on an average, an entityhas been operating at 70% of its installed capacity.Figure 16 shows the results.

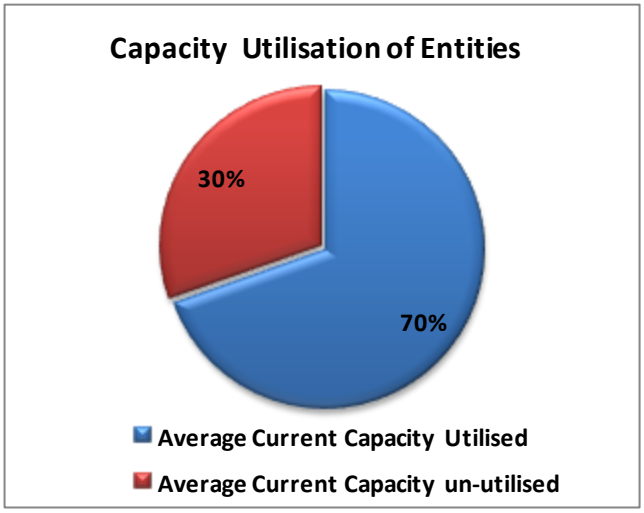

Figure 16 – Capacity Utilisation of Entities

Figure 17 shows various factors for low capacity utilisation of garments sector entities.

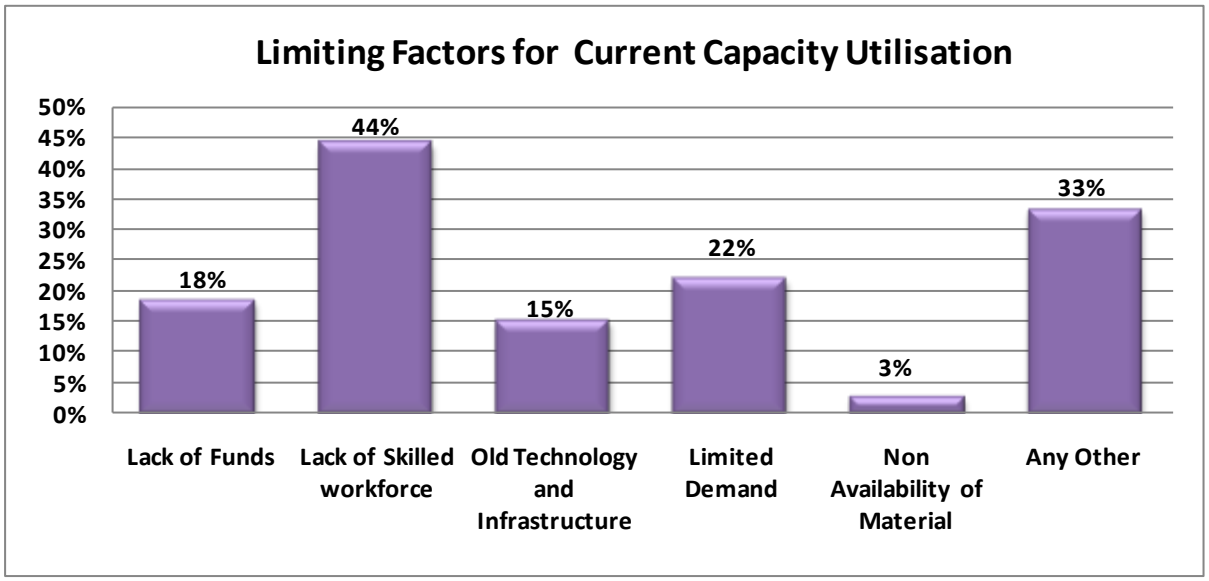

Figure 17 – Limiting Factors for Capacity Utilisation

The biggest reason in this regard was found to be lack of skilled workforce,mentioned by 44% entities.In Any Other, Energy crisis was mentioned as the second largest factor mentioned by 33% respondents. The third reason for low capacity utilisation, mentioned by 22% entities, was found to be low market demand.

5.1.12 Plans for Enhancement of Capacity Utilisation

Regarding capacity enhancement plans, 61% respondents said that they would like to increase their current capacity which will contribute in capacity enhancement of surveyed entities by 22% on average. 25% reported to already operating on their full installed capacity. 14% entities operating on low capacity utilisation mentioned that they would not be interested to increase their current capacity. Further, it was analysed that the current capacity utilisation of these entities surveyed is at 70%, where plan for improvement in current capicity utilisation covers 22% and 8% capacity gap is still unplanned.Figure 18 and Figure 19 show the results.

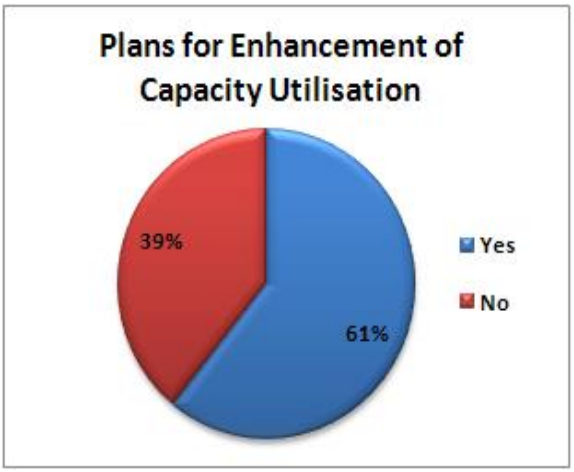

Figure 18 – Plans for Enhancement of Capacity Utilisation

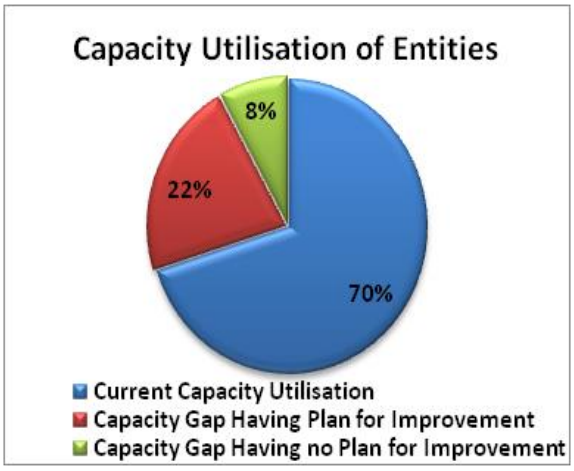

Figure 19 – Capacity Utilisation of Entities

5.1.13 Plans for Enhancement of Installed Capacity

Responding to a question on enhancement plans for increasing the installed capacity of entities, 67% respondents reported to have plans to increase their installed production capacities, thus resulting in extension of installed capacity by 24% on average.

Figure 20 and Figure 21 show the response of entities about the plans of enhancements in current installed production capacity of ogranisation.

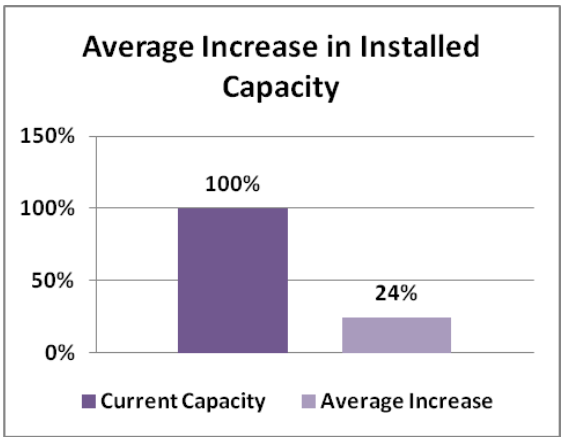

Figure 20 – Average Increase in Installed Capacity

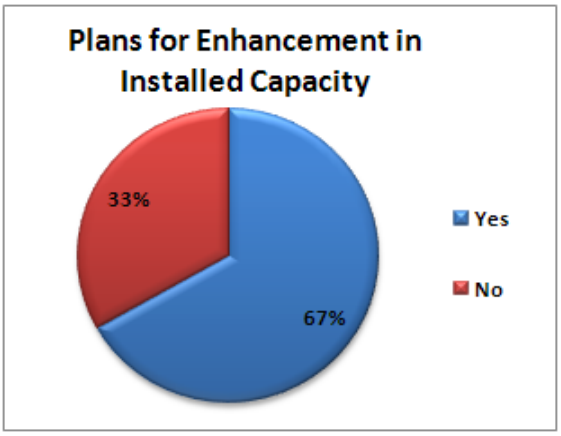

Figure 21 – Plans for Enhancement in Installed Capacity

This indicates an optimistic view of Garments sector to capitalise on the emerging growth opportunities by investing in existing infrastructure to increase their installed capacities.

5.2 Training Service Providers (TSPs) Profile

On the supply side, the survey was administered to cover twenty five (25) TSPs so as to analyse the supply situation of skills for the Garments sector.

5.2.1 Geographical Dispersion

Majority of TSPs (64%) were found to be operating in Lahore; followed by 8% in Faisalabad and Gujranwala each, 12% in Islamabad and 4% in Rawalpindi and Gujrat each. Geographical distribution is shown in Figure 22.

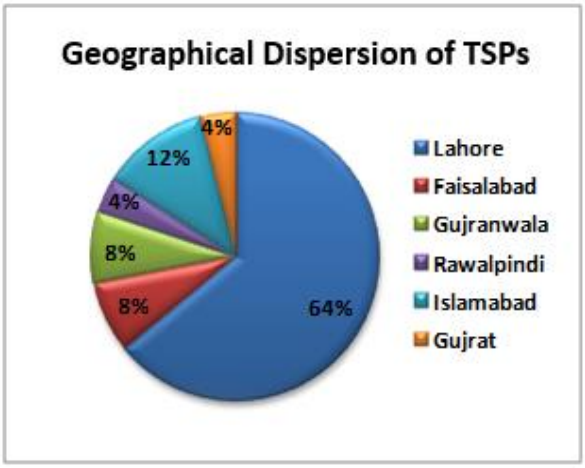

Figure 22 – Geographical Dispersion of TSPs

5.2.2 Status of TSPs

While selecting survey sample, training institutes operating in public or private sectors or as public-private partnership (PPP) were identified. It was ensured that the identified institutes offered training courses related to Garments sector.

Figure 23 shows the sample profile of TSPs selected for survey. It had 60% private institutes, 28% public institutes and 12% institutes working on PPP model.

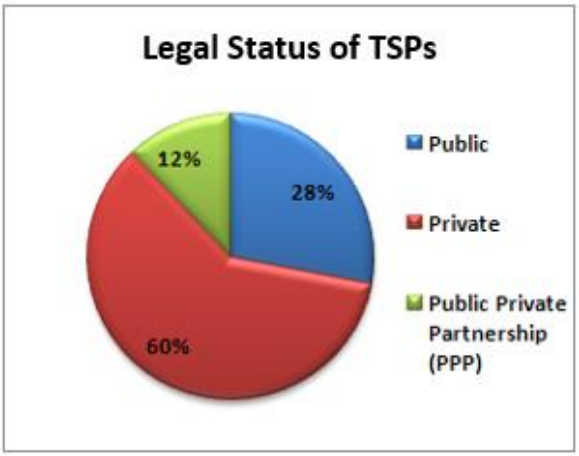

Figure 23 – Legal Status of TSPs

5.2.3 Composition of TSPs' Faculty

On average, 56% faculty members were found to be working as permanent faculty, while 44% faculty members were working on part time basis. TEVTA was an exception in this regards where the entire faculty comprised of permanent staff.[3] The results are shown in Figure 24.

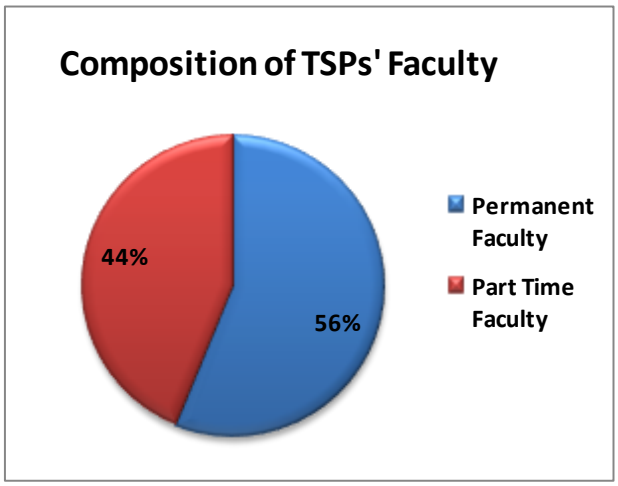

Figure 24 – Composition of TSPs Faculty

5.2.4 Sufficiency of Infrastructure

48% of the responding TSPs were of the view that they had sufficient infrastructure available to train the available number of students whereas 52% responded otherwise. On exploring the 52% TSPs with insufficient infrastructure, 62% were found to be in need of equipment, 23% required physical infrastructure and 15% had insufficient human resource. Figure 25 shows the split.

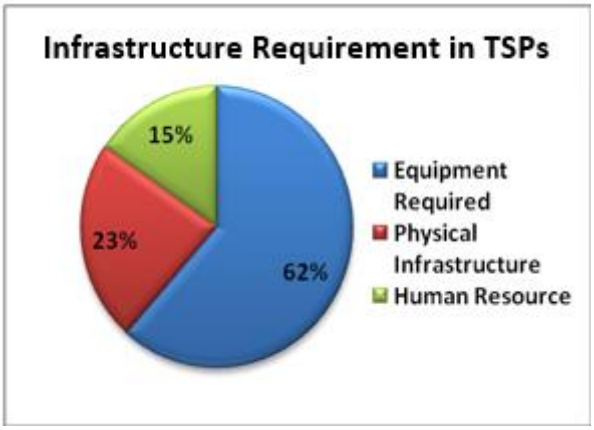

Figure 25 – Infrastructure Requirement in TSPs

[3] *TEVTA is adding a population bias due to its size and nature, so for this parameter, TEVTA is excluded from population*

5.2.5 Medium of Advertisement used for Student Enrolment

Figure 26 depicts the medium of advertisement used for enrolments of students by TSPs. The survey results show that newspaper, handouts and internet are the three most commonly used media to enrol new students in training institutes. 68% of the surveyed TSPs use these three media for this purpose.

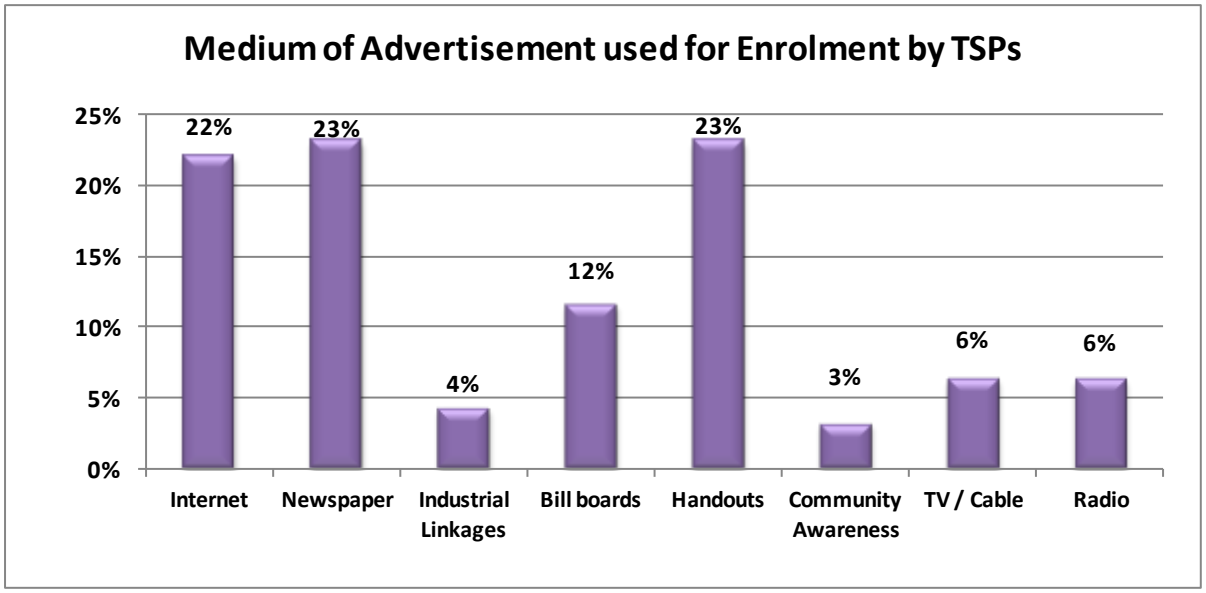

Figure 26 – Medium of Advertisement Used for Enrolment by TSPs

5.2.6 Sources of Funding for TSPs

50% of the surveyed institutes were self-financed; 30% institutes were funded by the Government, 13% were funded by Donor(s) and remaining 7% were funded through multiple sources of funding. The results are shown in Figure 27.

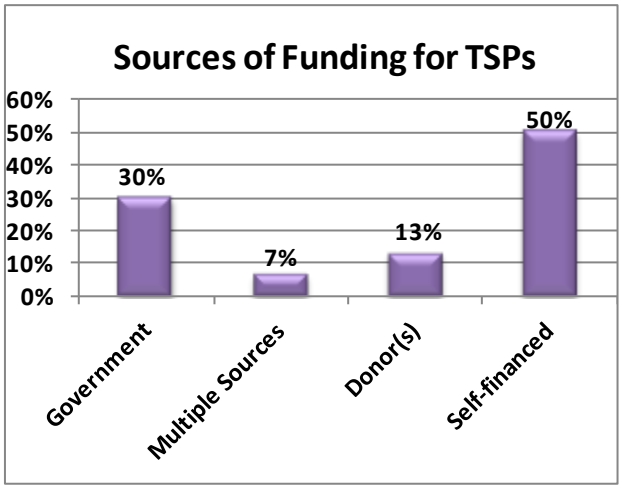

Figure 27 – Sources of Funding for TSPs

5.2.7 Student Composition vis-a-vis Fee Charged

TSPs were inquired about the composition of their student base with respect to the charged fee. 75% TSPs reported that they charged full fee from their students, 16% charged

concessional fee, 5% taught students free of charge' while 4% of the sample were found to providing financial support to their students by paying stipends. Figure 28 shows the results.

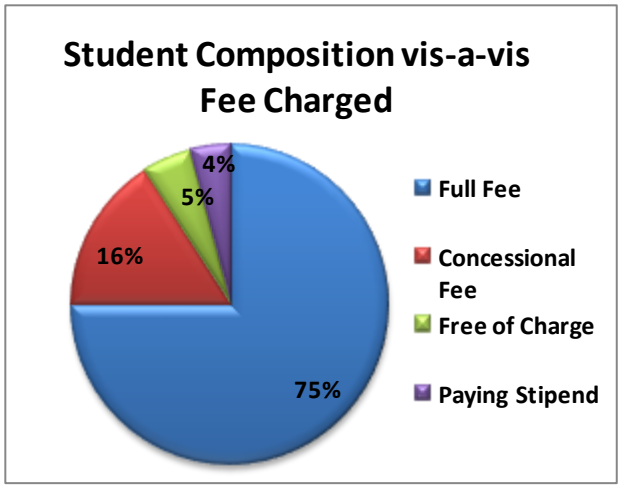

Figure 28 – Student Composition vis-a-vis Fee Charged

5.3 Sector Experts' Profile

The third segment of the survey was interviewing the Garments sector experts belonging to industry, faculty members and research.

Figure 29 shows that survey respondents were selected to represent 76% industry experts, 18% faculty members and 6% researchers.

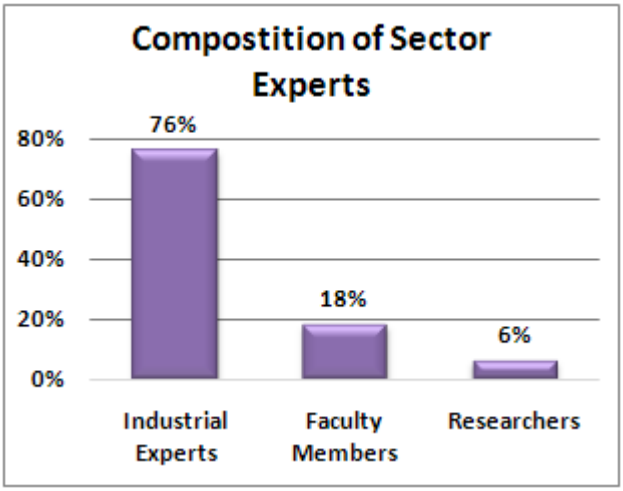

Figure 29 – Composition of Sector Experts

5.4 Conclusion and Key Findings

Garments Sector is primarily located in Lahore, Faisalabad, Sialkot and Gujranwala. Each of these clusters specialises in offering specific products. Lahore predominantly produces Denim products; Sialkot and Gujranwala are adept in producing Sports and Technical Wear, whereas Faisalabad mainly produces hosiery products.

Garments sector consists of mostly small and medium entities. Large scale garment manufacturing entities, having integrated value chain, are few in number. The two main sub-sectors are Woven and Knitwear Garments consisting of a product portfolio of Trousers, Shorts, Shirts, Sweaters, Pullovers, Baby Wear, Jackets, Socks, etc.

The Garments sector is a growing sector with particular reference to increasing number of entities established during the last three decades. (87% of total entities surveyed) which on average have grown at29% during that period. Average growth rate during the last decade has been 18% which is lower than the growth rate of the preceding decade (36%). This comparative decline in growth trend is mainly attributable to issues like energy crisis, deteriorating law and order situation and global recession.

Garments sector's growth rate is also depicted by revenue growth of the entities which has been witnessing an upward trend with 85% share coming in from exports. It is interesting to note that this growth is based on an average capacity utilisation of 70%. Three main reasons of low capacity utilisation were quoted as lack of skilled workforce (44%), energy crisis (33%) and old technology and infrastructure (15%). However, the entities have plans not only to increase their existing capacity utilisation by 22% on average but also to invest in infrastructure to enhance their installed capacity by 24% to respond to emerging opportunities. Accordingly, sector players expressed their desire to opt for technological advancements to cope with emerging challenges.

TSPs providing skill training for garments sector are mainly found in Lahore with 60% representation, followed by 12% represented by Faisalabad and Islamabad each and 8% by Gujranwala, with a small representation of Rawalpindi and Gujrat. There was no TSP found in Sialkot.

60% of the surveyed TSPs were found to operate under private sector while 28% operated under public sector. 12% TSPs were found to be operating under PPP model. The issue of insufficient infrastructure was reported by 52% TSPs.

Key findings of the survey relating to TSPs are as follows:

- Full range of skills training programs are not offered by these institutes; with few exceptions like PRGTTI, PKTI and TEVTA etc., which are performing relatively better than others. It is important that sector specific courses are introduced at TSPs indifferent cities in line with the potential of those cities for producing a specific range of Garments.
- 60% TSPs have plans to expand by introducing new courses, increasing geographical outreach and investing in physical infrastructure. Appropriate initiatives should be taken to facilitate this expansion. In this regard, Government and donor agencies can step in to not only organise the efforts but also up-scale the technical and vocational footprint.

As part of mapping the sector, the third stakeholder group of sector experts was also interviewed. The group of the selected experts included 76% industrial experts, 18% faculty

members and 6% researchers. The list showing the profile of experts is presented as "Annexure F" where Table 27 provides the details regarding name, organisation, position held, qualification(s) and sector experience of these experts.

6.0 SKILLS GAP ASSESSMENT AND UP-SKILLING STRATEGIES

This section maps the structure of the Garments Sector, identifies skills gaps and related challenges faced by the Garments sector entities and the recommended remedial measures.

6.1 Mapping of Existing Skills

This sub-section describes departmental structures of a Garments sector entity, compositions of the existing workforce, employment trends, and preferred skills areas, sources of hiring, preferred qualification levels for management positions, availability of workforce, proficiency levels and skill set possessed by the Garments sector workforce.

6.1.1 Departmental Existence

While considering the departmental existence, it is noted that in Garments Industry there are two types of entities, the ones which are composite (cut to pack units) and the others which perform specific operations only i.e. Cutting, Stitching, Dyeing, Embroidery, Laundry/Washing etc.

Cutting and stitching are the two main operations in garments manufacturing so these two departments were found to exist respectively in 94% and 97% of the surveyed entities. Finishing, Production Planning & Control and Quality Control were the other core departments which existed in more than 80% of the surveyed entities. In support functions, Finance and Accounts was the most commonly found department existing in 94% of the surveyed entities.

Figure 30 shows the departmental existence as percent of the surveyed entities.

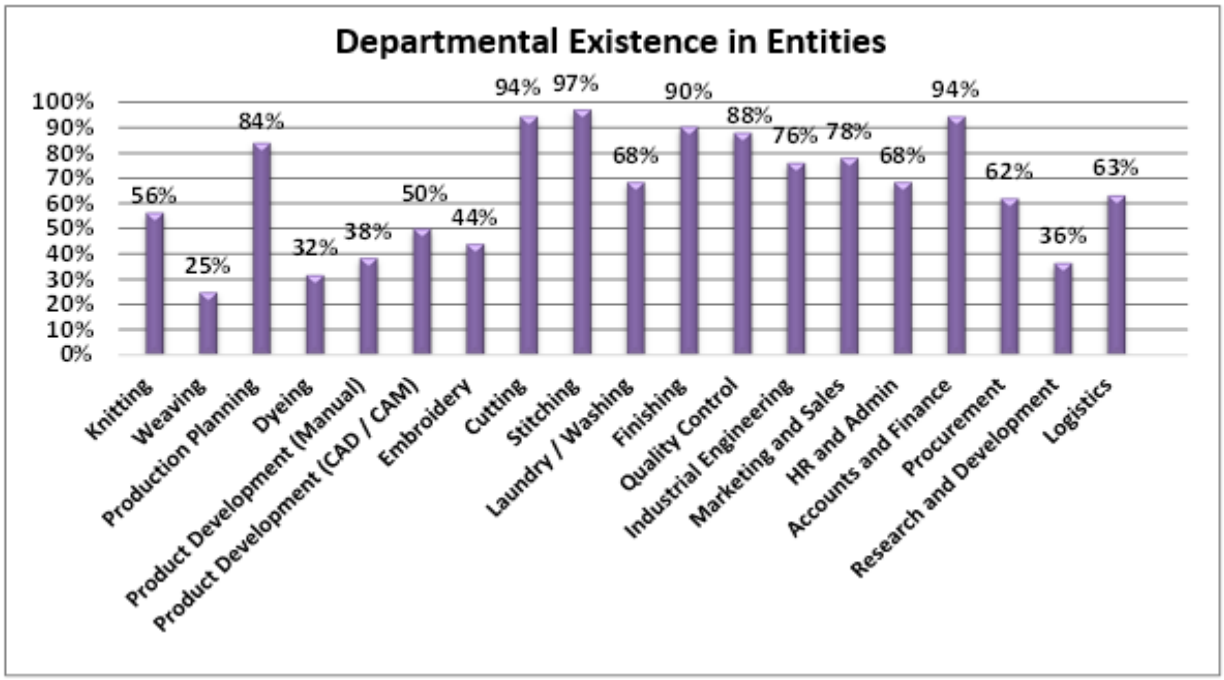

Figure 30 – Departmental Existence in Entities

6.1.2 Number and Percentage of Employees

Figure 31 reflects the total quantum of workforce and their numbers in each department of the entities surveyed:

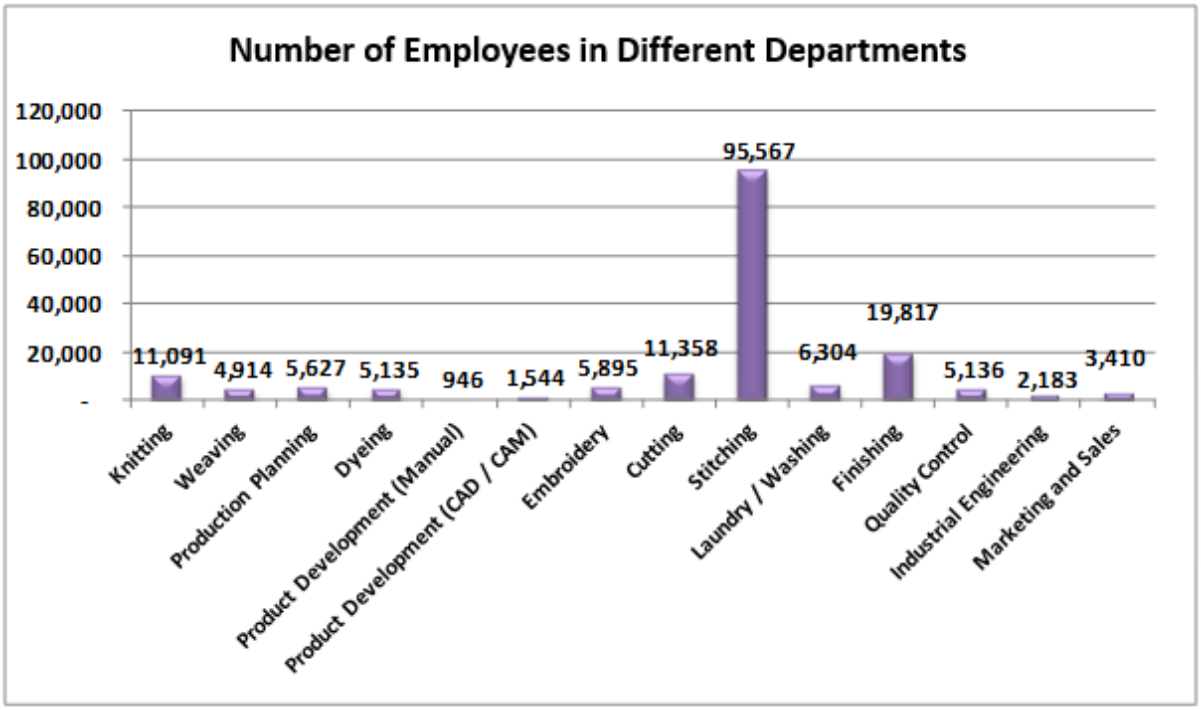

Figure 31 – Number of Employees in Different Departments

Figure 32 reflects the total quantum of workforce and their respective percentage compositions in pre-defined departments of the surveyed entities.

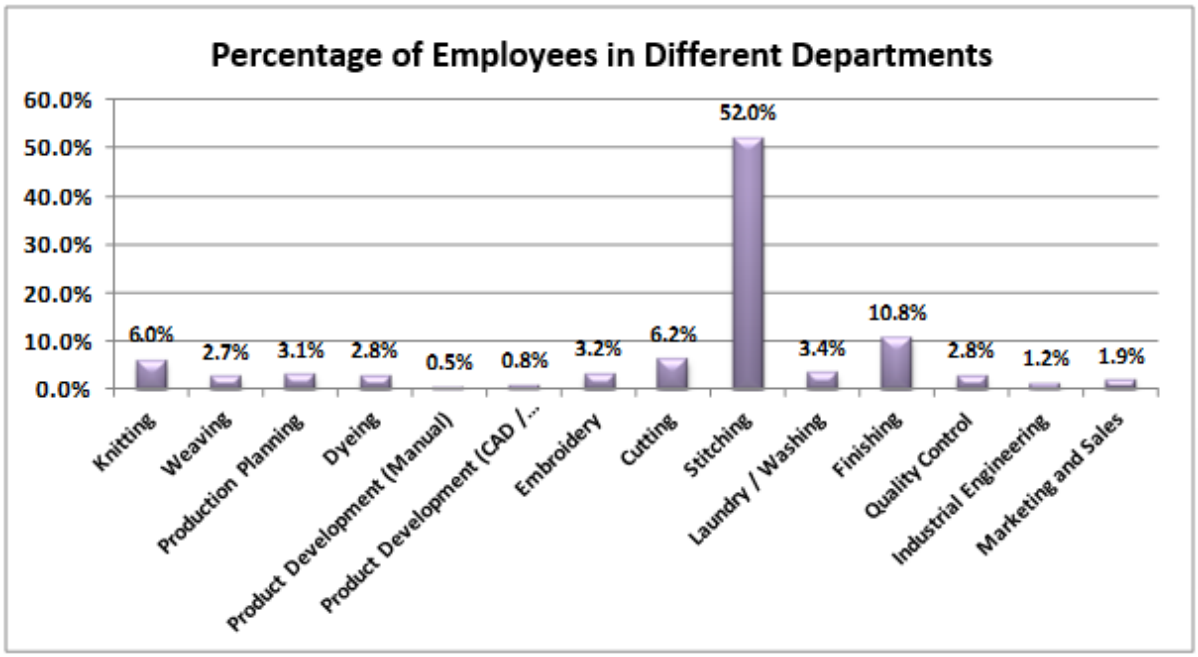

Figure 32 – Percentage of Employees in Different Departments

The above analysis is very important in determining the need of the workforce keeping in view the existence of departments in the Garments sector and the pattern of employment in respective departments.

About half of the total workforce of the surveyed garments sector entities is employed in Stitching department. That shows that stitching is the most important area with respect to creating employment opportunities for skilled manpower. The key reason for stitching to be a labour intensive function is that unlike other departments, one individual operator is required to operate one sewing machine.

6.1.3 Employment Categorisation

In Garments sector, employees are divided in three employment categories; permanent, piece rate work/daily wage work and contractual on the basis of compensation patterns.

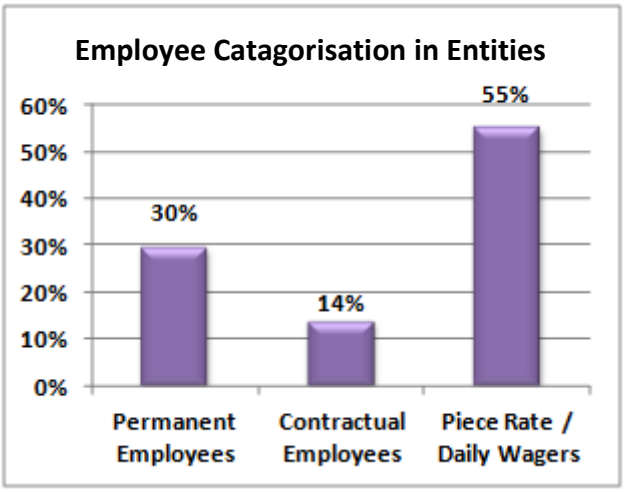

Figure 33 – Employee Categorisation in Entities

Figure 33 shows that the highest 55% share was that of the employees working on piece rate basis. It was followed by 30% permanent and 14% contractual employees. Piece rate workers are employed in Cutting and Stitching departments, which generally employ the largest number of employees.

6.1.4 Gender Bifurcation

Figure 34 presents a gender-wise bifurcation of Garments sector workforce. It shows that the majority of the workforce consists of male members.

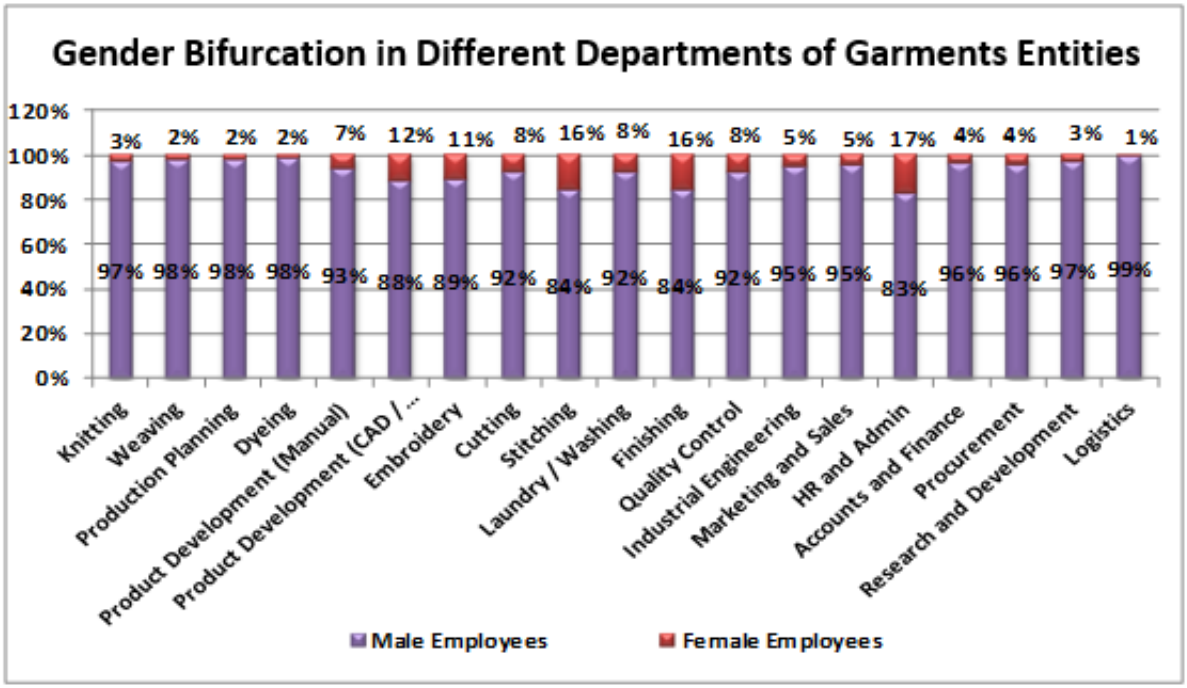

Figure 34 – Gender Bifurcation in Different Departments of Garments Entities

Within production, Stitching and Finishing departments have the highest number of female employees. Embroidery, Product Development, Cutting and Quality Control are the other departments with reasonable share of female employees. Traditional functions of weaving, knitting and dyeing have the lowest share of female employees. These departments require handling of large machines and the environment is also noisier and tougher compared to that in Stitching, Finishing, and Embroidery etc. departments.

In support functions, the highest share of female employees (17%) was found in HR and Admin. Department; while this share in Finance and Accounts was only 4%.

6.1.5 Preferred Skill Areas for Female Workforce

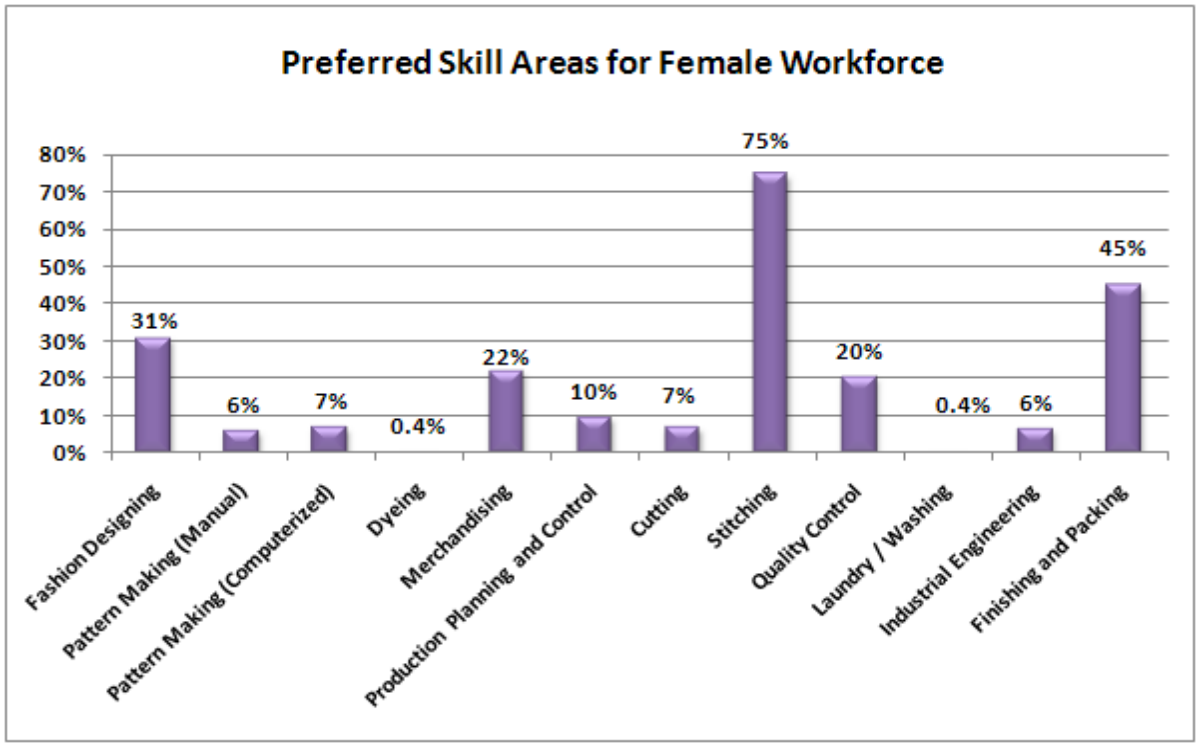

Figure 35 – Preferred Skill Areas for Female Workforce

Figure 35 presents the preferences given by the entrepreneurs regarding skills areas for the female workforce.75% respondents believed that Stitching department was the most preferred department for female workforce deployment as they possess precision in their stitching style that usually the male workers lack. However, when analysed as a whole, despite this preference, the number of male workers in Stitching department far exceeds that of the female workers due to higher availability of male workers.

The second most preferable department for female workforce, according to 45% respondents, was reported to be Finishing and Packing Department, followed by 31%, 22% and 20% respondents preferring Fashion Designing, Merchandising and Quality Control.

The preferences are in line with the general perception that females are not suited to work in rough and tough jobs like knitting, weaving, dyeing, etc.

6.1.6 Monthly Salary Ranges

The monthly salary ranges of employees working in different departments (at managerial, supervisory and operational levels) are presented in Table 12.

Table 12 – Monthly Salary Ranges of Employees in Different Departments

Departments	*Job Positions*	*Salary Range*	
		Rs.	*Rs.*
Knitting	Knitting Master	40,000	70,000
	Knitting Machine Operator	15,000	18,000
	Knitting Machine Mechanic	15,000	18,000
	Knitting Helper	12,000	13,500
	QCA	16,000	18,000
	Assistant	12,000	14,000
Weaving	Weaving Master	45,000	70,000
	Weaving Machine Operator	15,000	18,000
	Weaving Machine Mechanic	22,000	25,000
	Weaving Helper	12,000	15,000
Production Planning	Deputy PPC Manager	65,000	90,000
	Any other (Assistant)	30,000	45,000
Dyeing	Dyeing Manager	180,000	300,000
	Dyeing Master	60,000	80,000
	Dyeing Machine Operator	17,000	20,000
	Laboratory Assistant	15,000	18,000
	Sampling Man	18,000	20,000
Designing / Product Development (Pattern Making)	Supervisors Sampling Master	18,000	22,000
	Sampling Expert (Assistant)	17,000	22,000
	Coordinators:		
	Quality Control Assistant	14,000	24,000
	Cutting Assistant	18,000	20,000
	Stitching Assistant	13,000	15,000
	Sewing Assistant	13,000	15,000
	Helper	12,000	13,000
Cutting	Cutting Master	50,000	120,000
	Assistants	35,000	50,000
	Fabric Layer Operator	14,000	15,000
	Tracer	13,000	15,000
	Cutting Machine Operator	16,000	18,000
	Bundle Maker	12,500	13,500
		-	-
Embroidery	Designer	15,000	50,000
	Sampling Man	13,000	17,000
	Machine Operator	13,000	16,000
	Any other:		
	Supervisor	15,000	20,000
	Applique Cutter	12,000	13,000
	Mechanics	20,000	30,000

Departments	*Job Positions*	*Salary Range*	
		Rs.	*Rs.*
	Helpers	-	-
Stitching	Production In charge	25,000	45,000
	Supervisor	18,000	25,000
	Line Supervisor	15,000	18,000
	Quality Checker	14,000	18,000
	Machine Operator	12,000	25,000
	Sewing Machine Mechanic	20,000	30,000
	Any other (Assistant)	12,000	13,000
Laundry / Washing	Washing Master	45,000	100,000
	Laboratory Assistant	17,000	30,000
	Washing Machine Operator	14,000	17,000
	Hydro Operator	14,000	17,000
	Steam Operator / Dry Operator	14,000	17,000
	Mechanic	18,000	27,000
	Any other:		
	Dryer	12,000	14,000
	Helper	12,000	13,000
	Oven	16,000	22,000
	Scraping	12,000	15,000
	Spray	12,000	15,000
	Helper	12,000	13,000
Finishing and Packing	Packing In Charge	25,000	28,000
	Finishing In Charge	25,000	28,000
	Button, Rivet Machine Operator	14,000	20,000
	Thread Cutter	12,000	13,500
	Press Man	14,000	16,000
	Any other:		
	Inspector	14,000	17,000
	Alter	14,000	17,000
	Salvager	12,000	14,000
	Packing Helpers	12,000	13,000
Industrial Engineering	Industrial Engineer	30,000	85,000
	Any other:		
	Deputy Manager	25,000	55,000
	Assistant	15,000	22,000
	Instructor	18,000	25,000
	Time and Motion Study	14,000	18,000
Quality Control	Inline Quality Checker	14,000	18,000
	End of the Line Quality Checker	14,000	18,000
	Any other:		

Departments	Job Positions	Salary Range	
		Rs.	Rs.
	Supervisor	16,000	22,000
	Assistant QCA	12,000	15,000
	Dispatcher	14,000	16,000

6.1.6.1 Starting Monthly Salary Ranges – TSP's View

A similar question was asked from TSPs aiming to identify the preferences based on starting salary ranges of graduates which may also help in determining the preferences for that programmes/courses. The results are shown in Table 13.

Table 13 – Starting Monthly Salary Ranges of Employees-TSPs View

Name of Program	Starting Monthly Salary Range in PKR
Swing Machine Operators	12,000 - 15,000
CAD /CAM	18,000 - 30,000
Merchandising	17,000- 30,000
Quality Control	15,000 - 20,000
Pattern Drafting Maker	10,000 - 25,000
Industrial Engineering	35,000 - 45,000
Computerised Embroidery	15,000 - 27,500
Fashion Designing	15,000 - 35,000

6.1.7 Historical Employment Trend of Workforce

Reviewing the trend of historical employment of workforce, it was noted that 66% of the entities reported increase in the workforce employment in last 12 months, whereas 24% reported no change in their existing employment level and 10% indicated a decrease. The positive trend in employment also indicates the growing needs of the sector with regard to technical workforce. The responses are depicted in Figure 36.

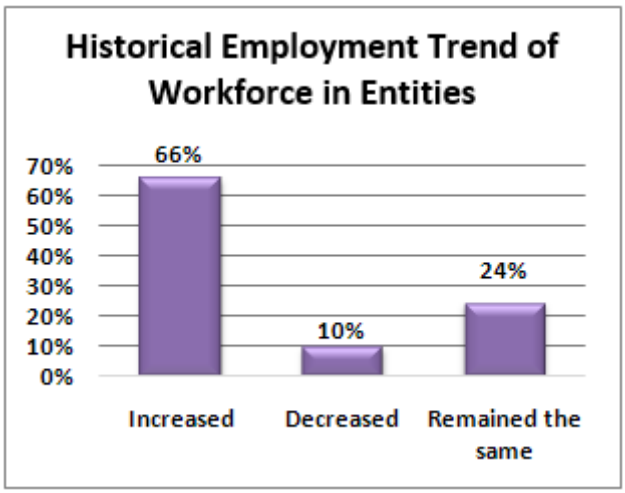

Figure 36 – Historical Employment Trend of Workforce in Entities

6.1.8 Sources of Hiring

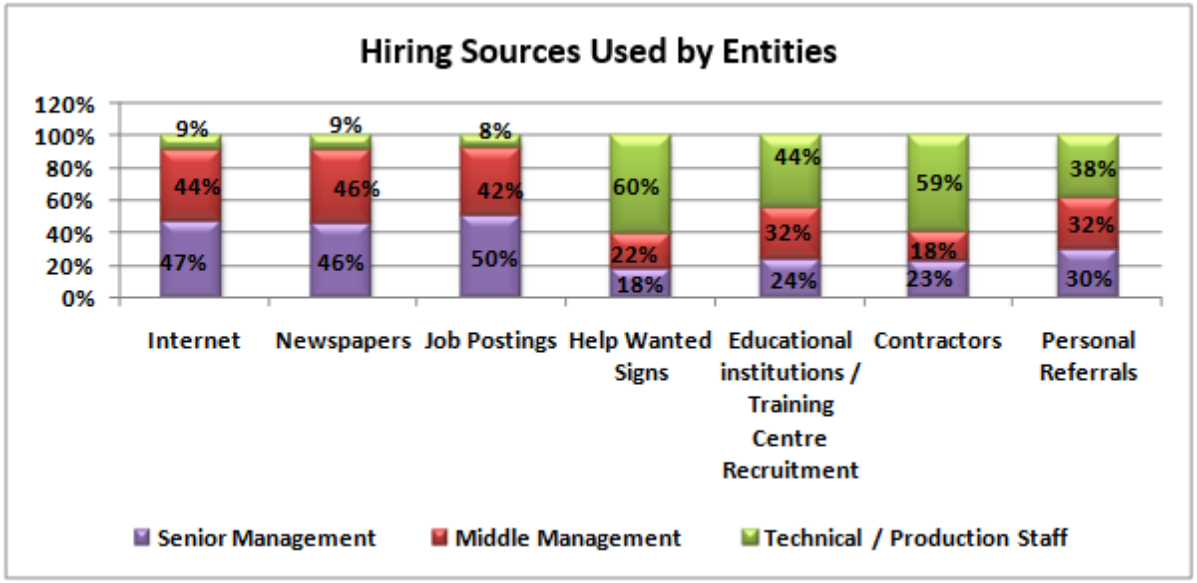

Figure 37 – Hiring Sources Used by Entities

Survey findings indicate that different sources were used by entities for hiring of employees. Detailed review of the responses demonstrated that job postings, internet, and newspapers with the respective percentages of 50%, 47% and 46% were the mostly used modes for hiring senior management. Newspapers, internet and job postings were the pre-dominantly used modes for hiring middle management with respective proportions of 46%, 44%, and 42%. Help wanted signs, contractors and educational institutions were found to be most commonly used modes of hiring of technical/production staff with the respective percentages of 60%, 59%, and 44% of entities. Figure 37 shows the results.

6.1.9 Qualification for Managerial, Supervisory, and Operational Workforce

Another aspect captured by the survey was determining the suitability of pre-defined educational levels for managerial, supervisory, and operational workforce. Figure 38 depicts the results.

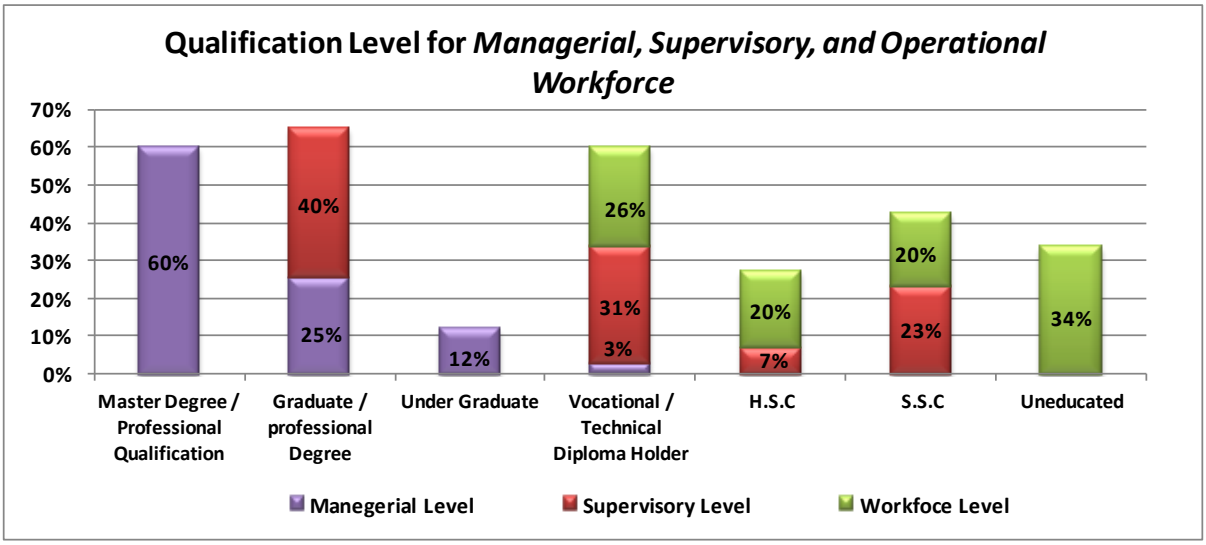

Figure 38 – Qualification Level for Managerial, Supervisory, and Operational Workforce

For managerial level, 60% respondents were found in favour of hiring Master/Professional degree holders, 25% preferred Graduates (Bachelor degree holders), and 12% preferred Under Graduates and only 3% opted for Vocational Diploma holders. Likewise, 40% preferred Graduates/Professional Degree holders to be recruited at supervisory level whereas 31%, 23% and 7% respectively preferred Vocational and Technical Diploma holders, Secondary School Certificate holders and Higher Secondary Certificate holders for supervisory positions. 34% respondents replied that they hired fresh candidates having no experience for technical workforce level whereas 26% informed their policy of hiring Vocational Training Certificate holder for this level, followed by 20% hiring Secondary School Certificate holders and Higher Secondary Certificate holders each for operational levels of management.

6.2 Skills Assessment

6.2.1 Proficiency Level of Workforce

Proficiency level is defined as the ranking of the ability or experience of a resource to operate at a certain position or to perform a particular task. During the survey, entities were asked about the proficiency levels of the three cadres of management. The results are shown in Figure 39.

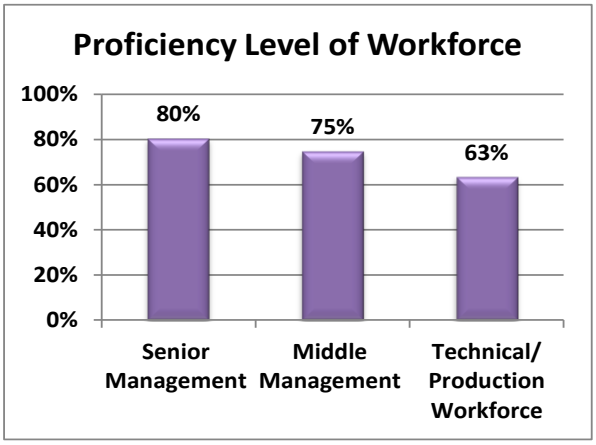

Figure 39 – Proficiency Level of Workforce

It is seen that senior management was considered proficient by 80% of the entities, middle management by 75% and technical and production workforce by 63% entities. The lower level of proficiency in technical and production workforce (people who are directly involved in production process) highlights the need to train them in their respective areas of work for them to increase their proficiency levels.

6.2.2 Department-wise Skills Level of Existing Workforce

Competency is the basic building block of measuring skill. When units of competency are combined into an interrelated set below the level of full qualification, they are commonly referred to as Skill Sets.

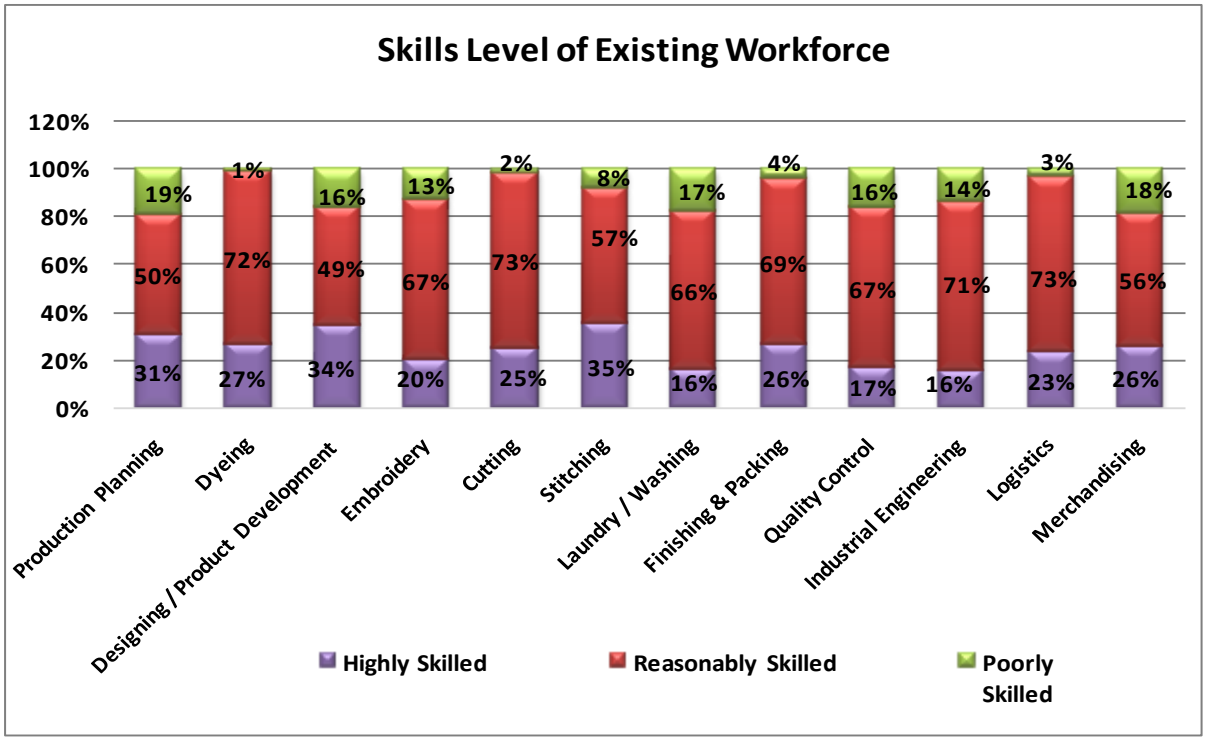

Figure 40 – Skill Level of Existing Workforce

The survey also rated the skills level of existing workforce on three categories; Highly Skilled, Reasonably Skilled and Poorly Skilled. Figure 40 shows the results.

Stitching was found to be an area where a high satisfaction level was observed. 35% entities rated the stitching workforce as 'Highly Skilled' which is the highest amongst all. Similarly, the share of 'Poorly Skilled' for Stitching is 8% which is lower compared to other functions. Designing/Product Development is the other area where satisfaction with respect to skill levels is high and 34% entities rated that as 'Highly Skilled'. However, there is a considerable share of entities (16%) which have rated this as 'Poorly Skilled'. This indicates that not all the Designing/Product Development workforce is adequately trained. A similar trend is also seen for Production Planning where the share of 'Highly Skilled' is high (31%) but so is the share of 'Poorly Skilled' (19%). Merchandising also shows a similar trend. It is interesting to note that all three areas, Designing/Product Development, Production planning and Merchandising, are the ones where professional skills are required. Further, the merchandising is also one of the specifically highlighted skills by the PHMA which are highly in demand. Furthermore, it is observed that the majority of workforce in all of the departments is rated as the "reasonably skilled" (ranging between 49% - 73%) which requires the special attention for improvements to the "highly skilled"; this may lead us to increase in market share in high value but quality conscious export markets.

Quality Control, Laundry/Washing and Industrial Engineering are the areas where lowest number of entities has assigned a 'Highly Skilled' rating (17%, 16% and 16% respectively). The perception of low quality of skills in these areas is further strengthened by looking at their shares of 'Poorly Skilled' which are quite high compared to others (16%, 17%, and 14% respectively).

Cutting and Dyeing are the two areas which show a different trend from all others. There are respectively only 2% and 1% entities which have rated the skills as 'Poorly Skilled'. So the

satisfaction level of the management regarding these two skills can be classified in high to medium range.

While prioritising the need for trainings, one must consider the above mentioned situation. The areas rated high in 'Poorly Skilled' should be considered as priority while keeping in view the response regarding the criticality of the function/department.

6.2.3 Skills Assessment of Workers – Sector Experts View

The opinion of sector experts on the adequacy of skills possessed by the garments sector workforce was also sought. Responses received are presented in Figure 41, according to which 46% respondents rated the level of skills of workforce as Average, while 32% were of the view that the skills of existing workforce were Good. 12% reported Poor and 10% respondents believed that the work force was equipped with Excellent skills enabling them to meet the expectations of Garments sector entities. This trend seems to be in line with the trend observed from the responses of entities.

Figure 41 – Skill Assessment of Workers – Sector Experts Rating

6.2.4 Criticality Level of Technical Skills

The criticality level attached to different technical skills areas in garment production process was assessed. The criticality level is the relative importance given to a particular technical skill/activity in any process. A High rating is assigned to those skills which are absolutely necessary, Medium is assigned to the ones which are moderately required and Low to those which are preferably required. Accordingly, the respondents stated that each skill area has its own significance in the manufacturing process as all processes are interlinked with no margin of error in any of the processes given the competitiveness of the market. However, they ranked criticality of the technical skill areas either as High, Medium or Low. Figure 42 shows the results.

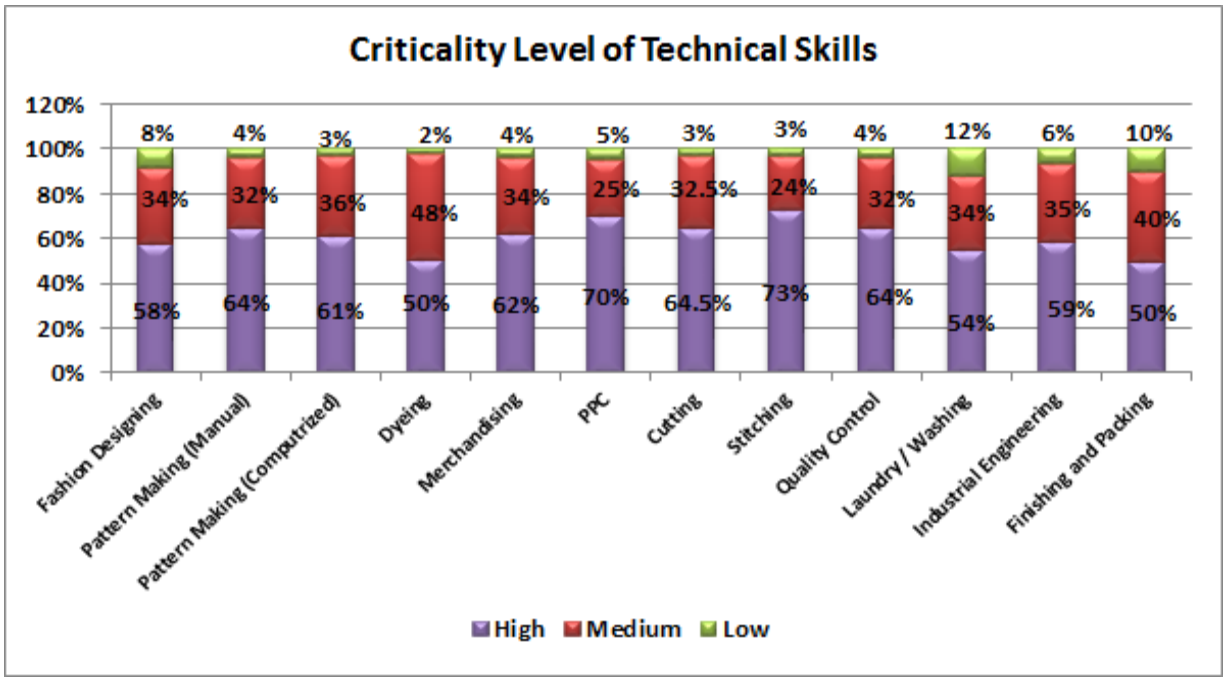

Figure 42 – Criticality Level of Technical Skills

- Stitching and Production Planning &Control were found to be the most critical areas rated High by 73% and 70% entities respectively. Other critical areas were Cutting and Quality Control which were rated High by 64.5% and 64% entities.
- With regard to criticality of technical skills areas termed as Medium, the responses of the entities were in the range 24-48% for all the skill areas. Dyeing, Finishing & Packing, Industrial Engineering were rated medium critical respectively by 48%, 40%, and 35% entities.
- Low criticality skills were identified as Laundry/Washing, Finishing & Packing and Fashion Designing for which 12%, 10% and 8% respondents respectively rated them Low.

6.2.5 Demand for Technical Skill Areas –TSPs View

In parallel with the demand side assessment relating to criticality of technical skill areas, a similar question was also asked from TSPs to see the correlation between the two responses.

Figure 43 depicts the demand in terms of criticality of the pre-defined skill areas in Garments sector.

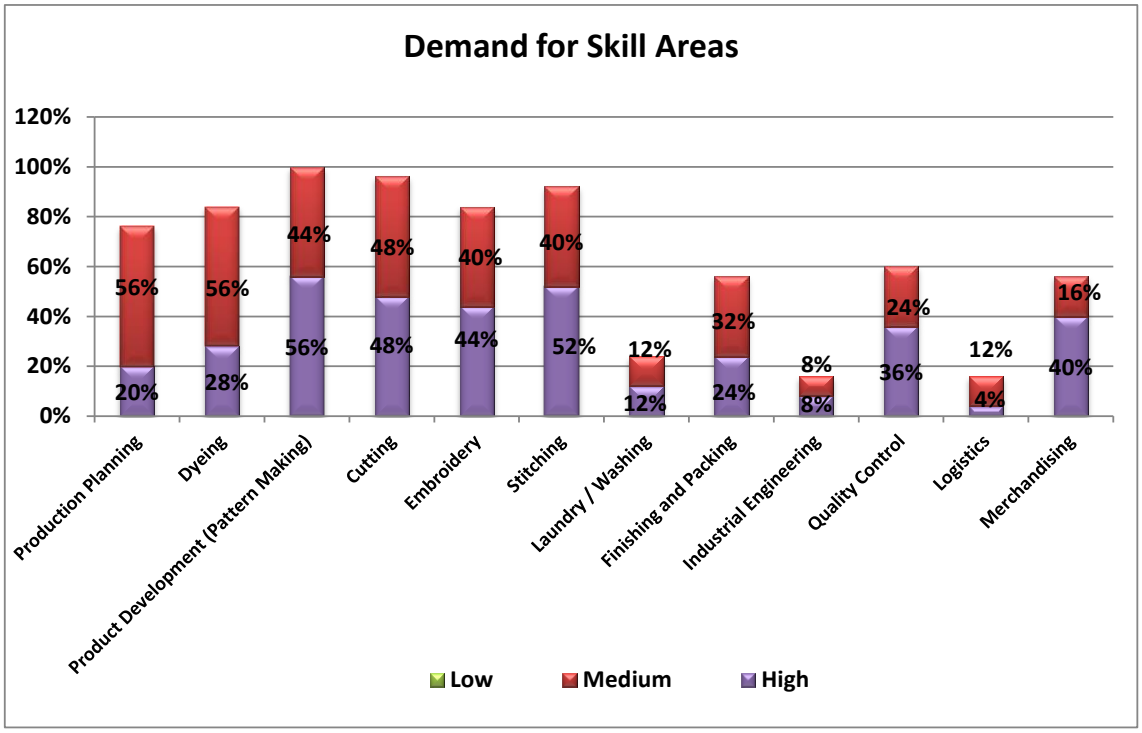

Figure 43 – Demand for Skill Areas

- Unlike the surveyed business entities, none of the responding TSPs mentioned low criticality for any of the skill areas.
- Product development was rated as highly critical by 56% of the respondents along with stitching which was rated high by 52%. Other areas of high criticality were Cutting and Embroidery rated high by 48% and 44% respondents.
- Skill areas rated as of medium criticality included Production Planning, Dyeing and Cutting scoring 56%, 48% and 48% respectively.

Respondents from TSPs (the faculty members) were asked about the preferred certification levels for different skill areas and the responses are depicted in Figure 44.

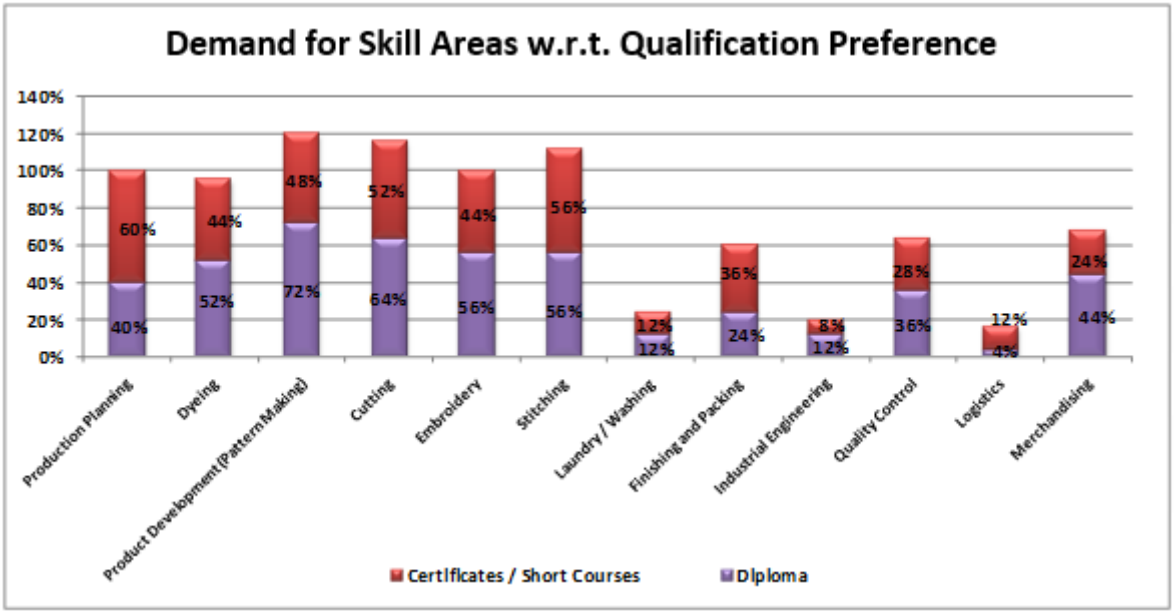

Figure 44 – Demand for Skill Areas w.r.t. Qualification Preference

Product Development was considered to be an area in which there was a strong demand for better qualified manpower. 72% surveyed TSPs preferred diploma courses for this function. Other functions where diploma was preferred over certificate courses were Cutting, Stitching, Dyeing and Embroidery.

6.2.6 Criticality Level of Soft Skills

In line with the above analysis of technical skills, the survey also determined the criticality level of soft skills among the workforce. The results are shown in Figure 45.

Motivation, Workplace Ethics, Teamwork and Timeliness were rated as highly critical in the range of 50-56% because they added more value to the overall management and production processes. Interpersonal Skills, Occupational Health and Safety, Communication and Professionalism were rated as highly critical in the range of 38-47%.

Majority of the respondents rated the criticality of soft skills either as “High” or “Medium” emphasising the importance that should be given to these skills by the entities.

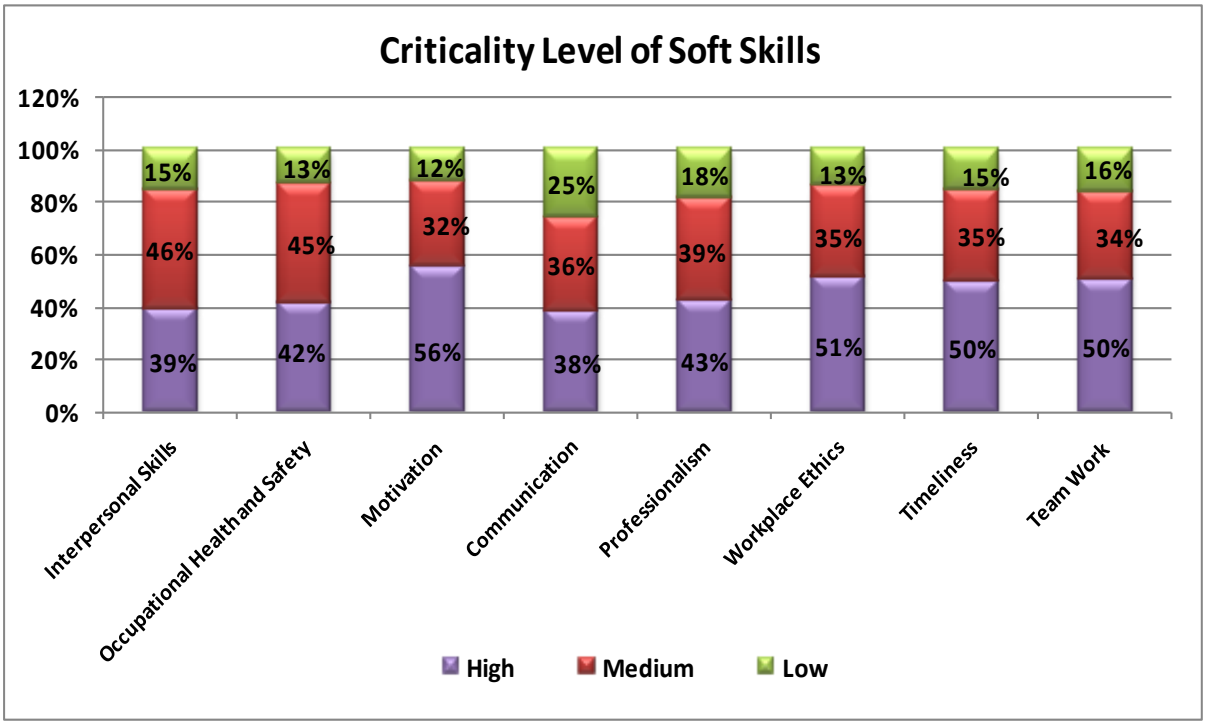

Figure 45 – Criticality Level of Soft Skills

6.3 Skills Shortage in Workforce and Remedial Measures

This section describes the status of workforce turnover, current vacancies, gap between skills being produced and supplied, including underlying reasons for these gaps and the remedial measures to bridge them. The section also elaborates on the adequacy of Technical Education and Vocational Training provided by TSPs.

6.3.1 Workforce Turnover

The ratio of the number of employees that leave a company through attrition, dismissal, or resignation during a period, to the number of employees on payroll during the same period,

is termed as workforce turnover. Figure 46 presents the percentage of labour turnover in different departments and categorises workforce turnover as High, Medium or Low.

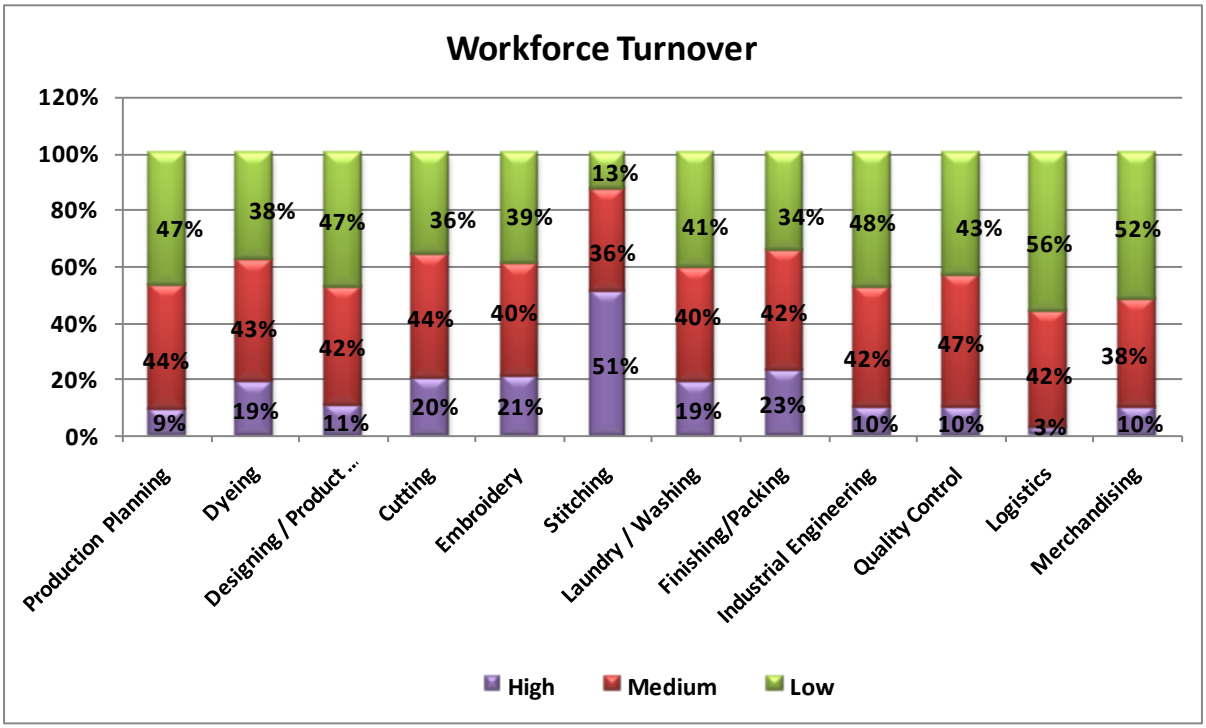

Figure 46 – Workforce Turnover

Respondents who reported high turnover in various departments believed that the Stitching department has the highest workforce turnover of 51% because of high demand for it; compared to other departments. 23% respondents stated that workforce turnover in Finishing and Packing department was the second highest, followed by a range of 19-21% reflecting medium turnovers in Dyeing; Laundry/Washing, Cutting and Embroidery departments.

6.3.2 Current Vacancies in Different Cadres

Table 14 depicts the current vacancies in different management cadres including vacancies considered to be hard to fill at these levels.

Table 14 – Current Vacancies in Different Cadres

Levels	Job Positions	Current Vacancies	Hard to Fill Vacancies
Managerial Level			
Senior Management	GM Operations	17	4
	GM Productions	8	3
	GM Marketing	10	4
	GM HR	12	2
	GM Supply Chain	9	4
	GM Finance	7	1
	Any other	1	-
Middle Management (Managers / Assistant Managers)	Manager/Assistant Marketing	46	21
	Manager /Assistant Production	37	18
	Manager /Assistant Before Washing (cutting, stitching)	31	14
	Manager/Assistant Washing	19	8
	Manager/Assistant Finishing and Packing	16	7
	Manager/Assistant Quality Assurance and Control	31	10
	Manager/Assistant Production Planning and Control	31	14
	Manager/Assistant Maintenance	23	7
	Manager/Assistant HR	14	5
	Manager/Assistant Finance	14	3
	Manager/Assistant Purchase	19	5
	Commercial Manager	5	1
	Product Development	10	7
	Any other	-	-
Technical / Production Staff			
Knitting	Knitting Master	29	12
	Knitting Machine Operator	140	35

Levels	Job Positions	Current Vacancies	Hard to Fill Vacancies
	Knitting Machine Mechanic	59	17
	Knitting Helper	30	4
	Any other	14	-
Weaving	Weaving Master	8	3
	Weaving Machine Operator	46	9
	Weaving Machine Mechanic	15	5
	Weaving Helper	10	-
	Any other	3	-
Production Planning	Deputy PPC Manager	31	4
	Any other	1	1-
Dyeing	Dyeing Master	9	2
	Dyeing Machine Operator	30	17
	Laboratory Assistant	13	2
	Sampling Man	26	3
	Any other	7	-
Designing / Product Development (Pattern Making)	Supervisors	30	3
	Sampling Expert	21	11
	Coordinators	18	8
Cutting	Cutting Master	44	22
	Fabric Layer Operator	59	21
	Tracer	35	15
	Cutting Machine Operator	270	67
	Bundle Maker	20	9
	Any other	1	-
Embroidery	Designer	24	14
	Sampling Man	11	4
	Machine Operator	49	24
	Any other	35	-
Stitching	Production In charge Cum	37	19
	Supervisor	189	82
	Line Supervisor	651	226
	Quality Checker	1,055	841
	Machine Operator	6,111	1,958
	Sewing Machine	-	-

Levels	Job Positions	Current Vacancies	Hard to Fill Vacancies
	Mechanic		
	Any other	34	-
Laundry / Washing	Washing Master	12	5
	Laboratory Assistant	18	12
	Washing Machine Operator	56	38
	Hydro Operator	14	7
	Steam Operator	13	10
	Mechanic	11	3
	Any other	34	-
Finishing and Packing	Packing In Charge	16	5
	Finishing In Charge	9	2
	Button, Rivet Machine Operator	95	31
	Thread Cutter	124	45
	Press Man	92	40
	Any other	40	-
Industrial Engineering	Industrial Engineer	12	7
	Any other	9	-
Quality Control	Inline Quality Checker	217	77
	End of the Line Quality Checker	194	36
	Any other (Industrial Engineering)	56	55
		10,187	**3,841**

Survey findings revealed that most of the entities surveyed have conveyed their demand of employees according to the different levels as shown in Table above. The analysis revealed a higher shortage of workforce at Technical/Production level as compared to senior and middle management levels due to the fact that the Garments Sector is labour intensive and growing. Similar to the pattern observed above, the highest number of hard to fill vacancies was also identified at Technical/Production level.

6.3.3 Reasons for Hard to Fill Vacancies

Exploring further, following reasons for hard to fill vacancies were noted for middle management level

'Incompatibility of curricula with industrial standards' was quoted by 27% respondents as the most important reason for finding the right human resource in management cadre. The second most pertinent reason was 'Lack of demand-driven skills' quoted by 23% respondents. High turnover was the next important reason due to which the entrepreneurs find it difficult to hire good human resource.

For Technical/Production Staff, 42% respondents rated "high turnover rate of skilled workers" as the main reason for finding it hard to fill vacancies. 24% reported "incompatibility of curricula with industrial standards", 16% highlighted the "lack of demand driven skills". Details are presented in Figure 47.

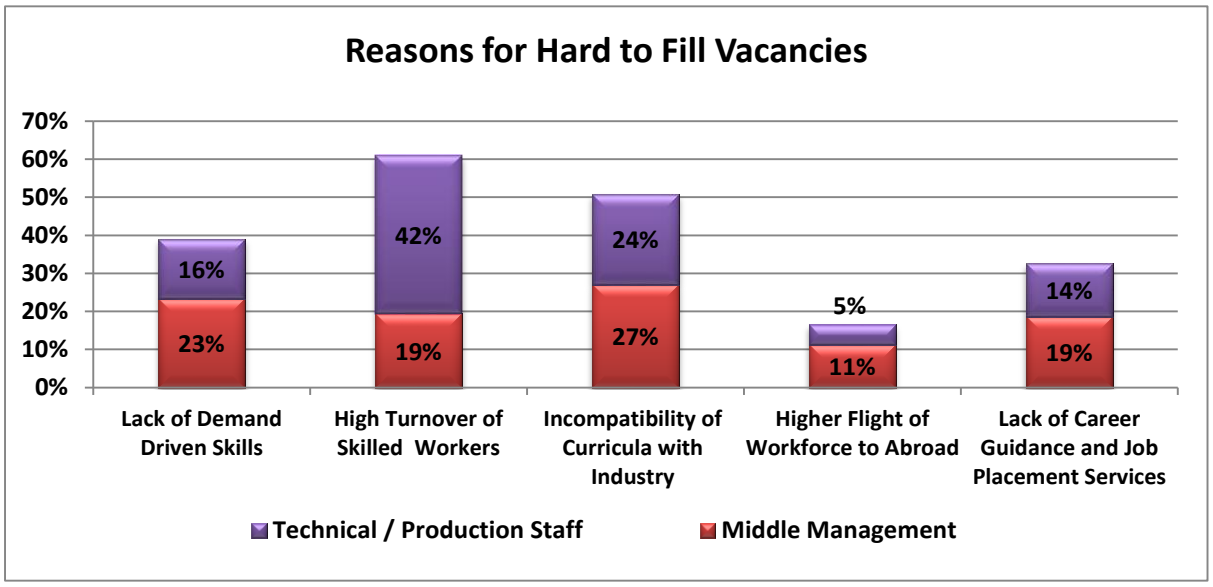

Figure 47 – Reasons for Hard to Fill Vacancies

6.3.4 Availability of Workforce – Sector Experts View

From an overall perspective, 54% sector experts believed that workforce availability situation in garments sector is not satisfactory. Of these, 8% said that workforce is not available while 46% believed that the workforce was poorly available. This indicates a wide gap between the supply and demand of workforce in the market. Of the remaining 46%, 22% were of the view that the workforce was available and the remaining 24% said that the workforce was freely available to meet the needs of the sector. The results are shown in Figure 48.

Figure 48 – Availability of Workforce – Sector Experts View

6.3.5 Gap between Skill Set and Demand –TSPs View

The survey also explored about the gap between skills being produced and their demand in Garments sector. 56% of the surveyed TSPs said that there is a gap between skills set being imparted by the present system and the demand of the Garments sector. The remaining 44% believed that there is no gap in this regard. Figure 49 shows the results.

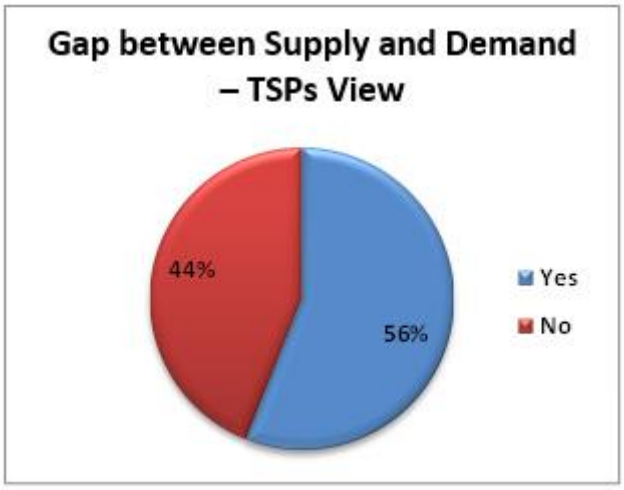

Figure 49 – Gap between Supply and Demand – TSPs View

6.3.6 Remedial Measures to Fill the Skills Demand-Supply Gap

Remedial measures to fill in the gap between demand and supply of skills were suggested by the TSPs. Table 15 shows the responses.

Table 15 – Remedial Measures to Fill Demand-Supply Gap

Remedial Measures	Responses
Extending Industry / Practical Exposure	43%
Industry Inputs at the Time of Development of Curricula	50%
Revamping Old Institutions and Establishing New Institutes	7%

A wide majority of 93% respondents highlighted the need for increasing the role of industry in technical and vocational training in the province. 50% TSPs suggested to involve business entities in curricula design to ensure alignment of the courses with industry's demand. 43% suggested a need to extend industrial and practical exposure. Only 7% were in favour of new investment for revamping the existing institutions and establishing new institutions for bridging the identified gap.

6.3.7 Gap between Supply of Skills and their Demand

The sector experts highlighted the issue of demand-supply gap of skills in garments sector in an even more pronounced manner. 86% Sector Experts believed there is a wide gap in this regard. Figure 50 shows the results.

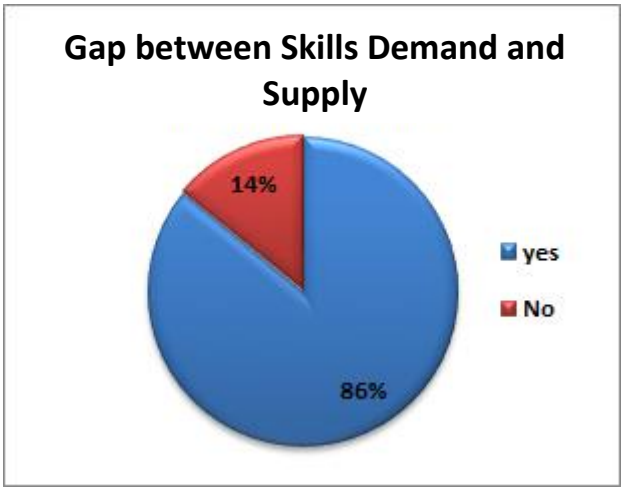

Figure 50 – Gap between Skills Demand and Supply

6.3.8 Underlying Reasons for the Gap

As per 33% sector experts, lack of skilled and trained teachers is the most important reason for low quality of technical workforce. The second most important reason was quoted by 24% respondents as the lack of coordination between the suppliers (TSPs) and the customers (industry). There is a need for the TSPs to rethink their strategy and ensure the involvement of industry representatives in technical education. The third reason for demand-supply gap directly concerned with the training capacity to produce trained workforce.19% respondents believed that the number of training institutes is limited to provide the required supply of workforce for the industry. Figure 51 shows the detailed results.

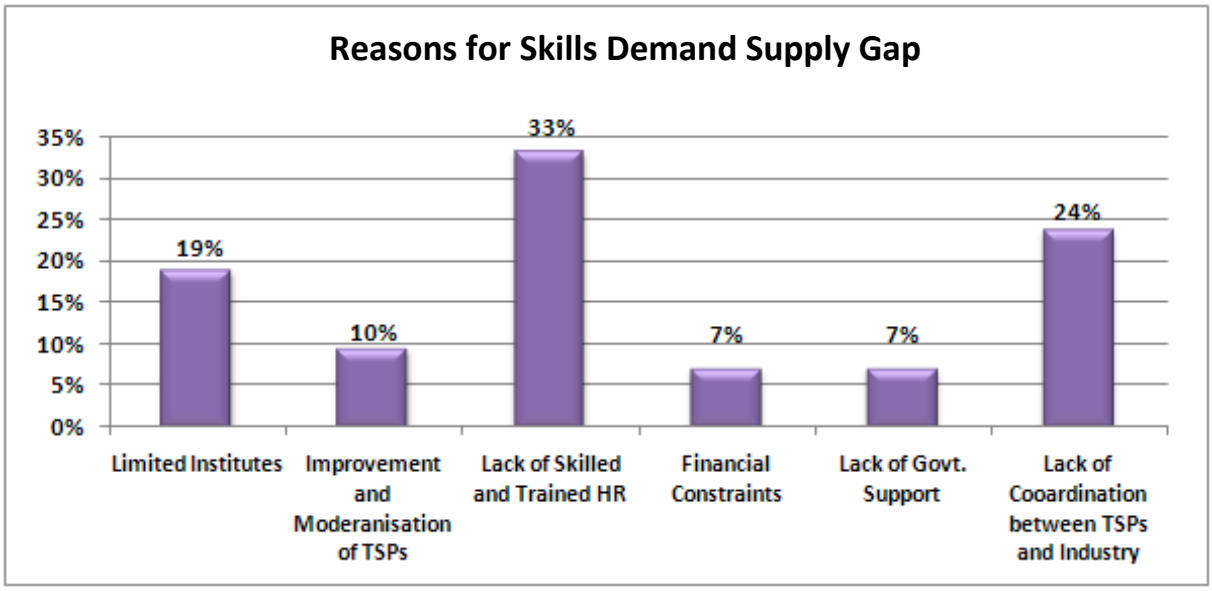

Figure 51 – Reasons for Skills Demand Supply Gap

6.3.9 Suggested Measures to Bridge the Gap

In line with the above discussion, suggestions to address the above-mentioned skills gap were identified. 34% sector experts suggested establishment of new institutes and curriculum revision, 21% recommended more emphasis on practical training, 21% highlighted the extension of support by the government and 24% suggested industrial

collaboration/job placement services as a suitable measure to cover the existing gap. Figure 52shows the results.

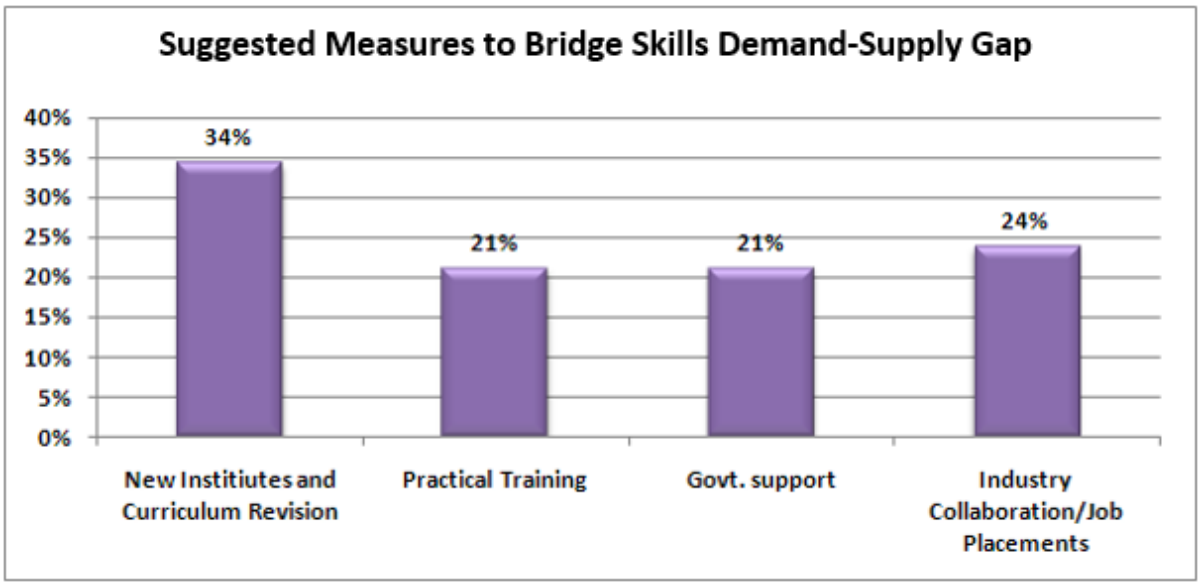

Figure 52 – Suggested Measures to Bridge Skills Demand-Supply Gap

6.3.10 Provision of Quality Workforce

74% of the surveyed entities were found to be not satisfied with the quality of workforce supplied by the prevailing Technical and Vocational Training System. The balance 26% thought that the current system met the requirements of the sector. The split is shown in Figure 53.

Figure 53 – Provision of Quality Workforce

Of the satisfied respondents; only 17% were found to be highly satisfied; while 42% and 41% respectively were satisfied and somewhat satisfied. Figure 54shows the results.

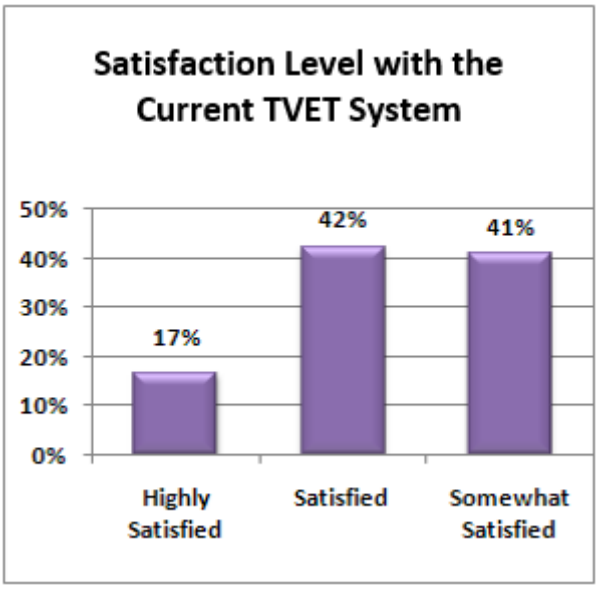

Figure 54 – Satisfaction Level with the Current TVET System

Of the non-satisfied respondents, 63% suggested introducing improved technical courses, 58% emphasised on the need to review existing curricula and 46% highlighted the importance of increase in practical skills through competency based training and assessment to improve the quality of workforce. Figure 55 shows the results.

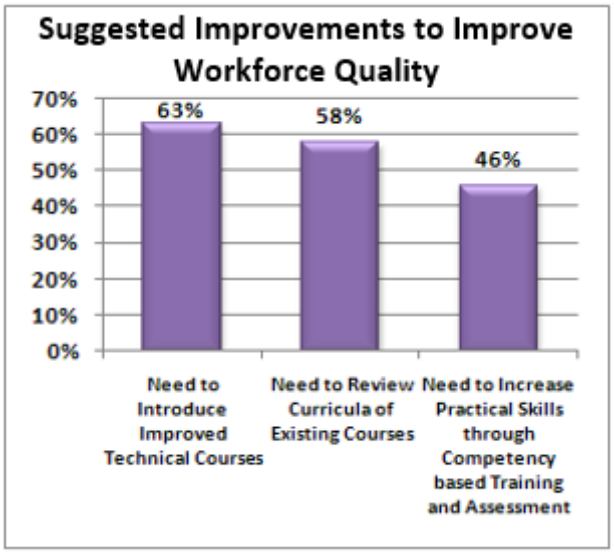

Figure 55 – Suggested Improvements to Improve Workforce Quality

6.3.11 Assessment of Trainees' Performance Graduating from TSPs

The surveyed business entities assigned a satisfactory rating to the competence of the fresh graduates hired by them. 56% respondents rated the freshly hired workforce to be poorly trained, 41% rated them as reasonably trained and only 3% thought them to be well prepared for undertaking the work assigned to them. The split is shown in Figure 56.

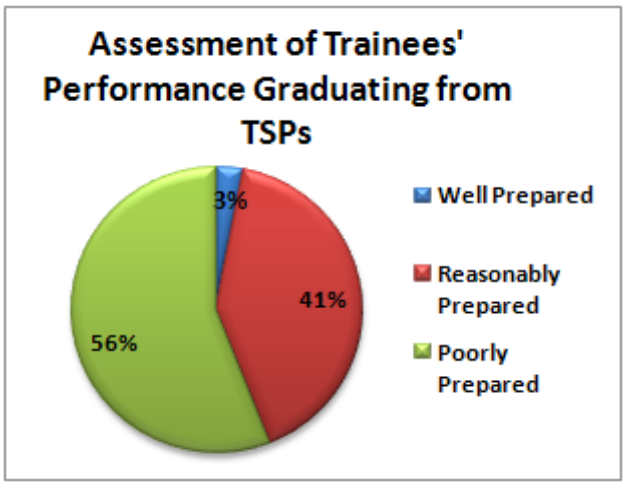

Figure 56 – Assessment of Trainees Performance Graduating from TSPs

Entities were further asked about the reasons of poor performance demonstrated by the newly graduated workers; 100% respondents termed lack of technical and vocational skills as the key issue. 42% considered lack of experience as a main reason and 28% expressed lack of literacy and numeracy skills as the reason for their dissatisfaction with the quality of work of the fresh graduates. Issues related to soft skills like lack of motivation and workplace ethics were not considered a major reason of poor performance and only 14% respondents mentioned that. The results are shown in Figure 57.

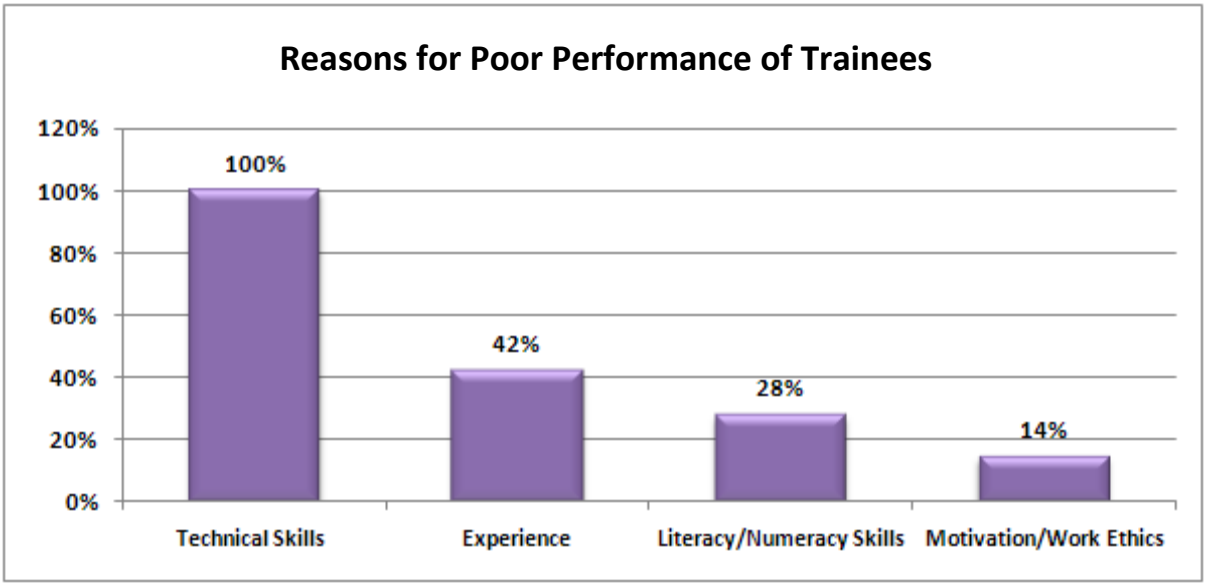

Figure 57 – Reasons for Poor Performance of Trainees

6.3.12 Adequacy of Technical Education to Meet Garments Sector Needs

A vast majority of 86% of the business experts was of the view that the prevailing Technical and Vocational Training system does not fully meet the needs of the sector. Figure 58 shows the division of responses.

Figure 58 – TVET Meeting the Skill Needs of Garments Sector – Sector Experts View

Exploring the reasons for this opinion, 40% experts said that lack of demand driven curricula is most important cause of this problem. The curricula are not in line with the sector needs. 26% quoted low education and ineffective training system as an important reason for low quality of technical workforce. Limited and outdated infrastructure, insufficient support of government to develop/upgrade the infrastructure and lack of modern and updated technological assistance for technical and vocational training institutes were the other reasons quoted by the respondents. Figure 59 shows the results.

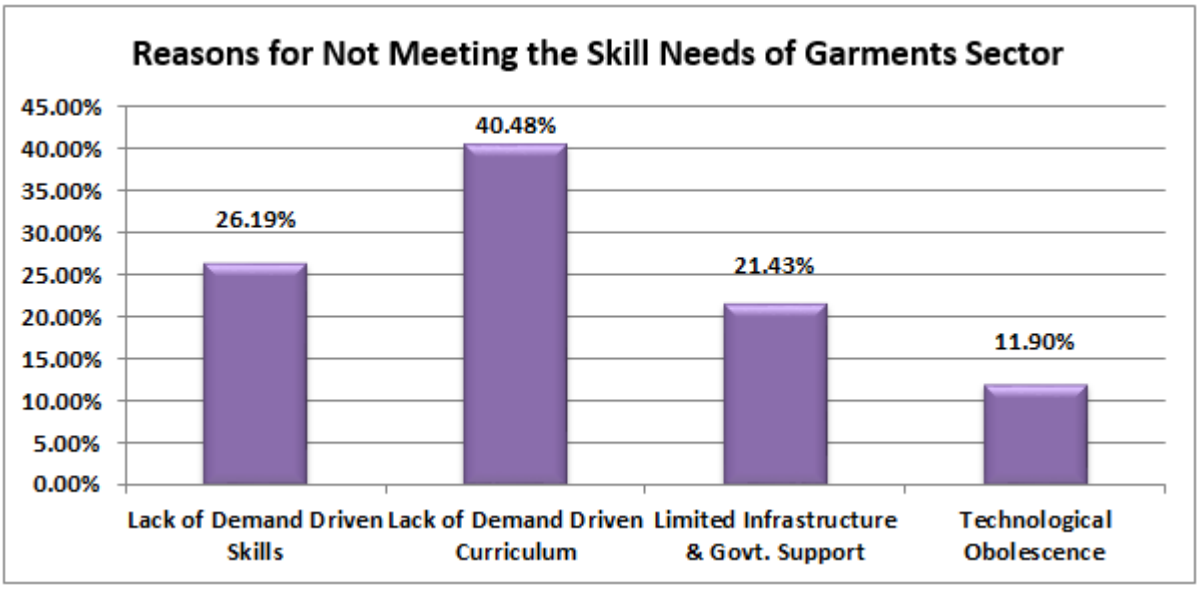

Figure 59 – Reasons for Not Meeting the Skill Needs of Garments Sector

The abovementioned comments by sector experts require an immediate attention of TSPs especially, and of all the stakeholders generally to remove the identified weaknesses.

6.3.13 Deficiency in Technical or Soft Skills or Both

Another dimension of our survey was to identify the skills areas usually found lacking in the available workforce. Figure 60 depicts that 26% sector experts reported lack of technical skills, 14% reported soft skills and 60% believed that Garments sector workforce lacks both technical and soft skills.

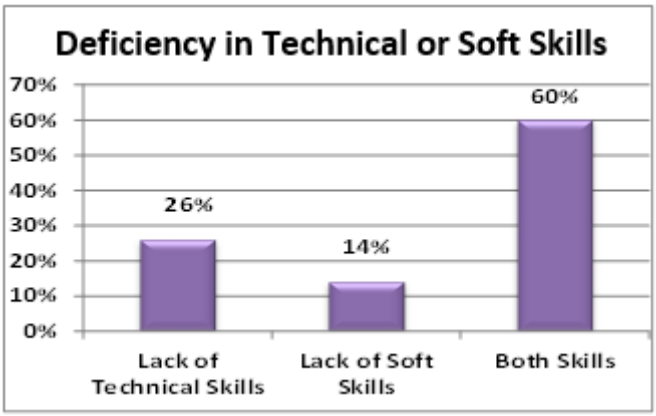

Figure 60 – Deficiency in Technical or Soft Skills

6.3.14 Deficient Technical Skills Areas and Remedial Measures

For addressing the skill deficient areas, Sector Experts suggested measures to address the skills deficient areas, 32% recommended designing demand driven programmes, 32% suggested need for revision in existing curricula and 34% suggested improvements in modes of training as the remedial measures for upgrading skills required in Knitting department.

The need for designing a demand driven program was highlighted by all the departments. However, it came out in a more pronounced way from Production Planning and Dyeing departments where 42% responding entities flagged the issue. 36% respondents mentioned this as an important remedial measure for Designing, Cutting, Embroidery, Quality control and Finishing/Packing functions. Department wise results are shown in Figure 61.

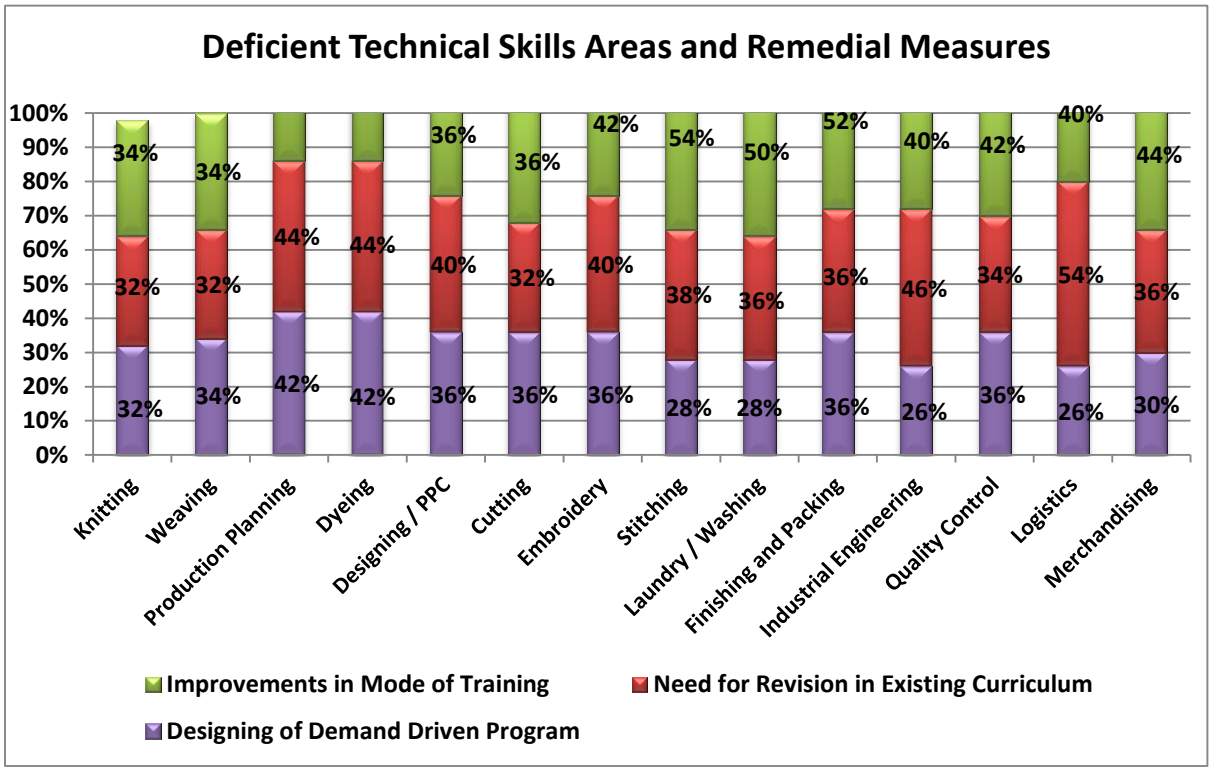

Figure 61 – Deficient Skill Areas and Remedial Measures

The need for revision of existing curriculum was found to be most relevant for Logistics, mentioned by 54% respondents. Other departments where this need was felt strongly included Industrial Engineering (46%), Production Planning (44%) and Dyeing (44%). The lowest interest of the respondents with respect to curriculum change was shown by Knitting, Weaving and Cutting departments where 32% respondents mentioned as important.

Need for improvement in mode of training was highlighted for the departments existing at the later part of the garments value chain, including Stitching, Laundry/Washing and Finishing/Packing. 54% responding entities considered improving training mode as an important remedial measure, while similar responses for Laundry/Washing and Finishing/Packing respectively were 50% and 52%. For Production Planning and Dyeing, only 14% respondents considered mode of training as an important remedial measure.

6.3.15 Remedial Measures for Technical Skills Enhancement

When asked about the remedial measures for improving the critical skills, skills enhancement through specialised trainings or designing special courses were highlighted. The results are shown in Figure 62.

For all the functions, almost an equally split responses were obtained. This shows that both the remedial measures were considered important for technical skills enhancement, though with a slight tilt towards need for specialised training. Finishing/Packing and Laundry/Washing rated important by 55% and 54% respondents respectively.

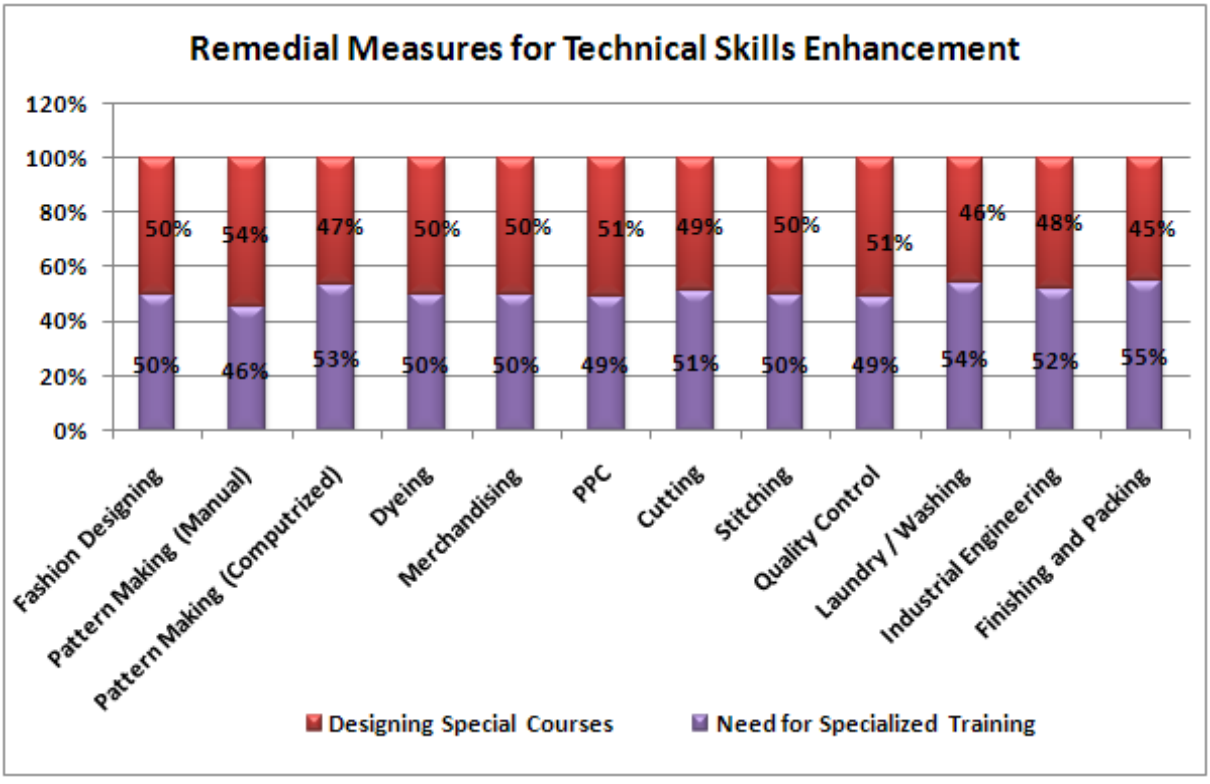

Figure 62 – Remedial Measures for Technical Skills Enhancement

6.3.16 Soft Skills Deficient Areas

Figure 63 depicts the deficient soft skills areas and suitable remedial measures to improve these skills areas.

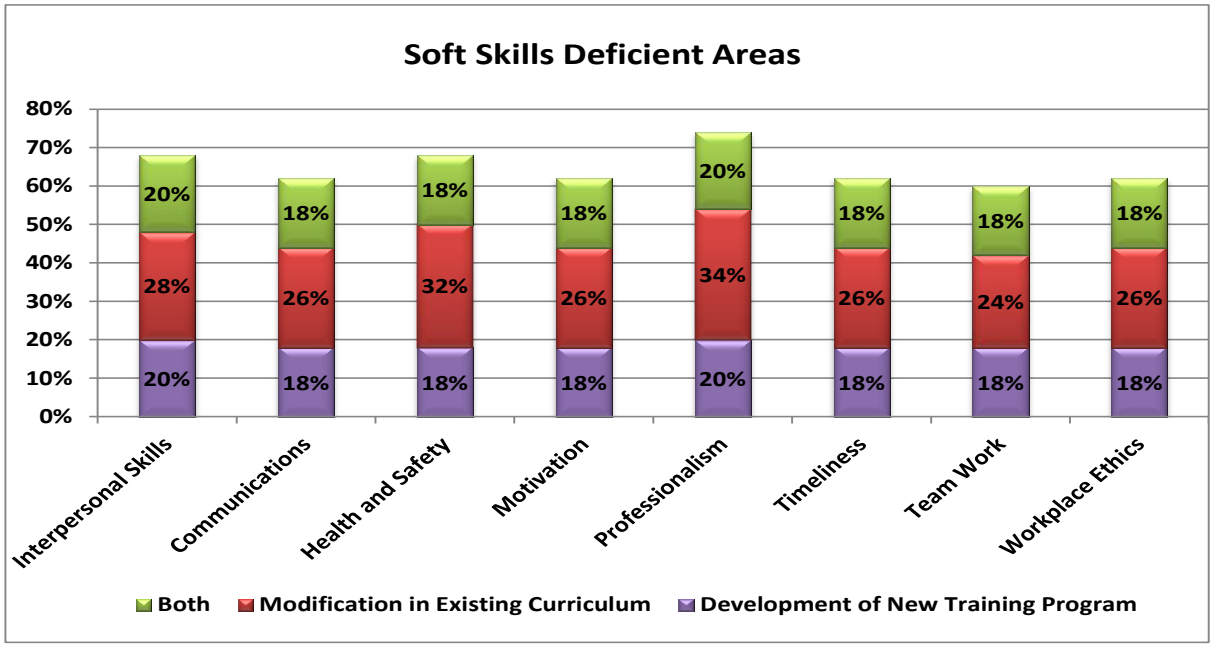

Figure 63 – Soft Skills Deficient Areas

In case of Interpersonal Skills and Professionalism, 20% respondents suggested development of new training programmes, 28% and 34% respectively suggested modifications in existing curricula and 20% highlighted the need to focus on both measures simultaneously. For Communication, Health and Safety, Motivation, Timeliness, Teamwork and Workplace Ethics, Sector Experts suggested development of new training programmes and modifications in existing curricula and strengthening of both dimensions in the range of 18-20%, 24-34% and 18-20% respectively.

6.3.17 Remedial Measures for Soft Skills Enhancement

When asked about the remedial measures for improving the critical soft skills, responses were received highlighting skills enhancement through specialised trainings or designing special courses. The results are shown in Figure 64.

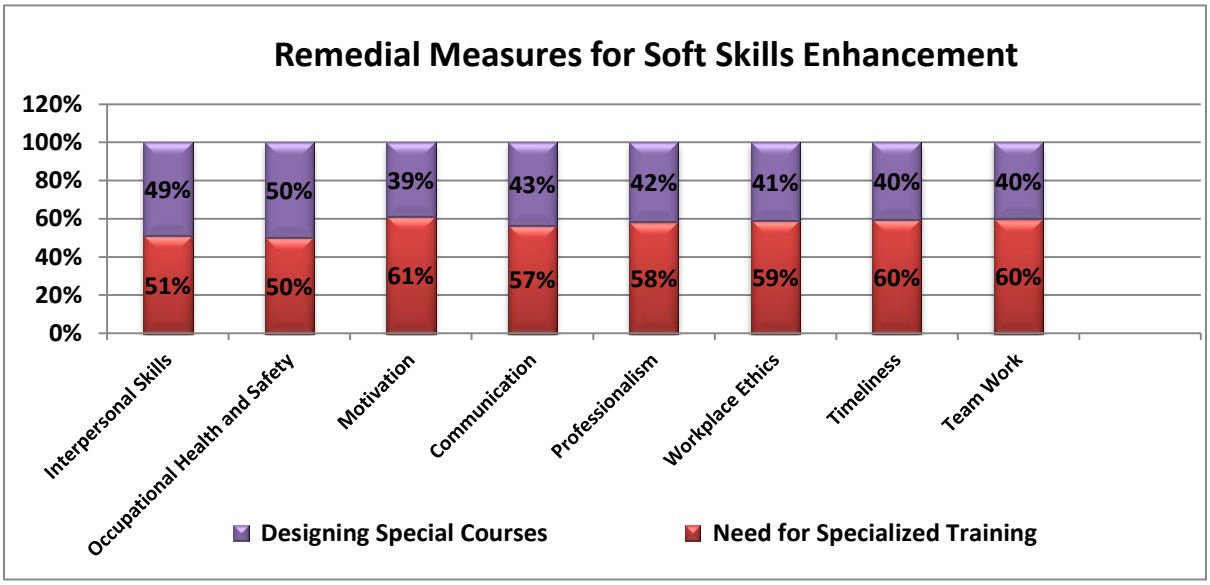

Figure 64 – Remedial Measures for Soft Skills Enhancement

Need for specialised training was favoured by more respondents compared to the measure of designing special courses for all the soft skills. There was a slight tilt towards specialised training for the soft skills of motivation, timeliness and teamwork where 60% respondents showed their preference.

6.4 Future Outlook of Next Two Years

6.4.1 Workforce Demand

Table 16 given below depicts the current employment status, current vacancies, and future production workforce need of the Garments Sector Entities. Based upon the survey conducted, we have ascertained the total number of employees employed in each department of the Garments Sector Entities. Furthermore, the entities were asked to highlight vacant positions at each job position. As far as the estimated future workforce requirement is concerned, it has been calculated based on the total employment capacity of 185,704, which has been projected at the average projected expansion rate of Garments Sector Entities i.e. 24%. Further, to identify departmental need, the existing pattern of consumption of workforce was used as a starting point. This was refined after developing base case models of both knit and woven entities defining the workforce requirements of each sub-sector keeping in view the average size of garments sector entities.

Table 16 – Workforce Demand in Next Two Years

Departments	Job Positions	Level as Per NVQF*	Criticality Level**	Currently Employed	Current Vacancies	Total Capacity	Expected Hiring in Next Two Years	
							Woven	Knit
Knitting	Knitting Master	Level 3	**High*** **	**11,091**	29	**11,363**	-	407
	Knitting Machine Operator	Level 2			140		-	1,352
	Knitting Machine Mechanic	Level 2			59		-	263
	Knitting Helper	Level 1			30		-	263
	Any other:	Level 2-3			14			-
	QCA	Level 3					-	263
	Assistant	Level 2					-	263
Weaving	Weaving Master	Level 3	**Low**	**4,914**	8	**4,996**	2	-
	Weaving Machine Operator	Level 2			46		20	-
	Weaving Machine Mechanic	Level 2			15		7	-
	Weaving Helper	Level 1			10		13	-
	Any other	Level 1			3		-	-
Production Planning	Deputy PPC Manager	Level 4	**High**	**5,627**	31	**5,659**	171	173
	Any other (Assistant)	Level 2			1		504	532
Dyeing	Dyeing Manager	Level 4	**Medium**	**5,135**		**5,220**	12	33
	Dyeing Master	Level 3			9		36	33
	Dyeing Machine Operator	Level 2			30		436	383
	Laboratory Assistant	Level 2			13		48	65
	Sampling Man	Level 2			26		24	33
	Any other (Assistant)	Level 2			7		72	98
Designing / Product	Supervisors Sampling Master	Level 3	**High**	**2,490**	30	**2,559**	8	18
	Sampling Expert (Assistant)	Level 2			21		15	27

Development (Pattern Making)	Coordinators	Level 2			18		8	-
	Any other	**Level 1/ 2**			83			
	Quality Control Assistant	Level 2					15	27
	Cutting Assistant	Level 2					15	27
	Sewing / Stitching Assistant	Level 2					126	187
	Helper	Level 1					15	28
Cutting	Cutting Master / Assistants	Level 3	**High**	**11,358**	44	**11,787**	89	73
	Fabric Layer Operator	Level 2			59		179	226
	Tracer	Level 2			35		248	137
	Cutting Machine Operator	Level 2			270		179	147
	Bundle Maker	Level 2			20		663	434
	Any other (QCA Cutting Inspectors)	Level 3			-		60	448
Embroidery	Designer	Level 3	**Low**	**5,895**	24	**6,014**	36	50
	Sampling Man	Level 2			11		36	50
	Machine Operator	Level 2			49		286	400
	Any other:	Level 1-2			35		-	-
	Supervisor	Level 2					36	50
	Applique Cutter	Level 2					71	50
	Mechanics	Level 2					107	50
	Helpers	Level 1					143	100
Stitching	Production In charge	Level 3	**High**	**95,567**	37	**103,644**	109	280
	Supervisor	Level 2			840		530	280
	Quality Checker	Level 2			1,055		430	843
	Machine Operator	Level 2			6,111		7,894	10,659
	Sewing Machine Mechanic	Level 2			25		218	277
	Any other	Level 1-2			34		3,166	560
Laundry /	Washing Master	Level 3	**Low**	**6,304**	12	**6,462**	20	-

Washing	Laboratory Assistant	Level 2			18		15	-
	Washing Machine Operator	Level 2			56		180	-
	Hydro Operator	Level 1			14		30	-
	Steam Operator / Dry Operator	Level 1			13		150	-
	Mechanic	Level 1			11		30	-
	Any other:	Level 1			34		-	-
	Dryer	Level 1					180	-
	Helper	Level 1					120	-
	Oven	Level 1					391	-
	Scraping	Level 1					225	-
	Spray	Level 1					180	-
	Helper	Level 1					50	-
Finishing and Packing	Packing In Charge	Level 2	**Medium**	**19,817**	16	**20,193**	24	55
	Finishing In Charge	Level 2			9		48	118
	Button, Rivet Machine Operator	Level 1			95		360	-
	Thread Cutter	Level 1			124		294	658
	Press Man	Level 1			92		175	159
	Any other:	Level 1-2			40		-	-
	Inspector	Level 2					296	282
	Alter	Level 1					96	97
	Helper	Level 1					96	97
	Salvager	Level 1					72	76
	Packing Helpers	Level 1					967	959
Industrial Engineering	Industrial Engineer	Level 2	**High*** **	**2,183**	12	**2,204**	11	38
	Any other:	Level 2-3			9		-	-
	Deputy Manager	Level 3					11	38

	Assistant	Level 2					74	38
	Instructor	Level 2					141	141
	Time and Motion Study	Level 2					38	38
Quality Control	Inline Quality Checker	Level 2	**Low**	**5,136**	217	**5,603**	321	-
	End of the Line Quality Checker	Level 2			194		73	689
	Any other:	Level 1-2			56		-	-
	Supervisor	Level 2					56	-
	Assistant QCA	Level 2					144	-
	Dispatcher	Level 1					80	-
				175,517	**10,294**	**185,704**	**20,975**	**23,072**

***Please refer to the NVQF Table below for overall Explanation of the Table.**

****Based on responses received while surveying Garments Sector Entities**

*****According to feedback from PHMA "Merchandising" "Fabrication" "Designing" and "Mechanics" are highly critical areas and have high demand in future.,further "Weaving" and "Industrial Engineering" Depertments are now rated as "High" with respect to the criticality level keeping in view this feadback..**

Additionally, we have given these projections based on the pre-defined levels mentioned in the National Vocational Qualification Framework (NVQF):

Table 17 – NVQF Table

Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Knowledge	Elementary	Basic	Broad	Comprehensive	Advanced	Expert
Skills	Limited skills	Basic skills	Broad range of skills	Professional level of skills	Specialist level of skills	Expert level of skills
Competency Outcome	Semi-skilled	Skilled	Highly skilled	Professional worker	Specialist worker	Expert worker

Additionally, we have prioritised the departments in terms of their criticality level as identified during demand side assessment. Higher criticality level indicates that there is an immediate need to address these departments in designing future strategy.

6.4.2 Workforce Demand Projections for Entire Garments Sector of Punjab

Based on the survey results of 250 Garments entities, the projected workforce requirement for the next two years was found out to be 44,047; distributed between woven and knit subsectors as 20,975 (47.6%) and 23,072 (52.4%) respectively. On the basis of this result, the manpower requirements for the entire Garments sector have been worked out as follows:

As per the industry sources, around 80% of Garments sector entities are in formal sector and 20% in informal sector which are providing support to formal garments sector entities. The formal sector is represented by PRGMEA and PHMA. In Punjab, the active members of PRGMEA are 183 while those of PHMA are 421. That means that total number of Garments sector entities in formal sector in Punjab are 604. Since the shares of formal and informal sectors in the sample were in accordance with those in the total population (20%, i.e. 50 out of 250 were from informal sector), the workforce requirement of the whole Garments sector of Punjab has been calculated through simple extrapolation as 133,022. In line with the trends found in the survey, the distribution of this projected demand has been worked as 63,345 for woven (47.6%) and 69,677 for knit (52.4%) subsectors.

Distribution of the projected workforce requirement between formal and informal sectors has also been calculated on the basis of the current workforce distribution pattern; found during the survey. Total current workforce requirements of the surveyed entities were found to be 175,517 of which 172,517 were found to be from the formal sector. This indicates that 98.3% of workforce is absorbed by the formal sector and only 1.7% by the informal sector. On this basis, the distribution of the total projected demand of 133,022 has been worked out as 130,748 for the formal and 2,274 for the informal sector.

The results are summarised in Table 18 and Table 19.

Table 18 – Projected Workforce Demand – Woven-Knit Distribution

Sub Sector	Projected Workforce Demand for Next Two Years (No.)
Woven Subsector	63,345
Knit Subsector	69,677
Total	**133,022**

Table 19 – Workforce Demand – Formal-Informal Distribution

Type of Entity	Projected Workforce Demand for Next Two Years (No.)
Formal	130,748
Informal	2,274
Total	**133,022**

6.4.3 Emerging Challenges

This sub-section explains the challenges being faced by Garments sector entities, due to shortage of required skills and new technological advancements and the strategies to be adopted to deal with those challenges.

6.4.3.1 Challenges faced by Garments Sector

An open ended question was posed to sector experts to obtain their views on the challenges being faced by Garments Sector. Figure 65 shows the responses received from the experts.

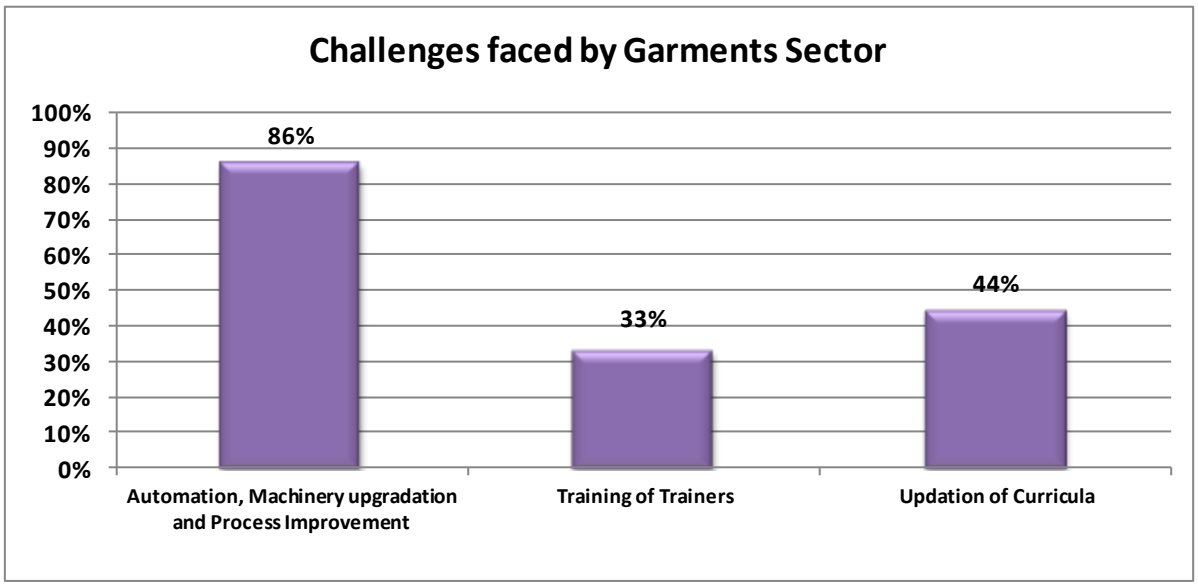

Figure 65 – Challenges Faced by Garments Sector

86% sector experts viewed automation, machinery up gradation and process improvement as the main challenge, 44% said that updating of existing curricula is the main emerging challenge, followed by Training of Trainers which was viewed by 33% as an important emerging challenge.

6.4.4 Prospects of Benefiting from Award of GSP Plus Status

Respondents were asked about whether GSP Plus status awarded to Pakistan by EU would enable Garments Sector to take benefit or not. About 78% of the total respondents responded in 'Yes' and only 22% responded otherwise. The split is shown in Figure 66.

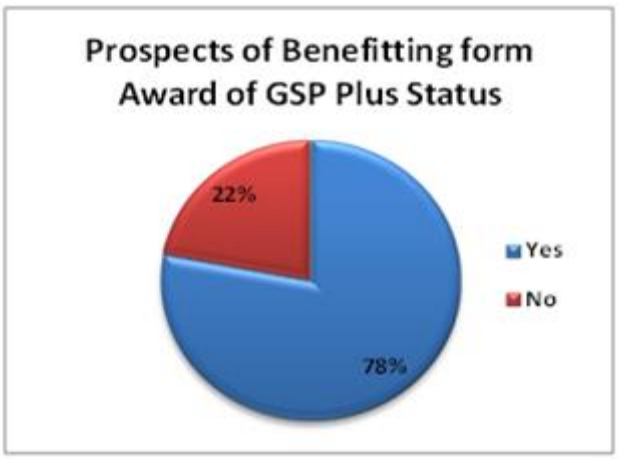

Figure 66 – Prospects of Benefiting from GSP Plus Status

78% respondents who replied affirmatively were further asked about suggestions to tap the available opportunity.

6.4.5 Strategies to Benefit from GSP Plus Status

54% respondents suggested that Government support should be provided to deal with energy crisis, law and order situation should be improved and infrastructure should be improved. 36% respondents considered skill and technology improvement as the main element of strategy, followed by 10% respondents who emphasised on the importance of timely meeting the deadlines imposed by EU to maintain GSP Status. Figure 67 shows the results.

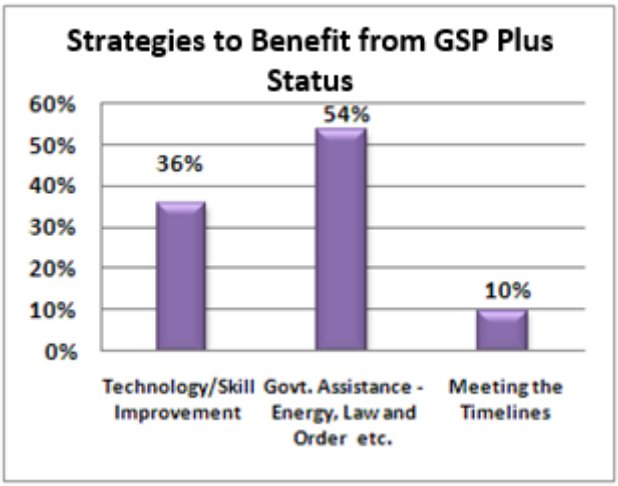

Figure 67 – Strategies to Benefit from GSP Plus Status

22% respondents, who were pessimistic about beneficial prospects emerging from the award of GSP Status, were further inquired about the reasons of their disagreement. The results are presented in Figure 68.

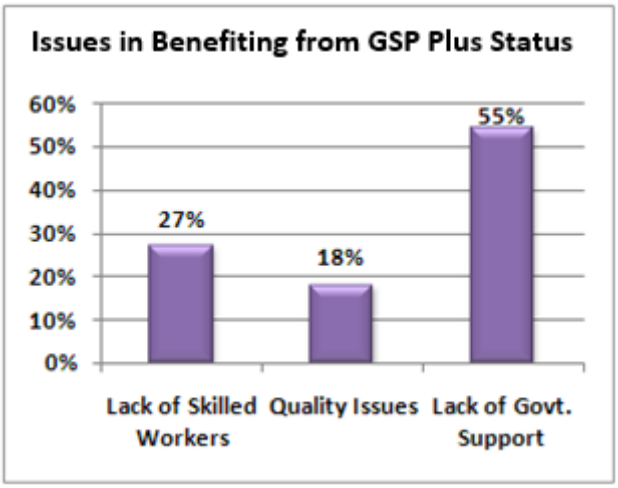

Figure 68 – Issues in Benefiting from GSP Plus Status

55% considered weak government support for the industry as the main obstacle, whereas 27% were of the view that shortage of skilled workforce was the main hindrance and remaining 18% pinpointed the quality issues as the main constraint for not getting the maximum benefits.

6.4.6 Shortage of Required Skills for Emerging/New Technologies

Introducing new technologies has always been a challenging task since that has to be accompanied by simultaneous developments in leadership, financial resources, personal and organisational relationships, coordination and staff development. Another important aspect is to develop the workforce to ensure optimal gain from introduction of new technologies. In order to improve the prevailing skills set of the workforce with the introduction of new technologies, following skill areas have been identified by the sector experts and Garments sector entities for which human resource will need to be trained:

- Computerised Sewing Machines Operating skills
- Computer Aided Designing/Computer Aided Manufacturing (Gerber Grading Technology - GGT)
- Computerised Dyeing
- Switch Track System
- Horizontal Cutting
- Laser Cutting Machines Skills
- Mock Stitching Skills
- Production Planning
- Quality Control Skills
- Supply Chain Management
- Workplace Ethics

6.4.7 Tackling Technological Challenges

Sector experts were inquired about the approaches to tackle technological challenges being faced by workforce. Varied responses were noted. The results are shown in Figure 69.

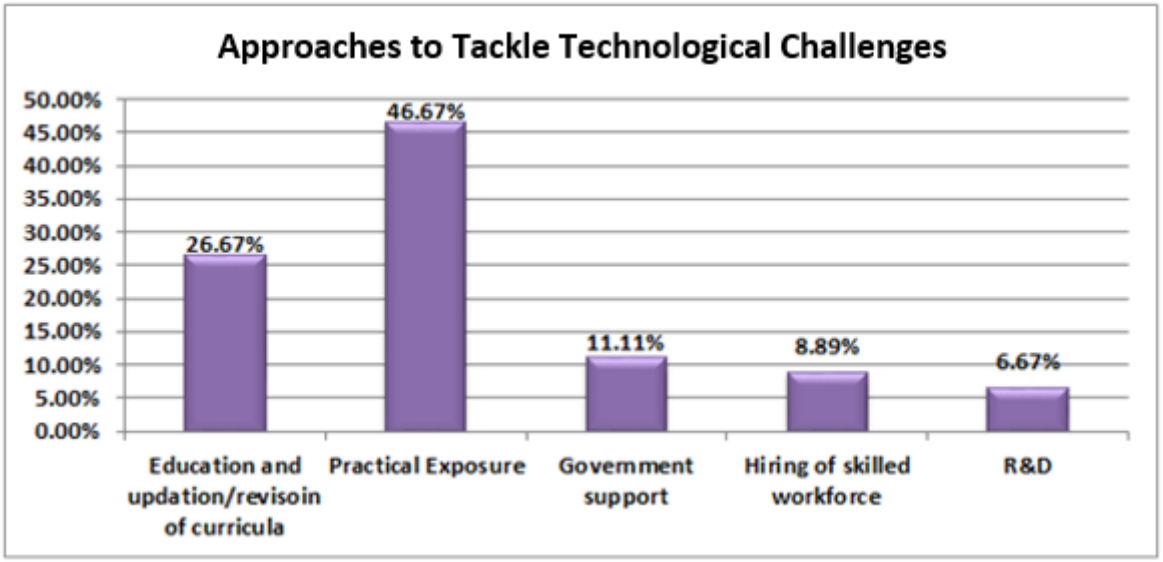

Figure 69 – Approaches to Tackle Technological Challenges

47% respondents recommended enhancing the practical exposure of workforce, while 27% suggested the need of education and revision of existing curricula. 9% highlighted the need of hiring skilled workforce, 11% respondents mentioned the need of government support and only 7% stated the need for research and development mechanism.

6.5 Conclusions and Recommendations

Garment manufacturing starts with receiving fabric as a raw material and passes through various departments to undergo several processes. The survey identified commonality of departments existing in Garments sector entities. It was found that Stitching department exists in 97% entities, Cutting in 94%, Finishing in 90% and Accounts & Finance in 94% entities. Stitching department has the maximum concentration of employees (52%) and the highest female workforce representation (16%). Currently, 55% of the workers in the Garments Sector are Piece Rate Workers drawing a minimum wage of PKR 12,000. Stitching department was also identified by 75% respondents as most preferred department for female employment. According to the survey findings it was found that Garments sector hires senior and middle management employees through internet, newspapers and job postings whereas, operational level workers were hired through contractors and help-wanted signs.

The proficiency level of the workforce was rated by the responding entities for all management cadres at 63% or above whereas sector experts assessed the workforce as 46% possessing average skills. Trainings and workshops must be organised based on the international standards so that the proficiency level of employees may be matched with the proficiency level of emerging economies which will eventually improve the quality of output.

The criticality level attached to different technical skills areas in garment production process was rated as high, medium or low by the respondents (entities and TSPs) A review of demand side and supply side perspectives reveals that for some skill areas, the assessment of demand and supply sides seems to be in line while for others there is a difference in the level of importance attached to these skill areas. For soft skills, majority of the respondents realised the importance of soft skills and rated their criticality as high or medium emphasising the importance assigned to these skills.

Although 66% respondents reported increasing employment trend; yet the entities also indicated a current shortage of workforce at different management cadres (10,187) and hard to fill vacancies (3,841). Most common reasons for the vacancies to be hard to fill were lack of demand driven skills, incompatibility of curricula with the industry requirements, high flight of skilled workforce and lack of career guidance. This view is reinforced by the views of 46% sector experts saying that the workforce was poorly available. Furthermore, the survey also identified that given the expansion plan of increasing the installed capacity at 24% on average, the surveyed entities alone (which are almost 41% of the garments sector in Punjab) will require an additional operational workforce of 44,047 persons which on extrapolating upon population results in 133,022. Correspondingly, a plan will have to be developed by TSPs to meet the identified demand since the existing training capacity of the surveyed TSPs is only 6,168 persons.

Both the surveyed groups, sector experts and TSPs, agreed on the existence of demand and supply gap in the Garments sector workforce. The other important issue reported by Garments sector was the lack of adequate skills in the workforce graduating from TSPs. There are multiple reasons for this gap; the more important being the lack of coordination between industry and TSPs (from curricula design to job placement), lack of updated and demand driven curricula, limited and outdated infrastructure of TSPs, untrained trainers and lack of government support. There is a need to remove these gaps by increasing interaction

between industry and TSPs to increase practical exposure, designing modern, demand driven curricula and effectively training the trainers.

The survey also identified challenges faced by the sector. On the external front, energy crisis and deteriorating law and order situation are the key challenges while the recent award of GSP Plus status offers an attractive growth opportunity. Government needs to initiate appropriate steps to extend support to the industry to cope with these challenges and opportunities. On the internal front, updating of machinery and technology, adequacy of talented workforce and process automation would enable the sector to achieve expectations of the stakeholders.

7.0 TRAINING AND DEVELOPMENT

This section highlights the ability and capacity of Garments Sector entities and Training Service Providers to train individuals, training strategies adopted by them and assessment of Training of Trainers.

7.1 Training Capacity of Garments Sector Entities

This sub-section relates to the assessment of employers and TSPs' ability and capacity to train individuals, types of trainings provided and expansion plans of TSPs.

7.1.1 Provision of Formal Training

The entities were asked about the existence of any system for training their workforce. The results indicated that 32% of the entities provided formal training to their workforce while 68% of the entities did not have such system in place. Figure 70 shows the results.

Figure 70 – Existence of Formal Training System in Entities

Exploring the reasons for not providing any formal training, 48% of the respondents reported lack of resources to be the major factor in this regard while 52% did not consider these trainings beneficial for development of their workforce. Division of responses is shown in Figure 71.

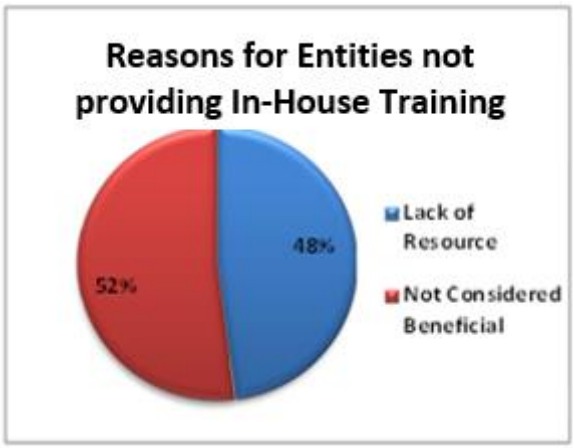

Figure 71 – Reasons for Entities not providing In-House Training

7.1.2 Number of Employees Trained during Last Twelve Months

Entities providing training to their workforce were further asked about the number of employees trained. It was found that only 4.36% of the existing workforce of the surveyed entities was provided any formal training, which cannot be termed encouraging. Table 20 depicts complete results.

Table 20 – Percentage Employees Trained by Entities through In-House Training

Employees Trained	
Total Employees	175,517
Employees Trained in last 12 Months	7,655
Percentage of Employees Trained	4.36%

7.1.3 Budget for Employees Training

Garment entities providing technical training to their employees were inquired about any budgetary allocation to conduct trainings. It was found that only 33% of the entities allocated a budget while 67% did not have any such provision, indicating the ad-hoc nature of training activity. Figure 72 shows the split.

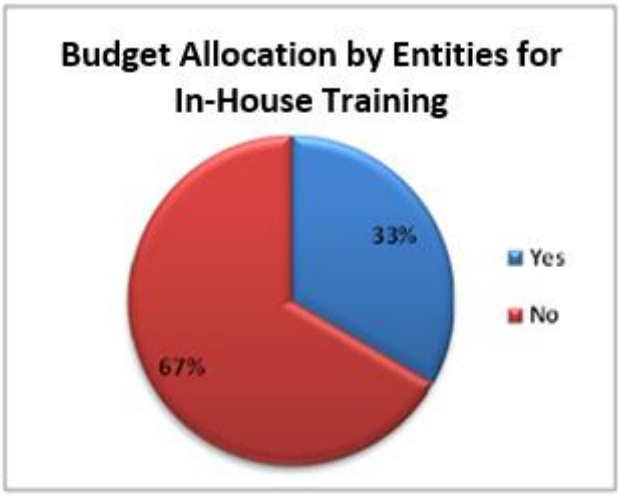

Figure 72 – Budget Allocation by Entities for In-House Training

58% respondents reported to allocate less than 1% of their total expenditures for trainings, 38% allocate 1-5% and 4% had budgetary allocations more than15% of total expenditure. Figure 73 presents the results.

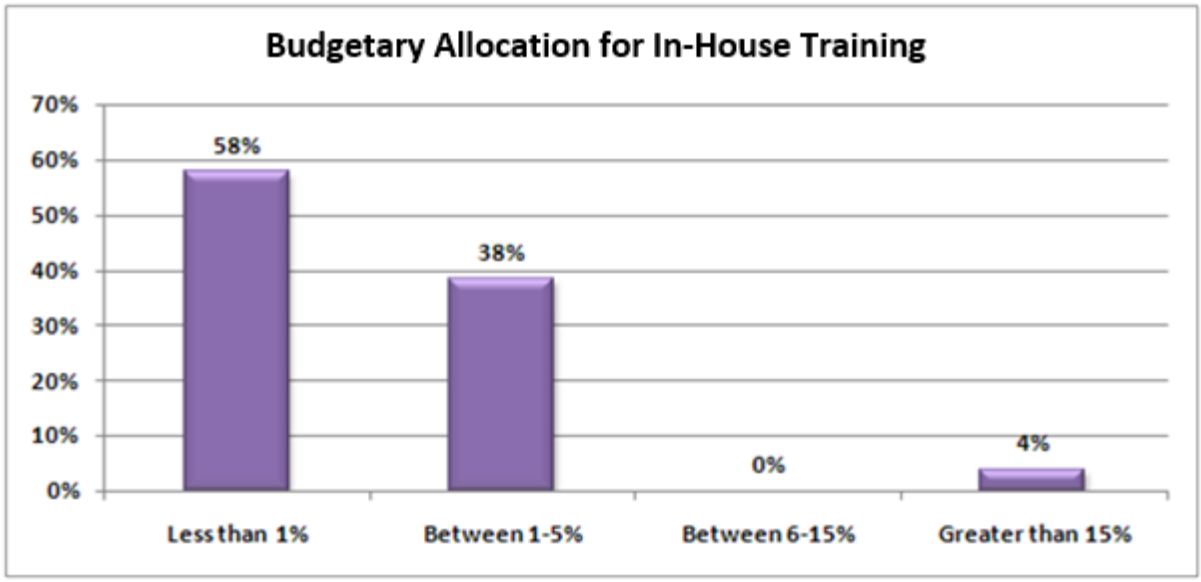

Figure 73 – Budgetary Allocation for In-House Training

7.1.4 Availability of Training Centre

Entities providing training to its workforce were further questioned if there was any separate training centre at their location through which training activity was initiated. 38% entities responded 'Yes' while 62% said that they did not have any such training centre in place. The split is shown in Figure 74.

Figure 74– Availability of Training Centre in Entities

7.2 Training Capacity of TSPs

7.2.1 Quality of Training by TSPs

Our survey findings revealed that majority of the sector experts were not satisfied with the quality of training being provided by technical and vocational training institutes. 42% experts rated the quality as average and 28% rated it as poor. Only one fourth of the experts interviewed were of the view that the quality of the training was good while 6% rated the training quality to be excellent. Results are depicted in Figure 75.

Figure 75 – Assessment of Training Quality by TSPs

7.2.2 Desire for Expansion Plan

On inquiring the respondents if they had any expansion plans in place to increase their footprint, 60% TSPs replied positively and the remaining in negation. Response split is shown in Figure 76.

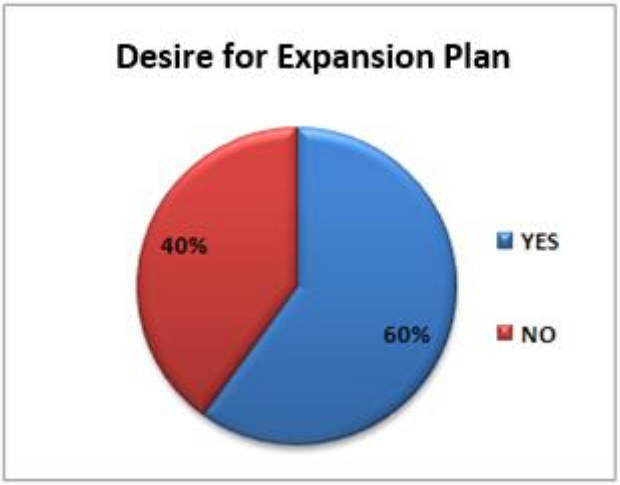

Figure 76 – Desire for Expansion Plan

7.2.3 Expansion Plan of TSPs

TSPs which were planning to expand were further inquired about the nature of expansion that they would pursue. 93% respondents expressed the desire to introduce new courses, 33% responded to increase their geographical outreach and 27% intended to improve their physical infrastructure. Figure 77 shows the results.

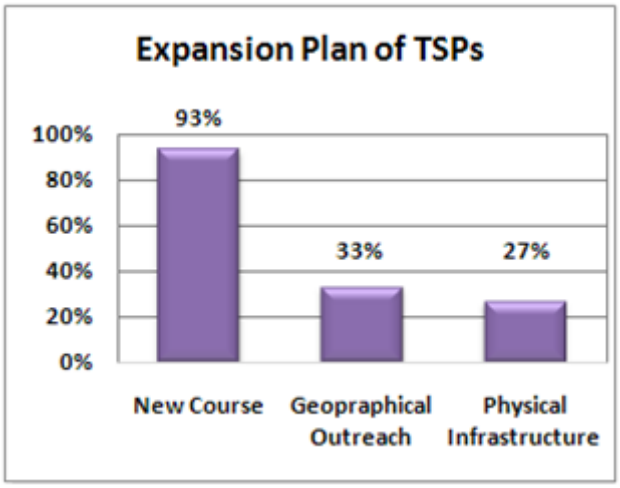

Figure 77 – Expansion Plan of TSPs

In the wake of emerging technologies and advancements in production processes, TSPs acknowledged the importance of redesigning the curricula currently being taught and of expanding the technological infrastructure to impart relevant and quality trainings to the workforce so as to enable them to encounter the emerging challenges.

7.3 Training Strategies

This sub-section explains different types of trainings being provided by Garments sector entities and the preferred modes of trainings for development of workforce.

7.3.1 Types of Training

With regard to assessment of training strategies, entities were asked about pre-defined types of trainings being provided to both existing and new employees.

For new employees, 36% entities were found to train their workforce through vocational training institutions, while 52% entities stated that on job training was adopted by them. 12% entities stated that workers were trained through apprenticeship.

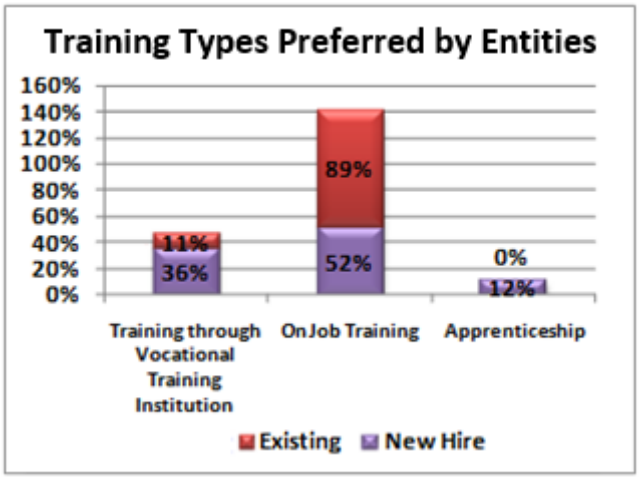

Figure 78 – Training Types Preferred by Entities

For existing workforce, 89% entities trained their workers through on the job training whereas 11% entities stated that their existing workforce was trained through vocational training institutes. Figure 78 shows the results.

7.3.2 Average Duration of Training

86% entities reported three months as the average training duration. 14% reported the training period to range between four and six months. This indicated that short training programmes were preferred by the entities. The responses are presented in Figure 79.

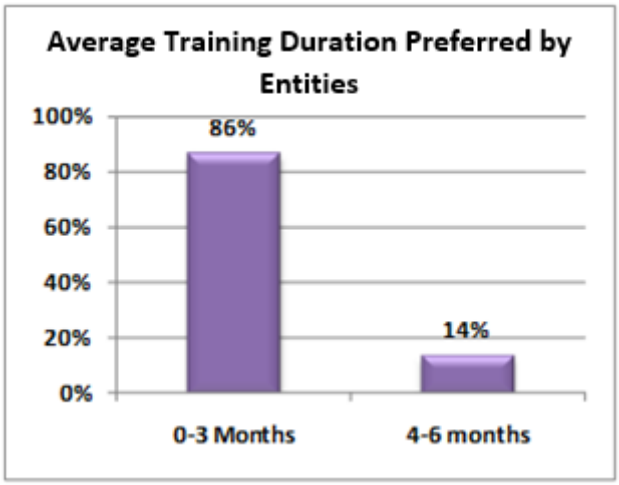

Figure 79 – Average Training Duration Preferred by Entities

7.3.3 Preferred Modes of Training

Another dimension explored during the survey related the preferred modes of training to the currently adopted ones. Responses indicated that 51% of the respondents preferred provision of training through vocational training institutions, followed by 49% for on the job training. None of the entities preferred apprenticeship training. Figure 80 shows the results.

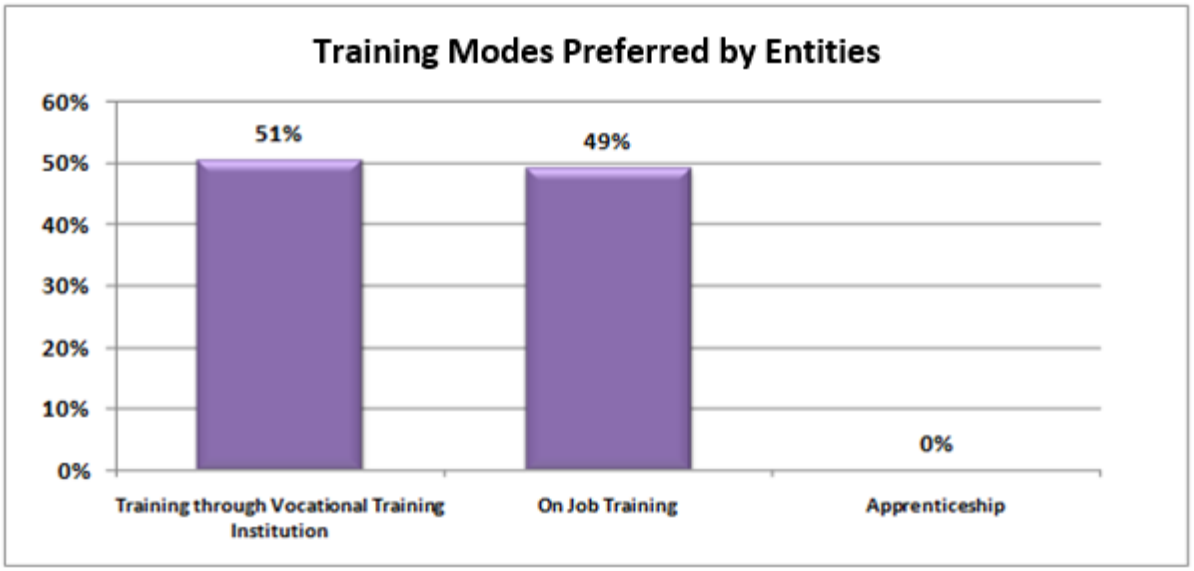

Figure 80 – Training Modes Preferred by Entities

Regarding the reasons/hurdles to use the preferred modes of training, 64% entities considered lack of resources as the main reason for not opting the preferred mode of training. Other reasons included lack of management commitment (11%) strict timelines (11%) and disconnect between industry and market (14%). Results are shown in Figure 81.

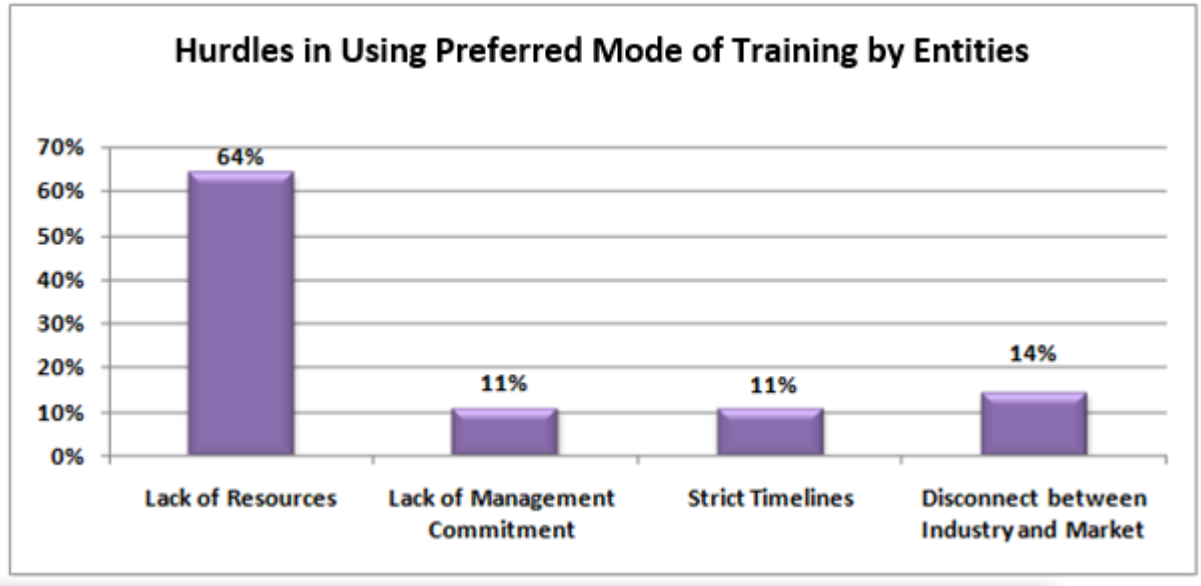

Figure 81 – Hurdles in Using Preferred Mode of Training by Entities

7.4 Training of Trainers (ToTs)

This sub-section deals with the assessment of Training of Trainers requirements within the sector to plan for designing related strategies.

7.4.1 Training of Trainers (ToT) Mechanism

TSPs were asked if they had any mechanism in place to arrange ToT sessions for their faculty on regular basis. It was found that only 32% TSPs had a ToT mechanism in place while 68% TSPs did not have any such mechanism. Figure 82 shows the results.

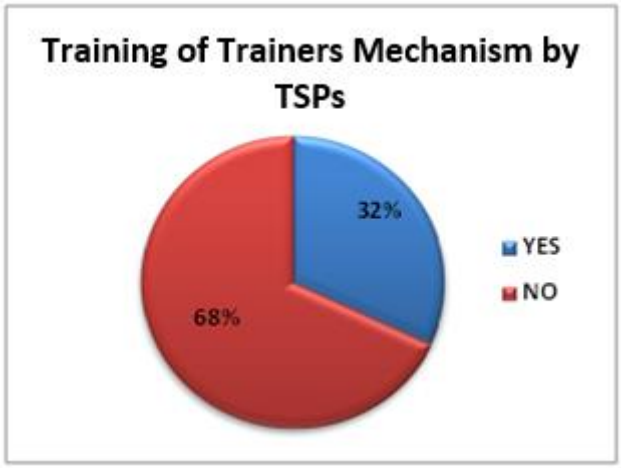

Figure 82 – Training of Trainers Mechanism by TSPs

TSPs conducting ToT sessions were further asked about the mode of training adopted for holding those sessions. Responses received are summarised in Table 21.

Table 21 – Modes for Training of Trainers by TSPs

ToT Modes of Training	Percentage of Responses
Appointment as Trainer Assistants	38%
Courses from Training Institutes	25%
Training Session with National and International Experts	25%
Online Courses	13%
Total	**100%**

38% respondents informed that trainers were appointed as trainer assistants of a senior trainer before becoming part of permanent faculty, 25% reported that trainers were sent to attend courses from training institutes. 25% told that trainers were provided an opportunity to attend training session with national and international experts and the remaining 12% got a chance to attend online courses.

7.4.1.1 Observations on ToT Mechanism

Improving the knowledge and skills base of TSP trainers is important for training and development of workforce available to the Garments sector. The significance of vocational training for Pakistan's Garments sector is highly dependent on trainer's knowledge, ability, experience and occupational skills. This scenario directs towards continuous improvement of trainers' capacities in this sector.

As trainers are meant to produce required skilled workforce, the government needs to develop a ToT mechanism/framework for TSPs providing technical education in the public and private sectors in terms of enabling them to exploit the available growth. During the survey of Garments sector entities, TSPs and Sector Experts, following observations were made:

- Lack of capacity development arrangements of trainers at the institute level
- Lack of resources and funding for ToT at institute level
- Lack of basic trainers' training infrastructure
- Lack of standardisation of trainers' profile
- Nonexistence of a mechanism for career development of trainers
- Lack of process controls for certification and accreditation for ToT
- Lack of communication channels i.e. the training institute and trainers
- Lack of harmonised recruitment and selection criteria for trainers
- Lack of competency based training role and duties of trainers
- Absence of trainers' skills development programmes
- Lack of interest and motivation of TSPs for hiring of experienced and well qualified trainers
- Lack of third party evaluation and appraisal mechanism for trainers
- Lack of industry experience of trainers
- Weak arrangements for up gradation of the technical skills instead of mainly focusing on pedagogical trainings.

7.5 Conclusions and Recommendations

7.5.1 Garments Sector Entities and TSPs' Ability and Capacity to Train Individuals

Concluding the discussion on Garments Sector Entities and TSPs' ability and capacity to train individuals, it was noted that only 32% entities had a formal system in place to train their workforce, which is only 4.47% of the existing workforce trained during last twelve months. Only 33% entities providing training allocated special budget as a percentage of their total expenditure. This is not a very encouraging situation in terms of perceived importance of training activity. It is therefore important to emphasise its importance and create awareness.

Of the entities which were not engaged in training activities, majority (52%) did not even believe in a training system and considered it a waste of organisational resources. The remaining quoted lack of resources as the major reason for not undertaking training activity.

In response to a question posed to TSPs regarding the prospects of expansion, 60% replied affirmatively. 93% of those expressed the desire to introduce new courses, 33% to increase their geographical outreach and 27% to improve their physical infrastructure.

7.5.2 Training Strategies

Different training mechanisms being used by Garments Sector Entities to train workforce include training through vocational training institutes, on job training and apprenticeship arrangements. The most appropriate training mechanism identified was on-job training by 49% Garments sector entities. The responding entities were also inquired about the preferred modes of training and the constraints in following those 60% respondents termed lack of resources as the major factor; along with lack of management commitment and disconnect between industry and service providers.

8.0 APPRENTICESHIP AND JOB PLACEMENT

This section assesses the current situation in Garments sector entities and Training Service Providers about apprenticeship programmes. Issues being faced preferred institutes for recruitment and job placement prospects of trainees have been explored during this assessment.

8.1 Apprenticeship Programme

Entities were asked if they have been offering apprenticeship programmes as defined in the apprenticeship ordinance of 1962. 26% respondents reported to have had an arrangement for apprenticeship programme whereas 74% responded otherwise. Split is shown in Figure 83.

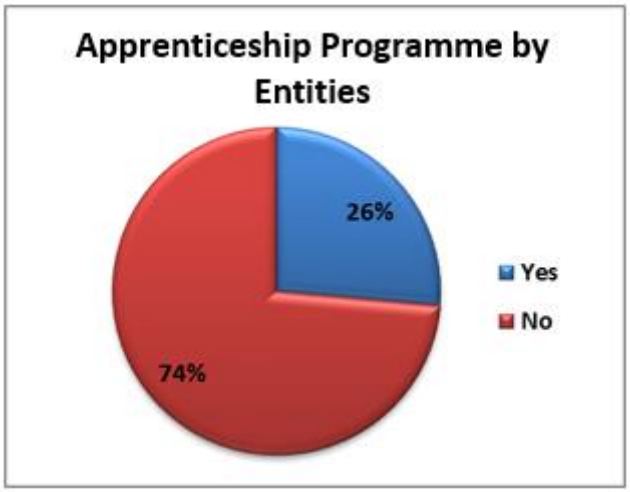

Figure 83 – Apprenticeship Programme by Entities

8.1.1 Apprentices Engaged per Annum

Entities having apprenticeship programme were also asked about the average number of annual apprentices engaged. It was found that 97% of the respondents engaged less than 50 apprentices annually whereas only 3% engaged more than 50 apprentices a year. Figure 84 shows the results.

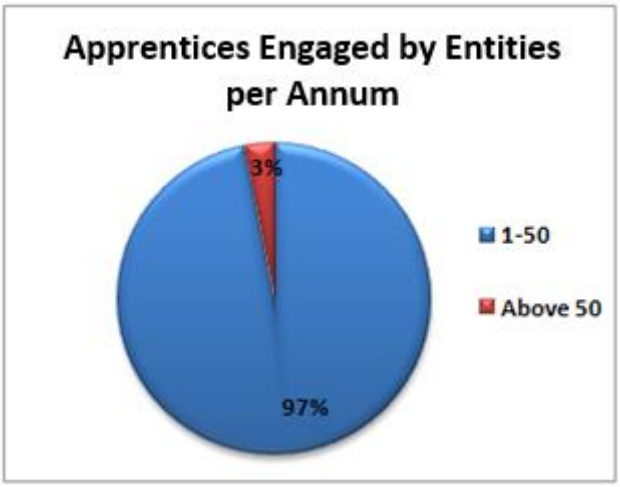

Figure 84 – Apprentices Engaged by Entities per Annum

8.1.2 Duration of Apprenticeship

On an overall a basis, there was a tendency to keep the duration of apprenticeship programmes smaller. It was found that 67% of the entities running apprenticeship programmes reported period of apprenticeship up to three months; while 26% of the entities engaged apprentices for four to six months. Only 8% of the surveyed entities conducted the programme for a period of more than six months. The results are shown in Figure 85.

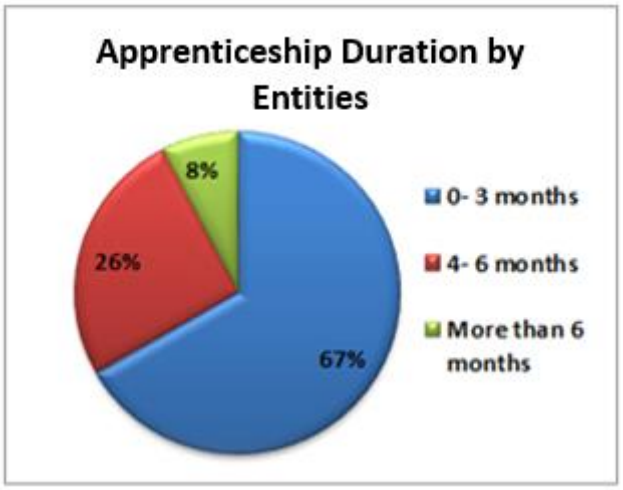

Figure 85 – Apprenticeship Duration by Entities

8.1.3 Conversion of Apprentices into Employees

The incidence of retaining apprentices as regular employees by the training entities was found to be small. Only 26% entities were found to retain their apprentices. Even those entities do not retain all of their apprentices. On an average, 65% apprentices were converted into regular employees. Figure 86 shows the results.

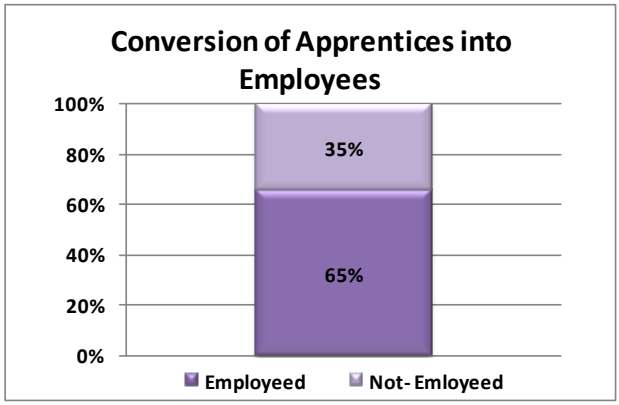

Figure 86 – Conversion of Apprentices into Employees

8.1.4 Honorarium of Apprentices

Survey analysis revealed that entities, which engaged apprentices, pay them an honorarium during their apprenticeship. This honorarium is on average 60% of the salaries of the employees working in the same positions. Figure 87 shows the results.

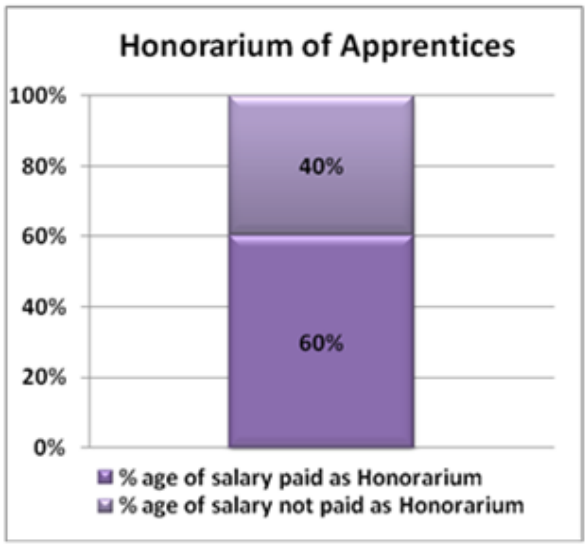

Figure 87 – Honorarium of Apprentices

8.1.5 Provision of Experience Letter to Apprentices

Garments sector entities employing apprentices were also asked about their policy of issuing experience letters to the apprentices successfully completing their apprenticeship period. 91% entities reported that they issue experience letter/certificate to the apprentices whereas 9% entities were found not doing this. Figure 88 shows the split.

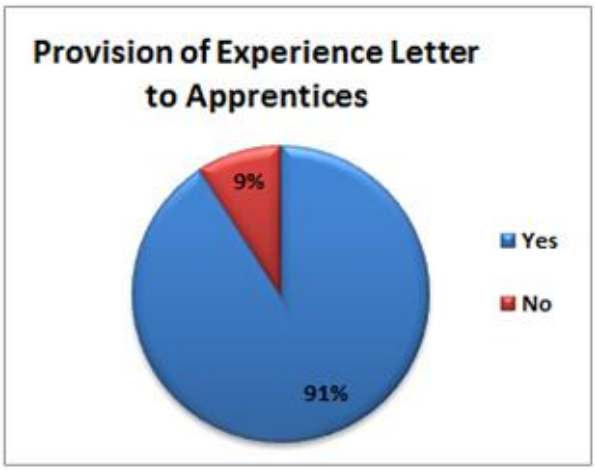

Figure 88 – Provision of Experience Letter to Apprentices

8.1.6 Problems in Taking or Continuing with Apprentices

The surveyed entities were also asked to identify the hurdles faced in taking or continuing with the apprenticeship programmes being run by them. The responses indicated that 29% entities considered continuing the apprenticeship programme a waste of resources; whereas 44% of the respondents stated that the apprentices left the organisation for higher pay during apprenticeship. Figure 89 shows the results.

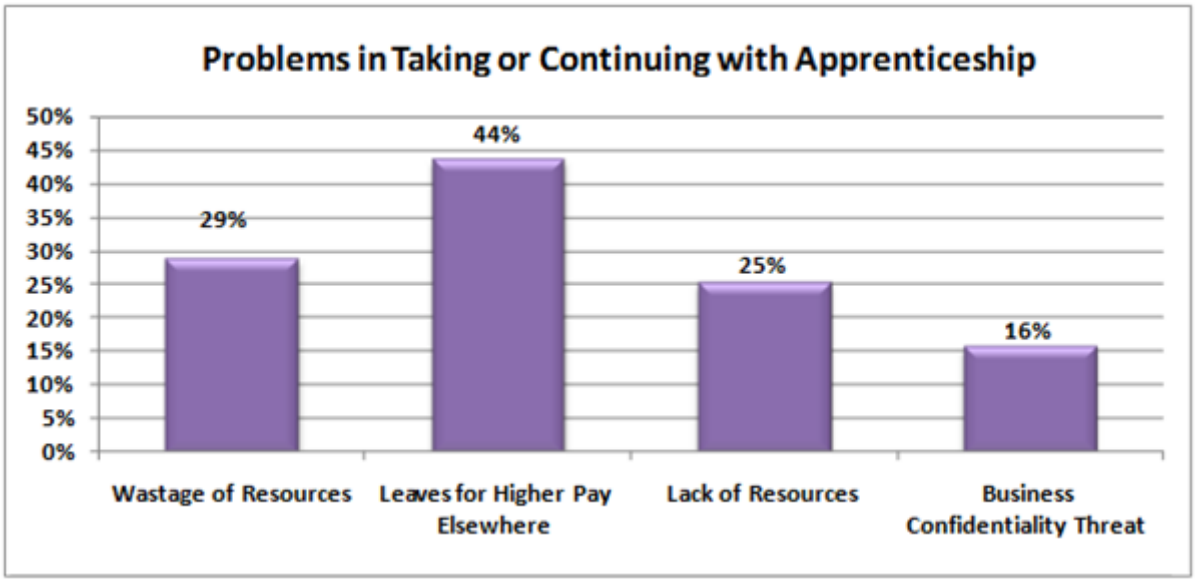

Figure 89 – Problems in Continuing with Apprenticeship

25% respondents termed lack of resources as the main issue in this regard and 16% replied that confidentiality threat to the organisation acted as the key constraint to continue with apprenticeship program.

8.1.7 Internship/Apprenticeship Arrangements-TSPs View

In line with analysis carried out in the demand side assessment, TSPs were also inquired about the existence of internship/apprenticeship programmes. 24% TSPs reported existence of internship/apprenticeship arrangements in place with Garments Sector entities and 76% institutes did not have such arrangements in place. Distribution of responses is shown in Figure 90.

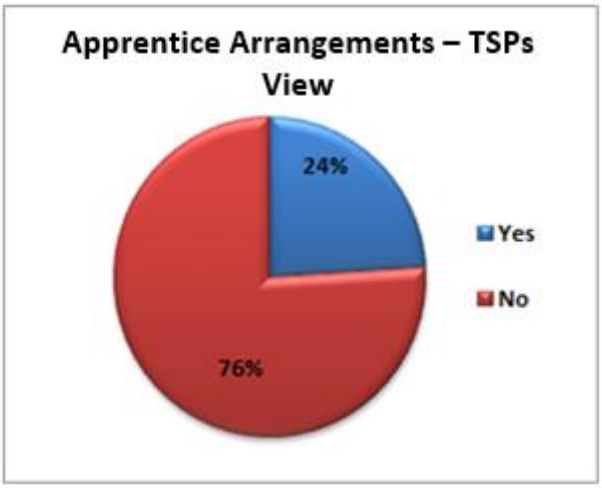

Figure 90 – Apprentice Arrangements – TSPs View

8.1.8 Placement of Apprentices

TSPs having internship/apprenticeship arrangements with Garments sector entities were asked about the average number of interns/apprentices placed. The results are shown in Figure 91.

67% TSPs reported placement of students in the range of 1-5 while 17% TSPs informed placement of their students in the range of 6-10 and an equal percentage of respondents reported placement of more than 10 students.

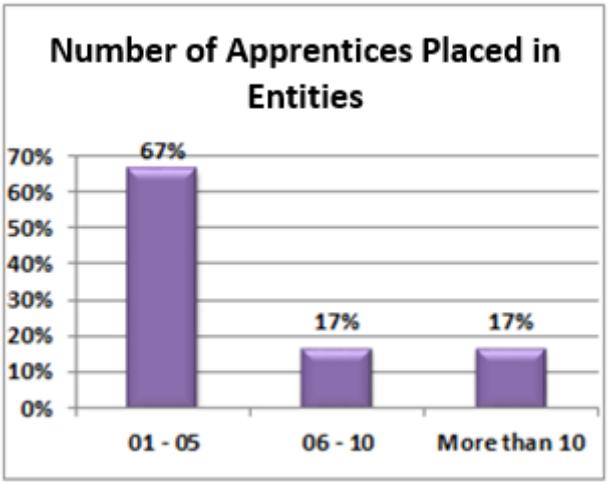

Figure 91 – Number of Apprentices Placed in Entities

8.1.9 Duration of Apprenticeship

The surveyed TSPs were also inquired about the average duration of apprenticeship. The findings revealed that the most commonly followed duration was three months. 67% interns/apprentices received 3 months internship/apprenticeship. 17% interns/ apprentices got one month internship/ apprenticeship; and 17% interns/apprentices managed to obtain six months internship/apprenticeship in the Garments sector entities. Figure 92 shows the results.

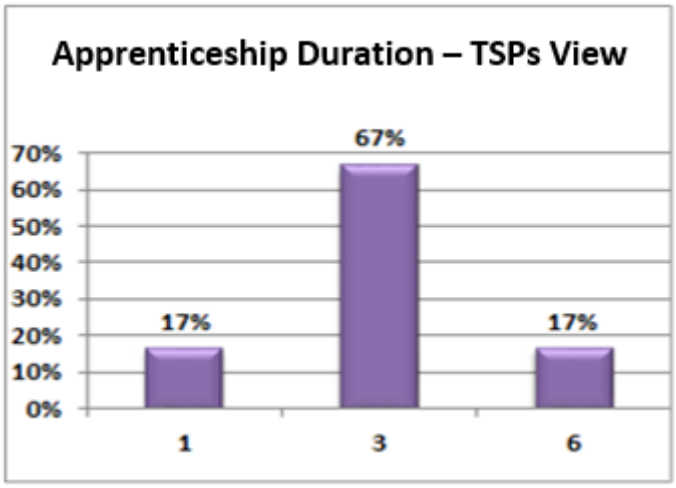

Figure 92 – Apprenticeship Duration – TSPs View

8.1.10 Job Placement within 60 days

TSPs were asked about the job placement prospects of their graduates within 60 days. Table 22 provides the responses noted:

Table 22 – Job Placement Prospects within Sixty Days

Name of Program	Average percentage of graduates obtaining relevant job within 60 days
Sewing Machine Operators	90%
CAD /CAM	79%
Merchandising	91%
Quality Control	81%
Pattern Drafting Maker	87%
Industrial Engineering	75%
Computerised Embroidery	72%
Fashion Designing	79%

All these above mentioned programmes are highly demanded in Garments sector and have over 70% prospect for the job placement within 60 days of passing out from the programme. People trained in merchandising and sewing machine operations have the highest probability of getting jobs as more than 90% of their graduates manage to get a job within sixty days.

8.1.11 Difficulties in Job Placement

With regard to difficulties faced by TSPs for placement of their students, following reasons were identified due to which students were unable to find a job, relevant to their skills and expertise, within a stipulated period of sixty days:

- Lack of required skills and expertise in new graduates
- Lack of industry exposure
- Gender discrimination
- Deteriorating law and order situation
- Economic turmoil and energy crises
- Social and cultural issues

Resolving the above-mentioned issues will improve the prospects of students' placements.

8.1.12 Follow up Steps for Job Placements after Graduation

On further inquiring about the follow-up steps taken by TSPs to place their newly graduated students, 68% respondents replied positively and the remaining 32% in negation. Response split is shown in Figure 93.

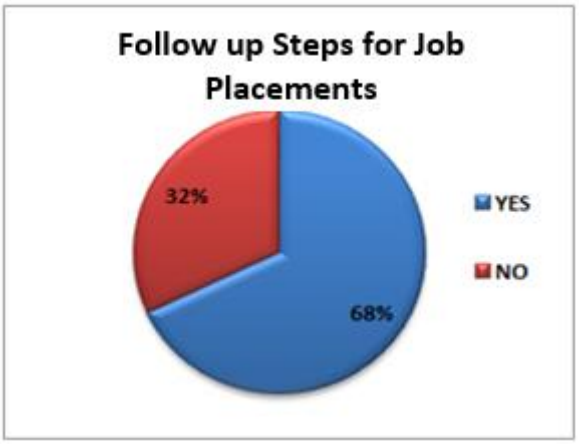

Figure 93 – Follow up Steps for Job Placements

Three types of follow up steps were identified by the TSPs for job placements of their graduates. Table 23 shows the responses.

Table 23 – Follow up Steps for Job Placement by TSPs

Follow up Step(s)	Percentage
Personal References	6%
Recruitment Seminars and Exhibitions Arranged by TSPs	65%
Placement through Garments Sector Linkages	29%
Total	**100%**

8.1.13 Measures to Improve Job Placement Prospects

TSPs were requested to provide their preference for predefined suggested measures to improve the quality of skills set of the workforce leading to better job placement. 64% of respondents chose the option of development of training material, whereas 60% chose the need for development of industrial linkages". 48% were in the favour of improvement in technical infrastructure/labs" whereas 40% opted for continuous professional development of faculty. The results are depicted in Figure 94.

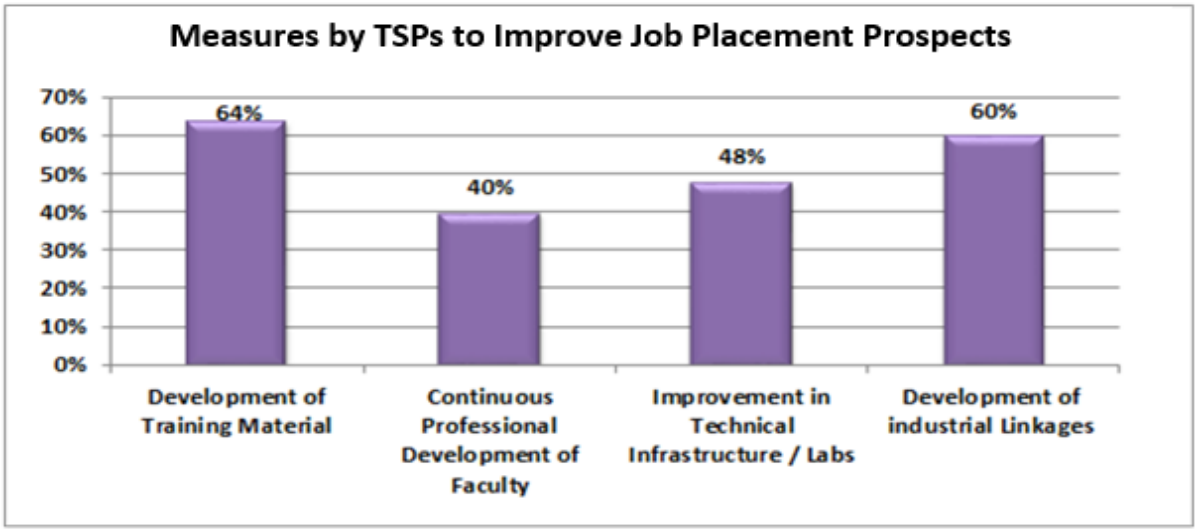

Figure 94 – Measures by TSPs to Improve Job Placement Prospects.

8.2 Conclusions and Recommendations

Reviewing the survey findings, it is noted that approximately 26% entities and 24% TSPs were engaged in offering apprenticeship programmes. Majority of these programmes covered a period of three months. This percentage, compared with the whole, is not encouraging and therefore, needs to up-scaled because it has the potential of improving the job prospects of the trained workforce by the Garments sector entities. These apprentices are hired initially at cheaper wages and satisfactory performers are retained as employees. The current ratio of conversion of apprentices into employees is 65% which appears encouraging. Apprenticeship programmes provide TSPs an opportunity to develop industry linkages; thereby helping them to improve the quality of education and skill set of their students.

Key issues viewed by entities in running apprenticeship programmes include perceived wastage of organisational resources, flight of trained apprentices and confidentiality threats. However, the benefits of running this initiative outweigh the perceived costs mentioned by the entities. It is recommended to design and implement a strategy through relevant representative bodies and forums to encourage both entities and TSPs to opt for apprenticeship programmes.

Looking into the job placement prospects of newly graduated students it was found that72-91% students (depending on the type of course) managed to get a job within sixty days of the completion of course. For job placement, 68% TSPs had a mechanism to assist students through follow up steps; including holding recruitment seminars and exhibitions, using industry linkages and personal references. Key steps to improve the job placement prospects include development of training material (64%), development of industrial linkages (60%), improvement in technical infrastructure/labs (48%) and continuous professional development of faculty” (40%).

9.0 REVIEW OF COURSES AND CURRICULA DEVELOPMENT

9.1 Review of Existing Courses

9.1.1 Details of Existing Courses Offered by TSPs in Punjab

On surveying the TSPs, following list of courses have been identified including their levels, available and current enrolments, passing percentages and average fee charged from the students. In case of donor funded interventions, name of the donor has been mentioned in the column titling "Existing Courses on Garments" Table 24 on the next page shows the details.

Table 24 – Existing Courses on Garments

Courses	Name of TSPs	Levels					Available Seats / Batch Capacity	Current Enrolment		Passing Percentage	Average Fee Charged from Students
		Ph. D / M Phil	Degree Master	Bachelors	Certificate / Diploma	Short Courses		Male	Female		
Production Planning & Control	PRGTTI				✔		20	15	5	80%	-
	STEPS				✔		50	25	25	100%	PSDF Funded
Industrial Engineering	TEVTA			✔	✔	✔	65	50	15	100%	1,500 per month
	Punjab Vocational Training Council				✔		30	30	-	-	PSDF Funded
	PRGTTI					✔	20	10	10	75%	PSDF Funded
Merchandising	PIFD			✔			35	15	20	90%	384,000
	PRGTTI				✔		20	16	4	80%	-
	STEPS				✔		25	25	-	100%	10,000 per course
Quality Control	PRGTTI				✔	✔	20	13	7	78%	-
	PKTI				✔		25	15	10	95%	3,000 per month
Apparel Supervision	PRGTTI				✔	✔	20	15	5	80%	-
	PIFD					✔	50	10	40	90%	PSDF Funded
CAD / CAM	PRGTTI					✔	20	15	5	80%	-
General Machine Operator	PRGTTI				✔	✔	20	13	7	80%	-
Stitching Machine Operator	PKTI				✔	✔	25	25	-	95%	5,000 per course
	Sanatzar					✔	60	-	60	100%	1,000 per

Courses	Name of TSPs	Levels					Available Seats / Batch Capacity	Current Enrolment		Passing Percentage	Average Fee Charged from Students
		Ph. D / M Phil	Degree Master	Bachelors	Certificate / Diploma	Short Courses		Male	Female		
											course
Knitting Machine Operator	PKTI					✔	25	25	-	95%	5,000 per course
	TEVTA				✔	✔	1,000	700	300	100%	1,500 per course
Fashion Designing	University of Gujrat			✔			25	10	15	90%	240,000 per course
	Hajvery University			✔			120	40	80	60%	400,000 per program
	PIFD			✔			35	-	35	90%	384, 000 per program
	PKTI				✔	✔	25	25	-	100%	8,000
	STEPS				✔	✔	200	50	150	100%	10,000 per course
	Dandy School of Fashion Design				✔	✔	15	15	-	100%	7,000 per course
	Sanatzar				✔	✔	275	-	275	95%	1,500 per course
	Allied College of Textile Management and Administration				✔	✔	15	-	15	100%	4,000 per course
	British Education and Training System				✔	✔	15	7	8	100%	10,000 per course
	HUNARKADA			✔	✔		30	7	23	85%	6,000 per month

Courses	Name of TSPs	Levels					Available Seats / Batch Capacity	Current Enrolment		Passing Percentage	Average Fee Charged from Students
		Ph. D / M Phil	Degree Master	Bachelors	Certificate / Diploma	Short Courses		Male	Female		
	GC University			✔	✔		50	25	25	99%	50,000 – 176,000
	National Textile Institute				✔	✔	20	-	20	99%	35,000 per semester
	GIFT University			✔			60	15	45		75,600 per semester
	Rawalpindi Institute of Art & Design				✔	✔	30	10	20	100%	5,000 per course
	HUNARKADA			✔	✔	✔	90	-	90	100%	8,000 per month
	University of Management and Technology			✔			40	10	30	90%	650,000 per program
Import / Export	PKTI				✔	✔	25	10	15	95%	5,000 per course
Textile Designing	University of Gujrat		✔	✔			40	20	20	90%	30,000 per semester
	National Textile Institute		✔	✔			125	25	95	90%	196,000 - 392, 000 per course
	GC University			✔			50	25	25	99%	176,000 per course
	University of Management and Technology	✔	✔				15	7	8	70%	500,000 – 900, 000 per program
	Punjab University (Art and Design			✔			60	20	40	90%	17,000 per semester

Courses	Name of TSPs	Levels					Available Seats / Batch Capacity	Current Enrolment		Passing Percentage	Average Fee Charged from Students
		Ph. D / M Phil	Degree Master	Bachelors	Certificate / Diploma	Short Courses		Male	Female		
	Dept.)										
	Hajvery University			✔			120	60	60	60%	50,000 per semester
	PIFD			✔			240	110	130	90%	96,000 per semester
	Lahore School of Fashion Design			✔	✔		40	-	40	100%	12,000 per semester
	HUNARKADA			✔	✔	✔	90	-	90	100%	8,000 per month
	University of Management and Technology			✔			40	10	30	90%	650,000 per course
	GC University			✔	✔		50	25	25	99%	50,000 – 300,000
	GIFT			✔			60	15	45	90%	75,000 per semester
	University of Faisalabad			✔			25	25	-	80%	87,000 per semester
	HUNARKADA			✔	✔	✔	30	7	23	55%	6,000 per month
	STEPS				✔	✔	50	25	25	100%	10,000 per course
	SABAC				✔	✔	50	20	30	100%	12,000 per course
	Allied College of Textile Management and Administration				✔	✔	15	-	15	100%	4,000 per course

Courses	Name of TSPs	Levels					Available Seats / Batch Capacity	Current Enrolment		Passing Percentage	Average Fee Charged from Students
		Ph. D / M Phil	Degree Master	Bachelors	Certificate / Diploma	Short Courses		Male	Female		
	British Education and Training System				✔	✔	15	7	8	100%	10,000 per course
	National Textile Institute				✔	✔	20	-	20	90%	35,000 per course
	Rawalpindi Institute of Art & Design				✔	✔	30	10	20	100%	6,000 per course
	Islamabad College of Management and Design				✔	✔	15	-	15	95%	15,000 per course
	SANATZAR					✔	25	-	25	100%	NAVTEC Funded
Pattern Drafting	STEPS				✔		50	25	25	100%	PSDF Funded
	PIFD					✔	50	10	40	90%	PSDF Funded
Dress Designing	TEVTA			✔	✔	✔	655	300	355	100%	1,500 per month
	STEPS				✔	✔	25	25	-	100%	10,000 per course
	Sanatzar				✔	✔	60	-	60	95%	1,600 per course
	GIFT University				✔		30	10	20	90%	64,000 per course
Fine Arts	Punjab University (Art and Design Dept.)		✔	✔			38	7	31	90%	17,000 per semester

Courses	Name of TSPs	Levels					Available Seats / Batch Capacity	Current Enrolment		Passing Percentage	Average Fee Charged from Students
		Ph. D / M Phil	Degree Master	Bachelors	Certificate / Diploma	Short Courses		Male	Female		
	University of Management and Technology			✔			40	10	30	90%	650,000 per course
	GC University			✔			50	25	25	99%	192,000 per course
	Islamabad College of Management and Design		✔	✔			85	20	65	90%	150,000 – 288,000 per course
Domestic Tailoring	Sanatzar				✔		250	-	250	95%	1,600 per course
Coral Embroidery	TEVTA			✔	✔	✔	400	150	250	100%	1,500 per month
	Allied College of Textile Management and Administration				✔		15	-	15	100%	8,000 per course
WillCom	Allied College of Textile Management and Administration				✔		15	-	15	100%	8,000 per course
Fabric Printing	TEVTA			✔	✔	✔	400	150	250	100%	1,500 per month
Graphic Designing	University of Management and Technology		✔				25	15	10	100%	400,000 per program
	HUNARKADA			✔	✔		30	7	23	85%	6,000 per month

Courses	Name of TSPs	Levels					Available Seats / Batch Capacity	Current Enrolment		Passing Percentage	Average Fee Charged from Students
		Ph. D / M Phil	Degree Master	Bachelors	Certificate / Diploma	Short Courses		Male	Female		
	Lahore School of Fashion Design				✔		15	-	15	100%	7,000 per course
Silk Printing	GC University			✔			50	25	25	99%	176,000 per program
	SANATZAR				✔		10	-	10	100%	1,000 per course

9.1.2 Potential Demand for Technical Courses Offered by TSPs

Garments sector entities were inquired about the potential intake of workforce attending the pre-defined list of technical courses. The results are shown in Figure 95.

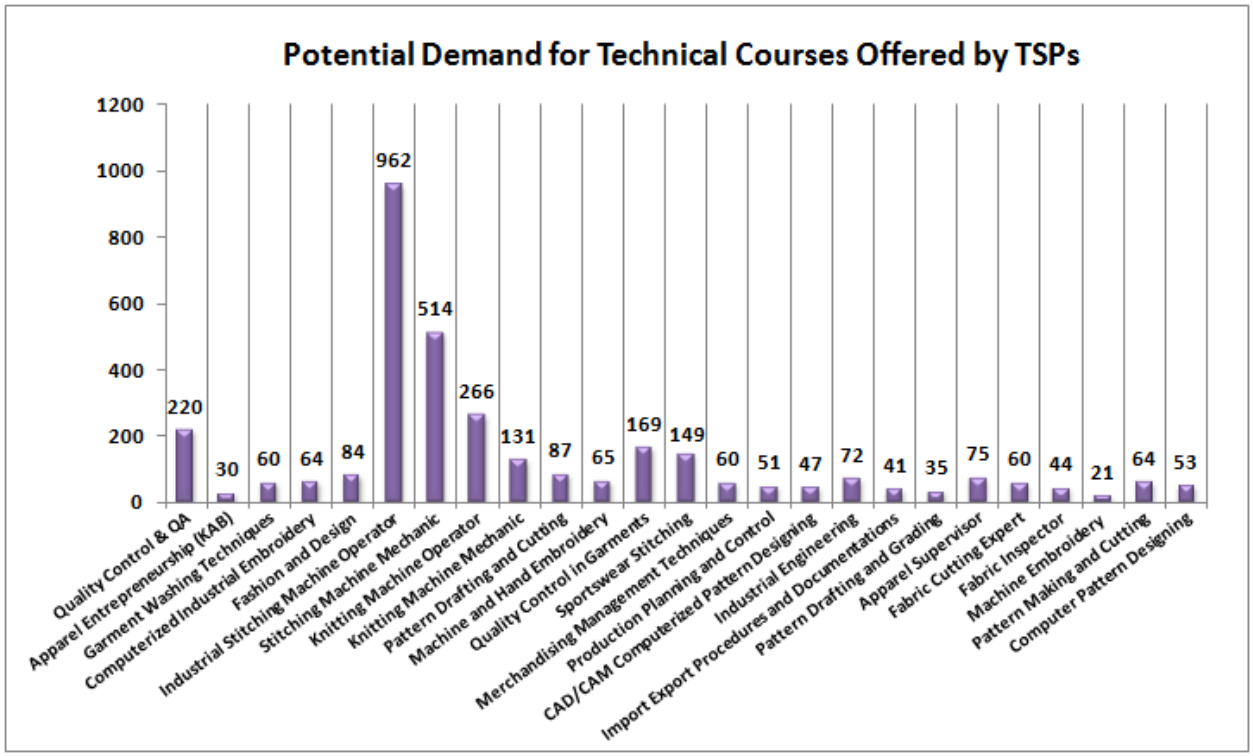

Figure 95 – Potential Demand for Technical Courses Offered by TSPs

The responding entities placed a high recruitment demand of 962 for Industrial Stitching Machine Operator and that of 514 for Stitching Machine Mechanic. Other courses in demand included Quality Control & Quality Assurance (220), Knitting Machine Operator (266) and Quality Control (169). The demand for rest of the courses ranged from 20 to 150 persons.

9.1.3 Courses Requiring Updating/Modification & Remedial Measures

TSPs were requested to identify courses and their respective levels which require updating/improvements. Figure 96 shows the results.

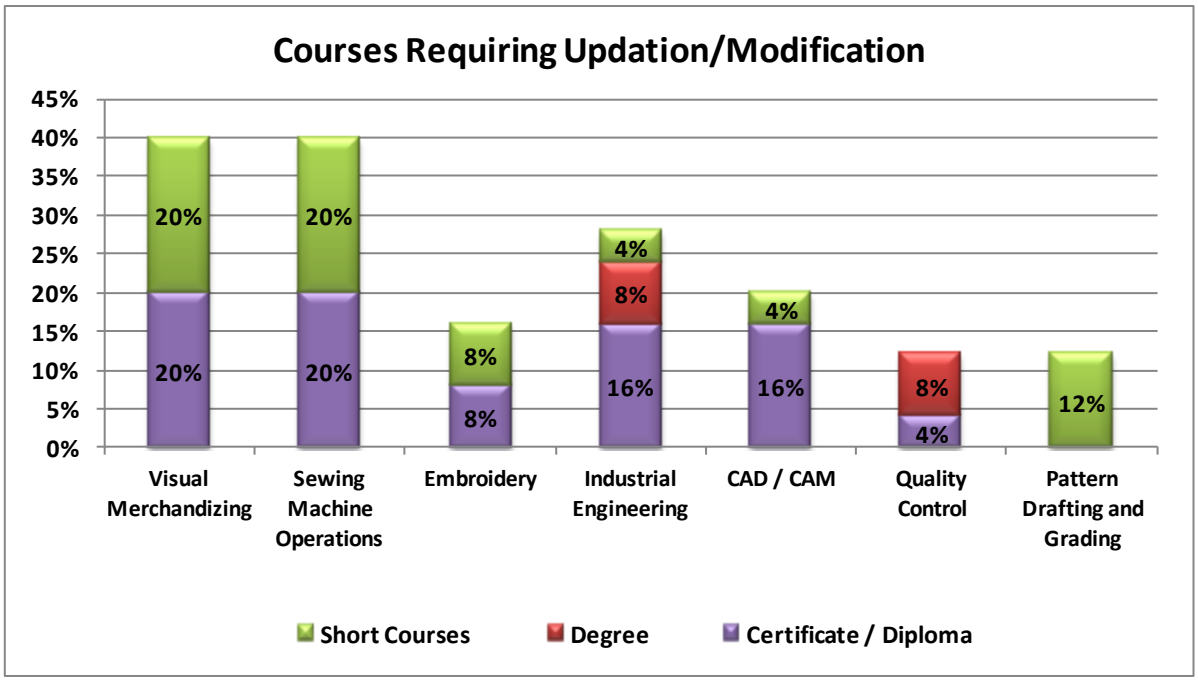

Figure 96 – Courses Requiring Updating/Modification

20% of the respondents stated that both Visual Merchandising and Sewing Machine Operations needed revision on Certificate as well as Short Courses level. In case of CAD/CAM, 16% suggested modification at Certificate and 4% at Short course levels respectively. The results are shown in Figure 97.

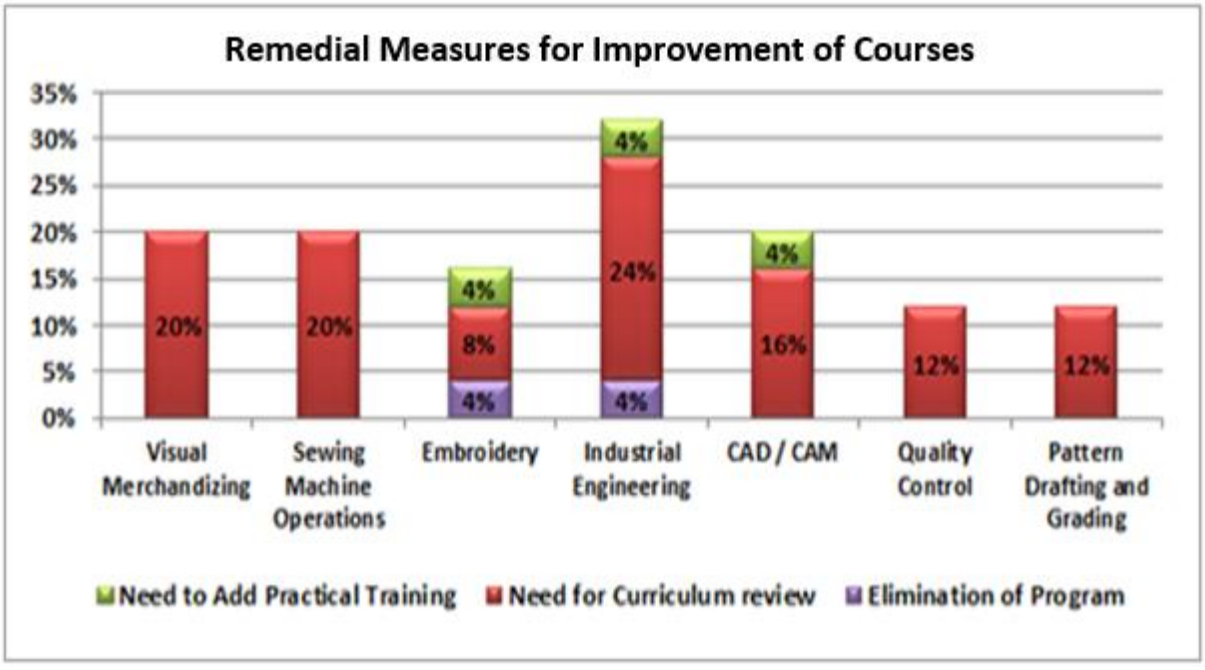

Figure 97 – Remedial Measures for Improvement of Courses

Improvement options were also proposed by the respondents with majority suggesting need for curriculum review as the main option for all the courses being taught at TSPs.

9.2 Curricula Development

9.2.1 Effectiveness of Existing Curricula

Feedback was obtained from sector experts regarding the effectiveness of existing curricula. 46% respondents rated its effectiveness as average, 28% rated it as poor. Only 26% rated it as good and none of respondents rated the existing curricula as excellent. Figure 98 shows the results.

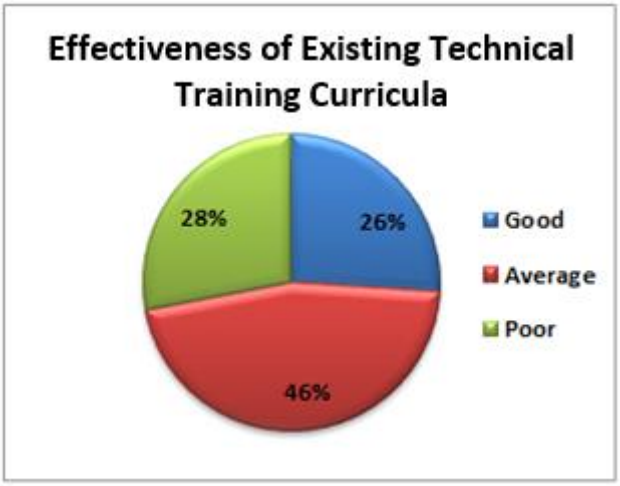

Figure 98 – Effectiveness of Existing Technical Training Curricula

This reflects that TSPs should update their curricula with the help of sector experts so that their suggestions and input could be made part of the curricula.

9.2.2 Institutes Benchmarked for their Curricula and Training

Sector experts were requested to provide their opinion about TSPs with respect to effectiveness of curricula and the provided training. Figure 99 shows the results.

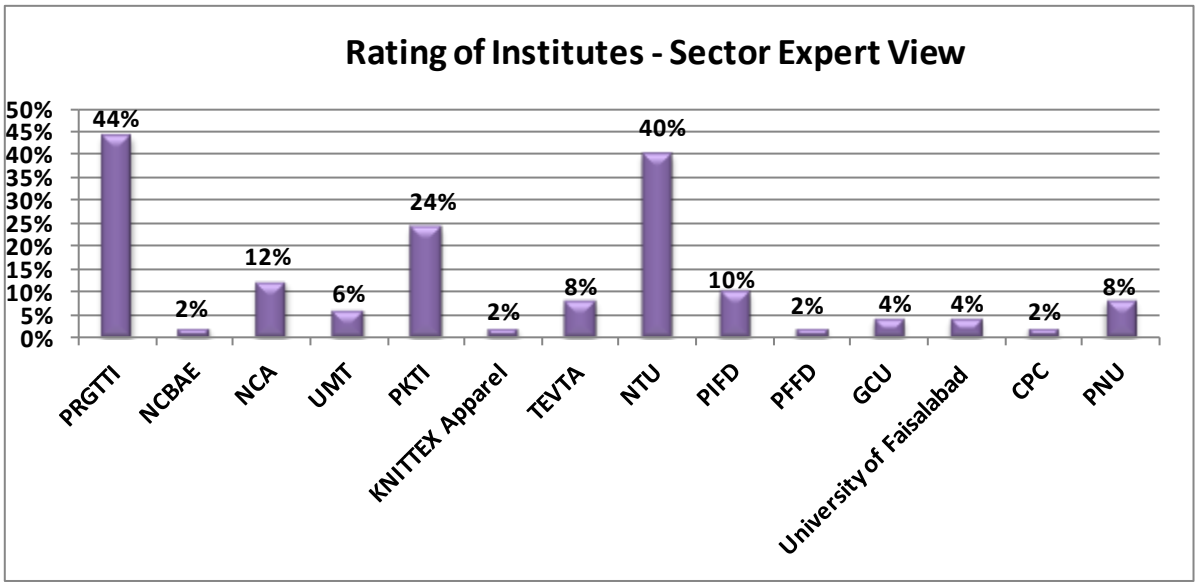

Figure 99 – Rating of Institutes – Sector Experts View

44% benchmarked PRGTTI, 40% experts benchmarked NTU, followed by PKTI and NCA scoring 24% and 12% respectively. Rest of the institutes fell in the range of 2-10%.

9.2.3 Mechanism for Development of Curricula

TSPs were asked about the methodology followed to develop the curricula of their courses. 36% of the TSPs were found to use their own experts to develop the curricula while 31% and 22% of the respondents were found to develop it in collaboration with Government bodies and industry respectively. Figure 100 shows the results.

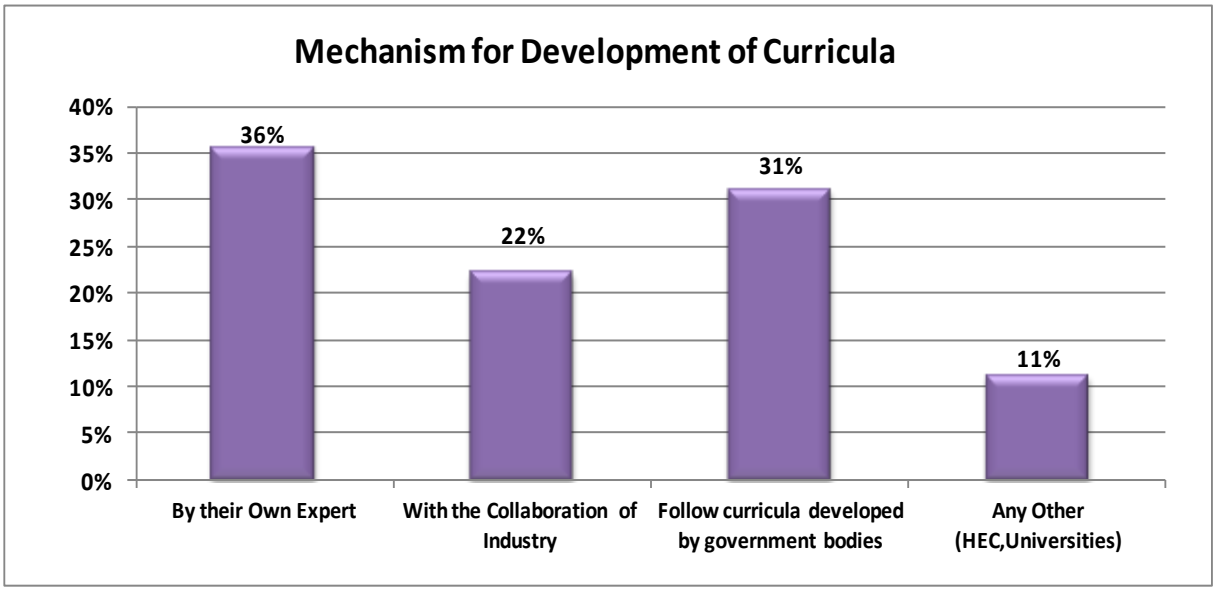

Figure 100 – Mechanism for Development of Curricula

TSPs were also inquired about the existence of any mechanism for getting endorsement from the industry/experts regarding the curriculum development; 48% of the surveyed TSPs responded positively. The results are shown in Figure 101.

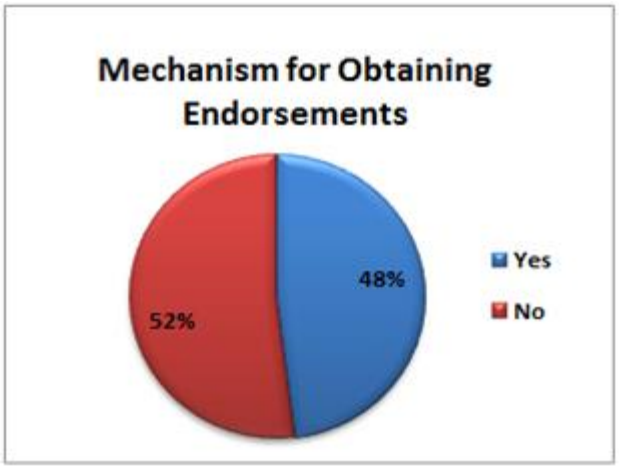

Figure 101 – Mechanism for Obtaining Endorsements

67% of these respondents took endorsement by consulting the industry experts, whereas 25% went for both industry experts and curricula setting body. The balance 8% opted for curricula setting body as the endorsing institute. The results are shown in Table 25.

Table 25 – Proposed Endorsing Mechanism

Interpretations	Percentage
Curricula Setting Body	8%
Consulting Industry Experts	67%
Industry Experts and Curricula Setting Body both	25%
Total	**100%**

9.2.4 Recommended Approaches for Development of Curricula

Sector experts were inquired about their recommended approach for development of the curricula. In response, 58% were found to be in favour of functional approach which is based on competency standards, whereas, 26% supported DACUM (Developing a Curriculum) which is based on occupational approach. The remaining 16% were of the view that both could be followed to have a better way of bringing the improvement to the curricula of the courses. Figure 102 shows the results.

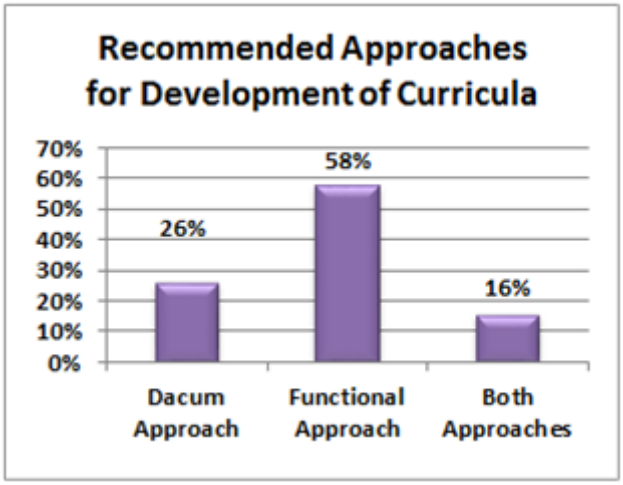

Figure 102 – Recommended Approaches for Development of Curricula

9.2.5 Observations in the Curricula Development Process

The survey findings revealed that there is no common strategy for the development of the curricula and different institutes teach self-made curricula, offering limited range of skill sets. With reference to the gaps in curricula development process, respondents made the following observations:

- Theory based, outdated and limited scope curricula resulting in poor quality training
- Misalignment between skills being taught at institutes and those demanded by the Garments sector
- Poor curricula development and quality assurance mechanism with no updating or revision
- Mismatch of curricula with physical and learning resources
- Poor state of curricula development mechanism and competency based training system resulting in weak institutional linkages between government and industry

- Low participation of private sector in curricula development process resulting in widening of skills-market gaps
- Curricula review and endorsement processes are non-existent, where found, supervision is weak and poorly planned.

9.3 Conclusions and Recommendations

Out of a long list of courses, the survey aimed at determining the demand of workforce attending those courses that would potentially be hired by Garments sector entities. 962 and 514 potential workers were identified to attend courses titling Industrial Stitching Machine Operator and Stitching Machine Mechanic respectively. Similarly, the demand for Knitting Machine Operator and Quality Control workers was found to be 266 and 220 respectively.

TSPs identified courses along with respective levels, which needed updating/improvement. Need for curriculum review was identified as the key improvement option. This finding was further reinforced by the response of sector experts; with 28% rating it as poor and 46% as average. Only 26% experts rated it as good.

For designing curricula, majority of the TSPs (64%) used their own experts while 56% and 40% were found to develop their curricula in collaboration with the Government and industry respectively. 48% respondents said to have a mechanism for obtaining endorsement of their curricula. Regarding recommended approaches for curricula development, 58% chose functional approach, which is based on competency standards, whereas, 26% supported the DACUM which is based on occupational approach. The remaining 16% were of the view that both approaches could be followed to have an improved curriculum.

There is no common strategy for the development of the curriculum and different institutes teach self-made curricula offering limited range of skill sets.

9.3.1 Recommended Model to Bridge Gaps in Curricula Development

While developing the curricula, there is a need to establish close liaison with industry, industry experts, academia, government and other stakeholders. This will help the TSPs to better understand the industry needs. In this regard, the curriculum development systems in Punjab were studied and discussed with the sector experts. On the basis of that analysis, it is recommended to follow the UK TEVT system as the base for the development of our indigenous curricula development system. Sector Skill Councils (SSC) and Industry Advisory Groups (IAGs) have already been developed through this. Role of SSC is very important as they collect labour market intelligence reports on regular basis and is responsible for the development of the competency standards, being used as the building block of entire curricula development process. Moreover, it gets a continuous feedback from IAG and get requirement of skilled labour force from the industry. SSC also acts as a coordinating link with government and passes requests to government for financial support and recommend improvements to the sector.

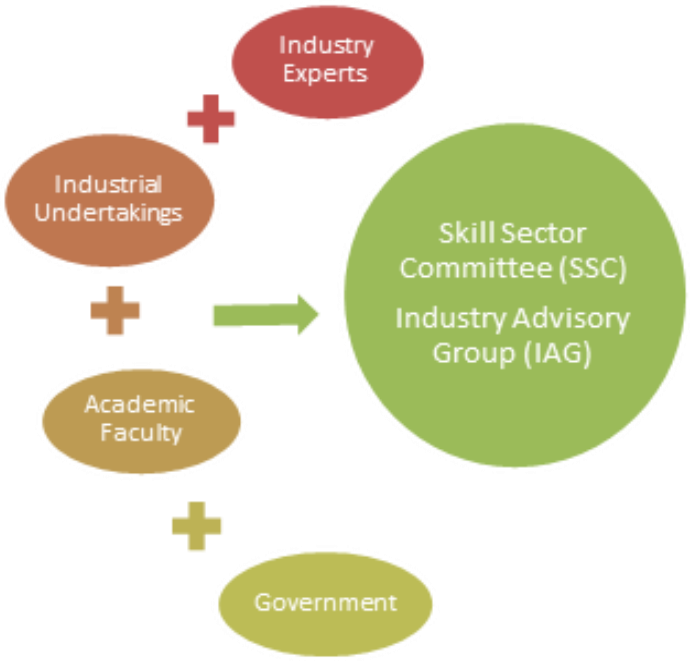

Figure 103 – Recommended Model to Bridge Skills Demand-Supply Gap

In Pakistan, there are no such mechanisms which can provide funds to carry on the research and development process. It will create a strong linkage between industry, institutes, government, and regulatory authorities. It is important that the Punjab Skills Development Fund pay attention to this model while conducting the exercise for development of suitable criteria for the sector.

10.0 ANNEXURES

10.1 Annexure A: Local and Export Demand Drivers

10.1.1 Local Demand Drivers

The recent shift of the population from the agrarian society to urban areas, increased income levels and population growth are the key factors contributing to raise the domestic demand. This means need for more factories, manufacturing units, supply of inputs to the garments sector.

Following are the key local demand drivers for Pakistan:

Increased GNP

Increasing GNP is contributing towards increasing the income levels of the people in the country as a whole and also the demand of the garments sector.

Consumer Buying Behaviour

Pakistani consumers increasingly prefer to buy readymade garments, shifting their consumption away from tailored clothing due to high tailoring charges, long delivery times and inconvenience. This phenomenon has attracted many textile companies, including exporters into the business of supplying clothes in the domestic market. Data from the Pakistan Bureau of Statistics suggests that demand for readymade garments has risen in the last decade, in terms of quantity, despite high increases in the prices.

Designer's Clothing

Designer clothing appears to be a trend that has caught on like wildfire among Pakistani consumers, a phenomenon that seems to underlie the growing popularity of designer garments, particularly popular among middle class and upper income consumers. Fashion savvy people are increasing in number day by day and hence the garment industry in Pakistan is growing day by day.

Information and Communication Technology

The electronic media and the internet have led customers in cities like Hyderabad, Multan, Faisalabad, Sialkot, Peshawar, Quetta, Gujranwala and other small cities and even towns to be just as informed and sophisticated consumers as those in Karachi, Lahore and Islamabad. Meanwhile, the rise in domestic demand for readymade garments is rapidly beginning to attract the attention of Garments exporters, who often find the local market easier to work with than their more demanding international clientele.

10.1.2 Export Demand Drivers

Pakistan's clothing sector has lot of potential for growth and expansion. Its strength originates from in-house cotton production, standardised production system, quality control, compliance and others as per the buyer's requirement. Following are the export demand drivers which require focus to capitalise on the available growth opportunities and bring enhanced economic prosperity for the country.

Business Environment

Business environment is the sum total of all external and internal factors that influence a particular business. Favorable business envoirnment of a country depends upon:

- Regulatory system
- Transportation and commercial environment
- Subsidies and tax credits
- Shipping and security of production relaxation in tariffs
- Political stability and economic growth
- Minimal administrative burden and corruption
- Compliance with internationally recognised health and labour standards

Infrastructure

Good infrastructure has a pivotal role to promote industrial activity in a country. Paved roads, railroads, seaports, communication networks, financial systems, and energy supplies, directly or indirectly support production and marketing for industries within the country. Infrastructure provides services that support economic growth by increasing the productivity of labor and capital thereby reducing the costs of production and raising profitability, production, income and employment.

Market Access

Among other export demand drivers, access to the markets has some special importance as all the products made by the country if not allowed to be sold in the desired market will be of no benefit. For this, a preferential access is to be given to garments exporting countries together with the faclity of no trade embargos.This incentive will help in enhancing the exports.

Availability of Workforce

Workforce in any business, particularly in a manufacturing concern, is an assential and important asset which contributes towards development and growth of the business in the same way as the physical asset such as machines.The availablity of highly productive, quality workforce at better compensation packages at lower, middle and the higher management level is very important to effect fast growth.

Raw Material Inputs

In the context of raw material inputs, it is important to focus on access to quality and cost competitive domestic or regional yarn and fabric production, rules of origin for trade preferences and the cost & availability of capital to invest in new machinery and purchase raw materials.

Strength of Manufacturing

Strength of the manufacturing is another prime driver of export which can be gauged through reputation for quality and on-time delivery, existing business networks (supply chain linkages, relationship with customers), levels of service provided (e.g. full- package versus assembly, flexibility and variety in styles or products, lot sizes offered, lead time and flexibility to respond to quick turnaround orders.

10.2 Annexure B: Success and Risk Factors

Textile and garments industry is the backbone of the Pakistan's economy. It is important to critically analyse its strengths and weaknesses so as to make the industry more competent among its rivals. It is the responsibility of the stakeholders to cooperate and foresee the challenges and opportunities ahead of time. Key success and risk factors have been discussed in the following paragraphs:

10.2.1 Success Factors

Raw Material Base

Pakistan has high self-sufficiency in raw material and is the fourth largest producer of cotton. Effective and efficient use of cotton resources can bring the textile and clothing industry in a more competitive position.

Labor

Pakistan has a cheap labour force. Cheap and ample supply of labour strengthens the industrial sector of the country. However, here is growing need to equip this workforce with better skills and techniques to improve its productivity.

Marketing

Targeting the unexplored export markets through aggressive sales and marketing strategies will pave the way for the growth of textile and garments sector. It is important to pay attention to explore and develop new markets in addition to consolidating our position in the existing markets. We should also pay attention to make investment in sales force and train them in marketing garments products so as to capture a bigger market share.

Collaboration with Foreign Companies

By developing partnerships with foreign companies, the local entities can learn in terms of system orientation, supply chain and use of modern imported technologies. This will also help to reduce costs, comply with the international standards, promote value added products, create new markets and provide skilled labour force to become a bigger player in the international garments markets.

Re-Engineering of Production System

Information technology has a crucial role in manufacturing sector. Acquiring state of the art machinery is an expensive but fruitful and necessary measure to stay competitive in the long run. It is the level of trust; the exporter builds with its customers by giving them flawless products, made on state-of-the-art machinery. This trust is the key for a business organisation to retain its customers. Therefore, it is important to produce with high efficiency, minimising the wastage of the raw material, energy resources and thus reducing the overall production cost.

Producing High Value Products

It is better to export yarn than raw cotton. Similarly it is better to export finished fabric than to export grey fabric (raw fabric). Furthermore it is very much feasible to export readymade garments than only fabrics. What makes the latter better is the value added and subsequent increase in per unit price.

Therefore, the textile industry should focus on the finished products so as to create more value in their products and reap larger margin of profits. The industry should also diversify into other areas such as technical textiles and nonwovens in order to decrease its dependence on conventional and commodity textiles, which is highly sensitive to per unit price and volume for the profit margin.

Image Building to Attract Foreign Investor

Secure business environment is needed to attract large investors. Security measures should be taken to facilitate the buyers and investors to visit Pakistan for investments.

Reducing the Cost of Business

China and India are much cheaper in labour, raw material and utilities as compared to Pakistan. Rising inflation also increases the cost of production. These unnecessary costs need to be controlled if the local Garments sector has to survive in the presence of these two large Textile exporters of the world.

10.2.2 Risk Factors

Research & Development (R&D)

Developed countries use biotechnology and genetic engineering to increase the quality and quantity of their cotton production. They are able to grow coloured cotton, organic cotton and several different varieties of cotton to add value to the garment value chain. In Pakistan, there is very little research done to produce modified cotton fibres. Practically no efforts are being made by the textile and clothing industry to enhance the quality of its products, upgrade the technology used, and encourage effective methods of production in order to compete internationally. Instead, the industry suffers due to lack of latest means of production and falling cotton crop output every year. Due to low quality of cotton crop, profitability decreases and the farmers switch to the other crops, thereby decreasing the cotton production.

Labour Productivity

Despite the abundant supply of the labour, productivity of the labour is very low. According to a study on textiles and clothing, the regional competitors of Pakistan take 75 minutes to complete and produce one piece of cloth whereas the local Garments sector takes 133 minutes for the same work. There is a wastage of 30% in finishing, 12% in washing and there is a need to cut costs up to 45% in sewing by getting more efficient.

Labour productivity can be improved by giving labour appropriate training on modern technology so as to make them more efficient.

Unstable Political Situation

Political unrest, strikes and terrorism have critically affected the economy of Pakistan. Frequent changing of the government has adversely maligned the export policies.

System Orientation and Supply Chain

Nowadays, the customers are very systematic in their requirements and specifications and expect a high level of professionalism from their vendors. Unfortunately, the local garment exporters lack this capability which makes it difficult for them to compete in international markets. On the other hand, supply chain management is rarely implemented. Time management is very important aspect in the business and buyers expect on-time delivery to

match the retail launch of seasonal collections on time. Delayed delivery of export orders result in increasing the cost and at times losing business altogether.

Financial Problems

Foreign investors and international fashion brands do not find it feasible to provide financial support to Pakistan because of deteriorating law and order situation and economic and political instability. Thus funds are not easily available through Foreign Direct Investment. Neither is government in a position to support the industry nor does private sector have strength to bridge this gap. This situation is continuously forcing the local industry to obtain funds at higher rate and pay high financial cost which ultimately shows up in the total cost and decreased the global competitiveness. Government should provide rebates and low mark-up financial assistance and encourage foreign investor to pay attention towards the garments sector of Pakistan.

Input Issues

Input costs are constantly increasing due to which the local industry cannot compete in the markets. Due to increase in prices of inputs used in manufacturing process like electricity, fuel etc., along with high prices of cotton and yarn lead to increasing the overall product cost.

Smuggling

Situation for the local Garments sector is further worsened due to availability of imported/smuggled goods in local markets at much cheaper prices. Chinese Goods are one of the best examples, which are available throughout the country at much lower prices.

Energy Crises

Utilities prices in Pakistan are higher than its competing countries and also keep rising on regular basis, which makes the industry un-competitive. Electricity load-shedding has significantly reduced the production capacity of various sub-sectors. To cope with the energy shortage, some entities use alternative sources of energy which further increases their cost of production. Due to such unfortunate situation the competitiveness of this industry in international market is affected badly.

International Competition

The industry is facing tough competition from other developing countries like Bangladesh, India and China in its major export markets of EU and USA. This is a huge threat to the Textile and garments manufacturing industry of Pakistan.

Environmental Issues

The textile and garments sector of Pakistan will have to face the challenge of complying with international environmental protocols. Almost every major industrial group has its own power plant being run on fossil fuel, causing air and water pollution. Various industrial processes employ a variety of chemicals in the form of raw materials, enzymes, detergents, dyes, acids, sodas and salts. Industrial processes also generate wastewater containing heavy metal contaminants which may invoke the various hazards to our industry.

Miscellaneous Problems

- Deteriorating political, law and order situation
- Political Instability

- Depreciation of Pakistani rupee
- War on terror
- Obsolete equipment and machinery.

10.3 Annexure C: National and International Curricula Meeting the Industry's Needs

10.3.1 Curricula of National Institutes

NAVTTC

NAVTTC is an apex body at national level to regulate, facilitate and provide policy direction in Vocational & Technical Training. The Commission establishes and promotes linkages between various stakeholders at national and international levels. Since its inception, NAVTTC has given a high priority to un-addressed areas and challenges being faced by TVET.

Garments related programmes being offered by NAVTTC are DAE Garment, Apparel Supervisor, CAD/CAM Computerised Pattern Designing, Dress Designing, Fabric Manufacturing and Weaving, Fashion Designing, Hand and Machine Embroidery, Production Planning & Control, Quality Control in Garments, Spinning Operations Supervisor, Sportswear Stitching, Stitching Machine Mechanic, and Stitching Machine Operator.

TEVTA

TEVTA was formed through an Ordinance (No. XXIV of 1999) promulgated by Governor of the Punjab which has now been replaced by TEVTA ACT (ACT X of 2010) Punjab. Its mission is to enhance global competitiveness in Punjab, through a quality and productive workforce by developing demand driven, standardised, dynamic and integrated technical education and vocational training service.

TEVTA Punjab strives for development of a dynamic technical and vocational training system to ensure horizontal and vertical mobility and regulate and develop standards of technical education and vocational training including internationally recognised curriculum, examination and certification system. Moreover, it also focuses on enhancing the participation of private sector in training activities at management level as well as motivating the local entrepreneurs to patronise the training programmes of TEVTA institutions, provides on-the-job training facilities and employment to the graduates

Garments related courses being offered by TEVTA are Dying and Bleaching (G-II), Textile Weaving Technology (DAE), Textile Weaving Technology (G-II), Advance Dress and Designing Making, Dress Designing & Making (G-III), Dress Making (G-III), Fashion Designing (G-III), and Machine Embroidery.

PVTC

Punjab Vocational Training Council (PVTC) is an autonomous corporate body established by the Punjab Government through the PVTC Act of 1998. Its mission is to alleviate poverty through Muslim charity (Zakat) and private sector participation by imparting demand driven skill training and enhancing employability for disadvantaged youth.

Establishment of PVTC came through the realisation that the less privileged sections of the society, eligible for Zakat, should be empowered economically so that they are able to sustain themselves and their families and engage in dignified economic activity. One of the better ways to use Zakat was to provide technical and vocational skills to the youth including girls and boys with certain minimum academic qualifications. This idea of economic empowerment would generate a multiplier effect in terms of economic activity and provide dignified monthly income to them and their families so that they come out of the eligibility of Zakat bracket.

Imparting of skill training in market relevant trades would bring much higher rate of return than general education. With the establishment of PVTC, training young girls and boys into professionally equipped and trained craftsmen has brought quantifiable dividends in the lives of these people. Course details are presented in Table 26.

Table 26 – Courses Offered by PVTC

Sr. No	Programme/ Course Name	Entry Level	Duration (Months)	
			VTI*	OJT**
1	Garments Stitching including Leather Garments	Primary	6	2
2	Dress Making	Primary/ Middle	12	2
3	Embroidery	Primary	12	2
4	Industrial Stitching	Middle	6	2
5	Fashion Designing	Matric	12	2

*Vocational Training Institute
**On Job Training

PRGTTI

Pakistan Readymade Garment Technical Training Institute (PRGTTI) was established in the year 1997, with the mission to offer technical training programmes to make meaningful contribution towards the global industry development. Since its inception in the training industry, the institute has built rapport in the market for its quality training programmes. PRGTTI understands the importance of training in both, practical and theoretical knowledge and has successfully designed short course programmes, which are aimed at training all sectors of the garments industry:

Courses offered by PRGTTI include Garment Washing, Computerised Industrial Embroidery, Apparel Supervisor, CAD/CAM Computerised Pattern Designing, Production Planning and Control, Quality Control in Garments, Stitching Machine Mechanic, Stitching Machine Operator, Import Export Procedure and Documentation, Industrial Engineering, Industrial Stitching Machine Operator, Machine and Hand Embroidery, Merchandising Management Techniques, Pattern Drafting and Grading, and Pattern Drafting & Cutting.

PKTI

Pakistan Knitwear Training Institute (PKTI) is a joint project of Ministry of Textile Industry, Government of Pakistan and business community to produce trained manpower for the knitwear garments industry. Since 1994, PKTI has been imparting training in all areas of knitwear garments manufacturing. Its students are proving their worth in different areas of knitwear garments sector.

PKTI owns a furnished building and has the ability to impart training with minimum expenses to at least 200 students at a time which can be increased to 600 students in a day. It has a fully equipped stitching lab, knitting lab, dyeing lab and a computer lab and is running different courses to cater the needs of the industry.

The knitwear garments sector has emerged to meet the needs of local market as well as international market. This product plays a vital role in earning foreign exchange, providing employment at mass level and contributing a large share in the GDP.

The courses offered by PKTI include Apparel Supervisor, Production Planning and Control, Quality Control in Garments, Import Export Procedure and Documentation, Machine Knitting Operator, Merchandising Management Techniques, Pattern Drafting & Grading, Pattern Drafting and Cutting, Knitting Machine Mechanic, and Knitting Machine Operator.

10.3.2 Curricula of International Institutes

Sri Lanka Institute of Textile and Apparel

Sri Lanka Institute of Textile & Apparel was established after merging the two Institutes Textile Training & Services Centre and Clothing Industry Training Institute. New Institute "SLITA" delivers study programmes that are being complied with the need of students in the Sri Lankan context. SLITA comes under the purview of Ministry of Industry & Commerce. Under its new status, the institute is empowered to award diploma, degrees at graduate and postgraduate level. SLITA provides fast track and cutting edge education to professionals for managing the Apparel Industry in a competitive era. The institute has entered into Memorandum of Understanding (MOU) leading Industries such as North Carolina State University, Bunka Fashion College, Japan. SLITA is committed to prepare its students for technical and managerial positions in Textile and Apparel Industry and strive to deliver quality education through a system of effective pedagogy and continuous industry interaction with students. With synergy of new technology and the knowledge from the industry, institute's mandate is to create technical and management professionals who can understand the dynamics of global business environment for Textile & Apparel Industry. The courses offered by SLITA are:

- Diploma in Textile & Apparel Technology
- Advance Diploma in Coloration & Finishing Technology
- Diploma in Testing & Quality Assurance of Textile & Garment

Changzhou Textile Garment Institute, China

Changzhou Textile Garment Institute was established in 1958 and is renowned for its research competence in physical and mechanical performance testing of textile fibres, analysis and testing of dyes and auxiliaries, design of new textiles, and fashion design, etc. The courses offered by the institute are:

- Fashion Design
- Pattern Drafting and Technique
- Fashion Design
- Fashion Show and Figure Design
- Dyeing and Weaving Design
- Pattern Drafting and Technique
- Fashion Marketing

Northern India Institute of Fashion Technology

The department of Industries & Commerce, Government of Punjab, India established Northern India Institute of Fashion Technology, in 1995, comprehending and visualising the need of trained professionals in the arena of Textile and Garments Industry. Following courses are offered by the institute:

- Fashion Design
- Fashion Design (Knits)
- Textile Design
- Garment Manufacturing Technology
- Fashion Marketing Management.

10.4 Annexure D: List of Garments Sector Entities Surveyed

Table 27 – List of Garments Sector Entities Surveyed

SR #	Entity Name	Entity Size	District
1	Pak Safety Textile	Medium	Faisalabad
2	Akbar Fabrics (Pvt.) Ltd.	Large	Faisalabad
3	M/S Zatex (Pvt.) Ltd.	Medium	Faisalabad
4	A M Knitwear	Medium	Faisalabad
5	FMT- Garments	Medium	Faisalabad
6	Team Gear (Pvt.) Ltd.	Small	Faisalabad
7	Zain Exports International	Large	Faisalabad
8	Chaudary Fashion	Medium	Faisalabad
9	Khawaja Cotton Industries	Medium	Faisalabad
10	Masood Textile Mills Ltd	Large	Faisalabad
11	Klash (Pvt.) Ltd.	Large	Faisalabad
12	Perfect Sourcing Pakistan	Medium	Faisalabad
13	Outso QC	Small	Faisalabad
14	NTU Exports	Medium	Faisalabad
15	Fashion & Style	Small	Faisalabad
16	Chenab Textile Mills Ltd	Medium	Faisalabad
17	S Brother Hosiery	Small	Faisalabad
18	Chaudhary Enterprise	Medium	Faisalabad
19	Al-Aziz Apparel Supply	Small	Faisalabad
20	Azad Institute	Medium	Faisalabad
21	Sock and Sock (Pvt.) Ltd.	Medium	Faisalabad
22	Lahore Fashion	Medium	Faisalabad
23	Idrees Knitting Components	Small	Faisalabad
24	Raby International	Medium	Faisalabad
25	Sardar Hosiery	Small	Faisalabad
26	Fashion and Trends (Pvt.) Ltd.	Small	Faisalabad
27	Image Garments (Pvt.) Ltd.	Medium	Faisalabad
28	Fitwell	Medium	Faisalabad
29	Drifti Sportswear	Medium	Faisalabad
30	Key and EMMS	Medium	Faisalabad
31	Ali and Sameer International	Medium	Faisalabad
32	Iqra Textiles	Medium	Faisalabad
33	Muneeb Apparel	Medium	Faisalabad
34	Bright way Enterprises	Small	Faisalabad
35	PS Pakistan	Medium	Faisalabad
36	Knit and Stitch	Small	Faisalabad
37	Alpha Knitting (Pvt.) Ltd.	Medium	Faisalabad

SR #	Entity Name	Entity Size	District
38	Ashar International	Small	Faisalabad
39	Kamal Hosiery	Large	Faisalabad
40	J Tex Incorporation	Small	Faisalabad
41	M/S. Haamitex Manufacturers	Small	Faisalabad
42	A.Z. Apparel (Pvt.) Ltd.	Medium	Faisalabad
43	Syntax Gloves Industries	Medium	Faisalabad
44	Alliance Textile	Medium	Faisalabad
45	Tauseef Enterprises(Pvt.) Ltd.	Large	Faisalabad
46	Haram Textile	Small	Faisalabad
47	White Wings Enterprises	Small	Faisalabad
48	M/S. Empire Tex	Small	Faisalabad
49	Arooj Enterprises	Medium	Faisalabad
50	AB Exports (Pvt.) Ltd.	Medium	Faisalabad
51	KAY Sons International (Pvt.) Ltd.	Large	Faisalabad
52	HMF Hosiery	Small	Faisalabad
53	Shabbir Hosiery	Small	Faisalabad
54	Shahid Hosiery	Small	Faisalabad
55	Bilal Umar Apparel	Small	Faisalabad
56	Paris Hosiery	Small	Faisalabad
57	Chaudhary Hosiery	Small	Faisalabad
58	Workwear	Small	Faisalabad
59	Dilpasand Hosiery	Medium	Faisalabad
60	Wide Zone International	Medium	Faisalabad
61	AG Apparel	Medium	Faisalabad
62	Tauseef Socks Enterprises	Small	Faisalabad
63	Hafeez Knitwear (Pvt.) Ltd.	Medium	Faisalabad
64	SAG Apparel(Pvt.) Ltd.	Medium	Faisalabad
65	COZI International	Medium	Faisalabad
66	BHS Apparel	Medium	Gujranwala
67	Ahsan Hosiery	Small	Gujranwala
68	Al-Hassan Hosiery	Small	Gujranwala
69	Saika Hosiery	Small	Gujranwala
70	Al-Aziz Hosiery	Small	Gujranwala
71	HTH Hosiery	Small	Gujranwala
72	Unilebal Sourcing	Small	Lahore
73	Knittex Apparel	Medium	Lahore
74	NM Enterprises	Small	Lahore
75	US Apparels	Large	Lahore
76	US Apparel - 3	Small	Lahore

SR #	Entity Name	Entity Size	District
77	Siraj Knitwear	Small	Lahore
78	E-Apparel	Small	Lahore
79	Safety Apparel	Medium	Lahore
80	Body Media International	Large	Lahore
81	Musterhaft (Pvt.) Ltd.	Medium	Lahore
82	Delta Group	Medium	Lahore
83	Stitch and Style (Pvt.) Ltd.	Small	Lahore
84	Combined Fabric Ltd.	Medium	Lahore
85	Samad Apparel	Small	Lahore
86	Hall Mark Apparel	Small	Lahore
87	Cotton Web	Medium	Lahore
88	Mr. Fabrics	Small	Lahore
89	Tex Pak	Medium	Lahore
90	Sajjad Knitwear (Pvt.) Ltd.	Medium	Lahore
91	Shajar Pak (Pvt.) Ltd.	Medium	Lahore
92	Styler Institute (Pvt.) Ltd.	Medium	Lahore
93	Escort International	Medium	Lahore
94	Master Textile Mills Ltd.	Large	Lahore
95	Shami Textile Ltd.	Medium	Lahore
96	Ambition Apparels	Medium	Lahore
97	Comfort (Pvt.) Ltd.	Large	Lahore
98	Versatile International	Medium	Lahore
99	Faaz International	Small	Lahore
100	Immi Garments	Medium	Lahore
101	E- Apparel	Small	Lahore
102	Texture Textiles	Medium	Lahore
103	Arfa International	Small	Lahore
104	W.E Apparel	Medium	Lahore
105	Pensy (Pvt.) Ltd.	Medium	Lahore
106	Tiger Hosiery (Pvt.) Ltd.	Medium	Lahore
107	Creative Apparels (Pvt.) Ltd.	Medium	Lahore
108	Subhan Knitwear	Medium	Lahore
109	S&T Trading Manufacturing Entity (Pvt.) Ltd.	Small	Lahore
110	X-trader Apparels	Small	Lahore
111	Anchor Sourcing	Small	Lahore
112	Balitex (Pvt.) Ltd.	Small	Lahore
113	S.H.Z Textile	Small	Lahore
114	Looptex (Pvt.) Ltd.	Medium	Lahore

SR #	Entity Name	Entity Size	District
115	Reet Garments	Medium	Lahore
116	Intermarket Knit (Pvt.) Ltd.	Large	Lahore
117	Shahkam Industries (Pvt.) Ltd.	Large	Lahore
118	M.Rafi Sons Garments (Pvt.) Ltd.	Large	Lahore
119	Faithful International	Small	Lahore
120	A.H.E	Small	Lahore
121	Progress Apparels	Small	Lahore
122	Rana Textile (Pvt.) Ltd.	Medium	Lahore
123	Mr. Fabrics (Pvt.) Ltd.	Large	Lahore
124	Rose Enterprises	Small	Lahore
125	Johar Knitwear	Small	Lahore
126	Apex Enterprises	Small	Lahore
127	The Edge	Small	Lahore
128	Panguan Traders	Small	Lahore
129	Generation Garments (Pvt.) Ltd.	Small	Lahore
130	Mukhtar Dressup	Small	Lahore
131	Hashir Textile Mills Limited	Large	Lahore
132	Paramount Enterprises	Small	Lahore
133	Zaam Traders	Medium	Lahore
134	Naveena Textile (Pvt.) Ltd.	Medium	Lahore
135	Haji Sheikh Noor-ud-din & Sons	Medium	Lahore
136	Ramay Textile	Medium	Lahore
137	Nishat Apparels	Medium	Lahore
138	Radiation Garments	Small	Lahore
139	Zulfiqar Knitting	Medium	Lahore
140	Mr. Denim	Medium	Lahore
141	Source Line International	Small	Lahore
142	A & F Apparel	Small	Lahore
143	AH Enterprises	Medium	Lahore
144	Global Apparel	Medium	Lahore
145	Dynamic Sportswear (Pvt.) Ltd.	Large	Lahore
146	Fashion Ground	Small	Lahore
147	Shan Enterprises	Medium	Lahore
148	Stipple Apparel	Small	Lahore
149	R-Usman Enterprises	Medium	Lahore
150	EN Garments	Small	Lahore
151	Denim Plus (Pvt.) Ltd.	Small	Lahore
152	AM Apparel	Small	Lahore
153	Forte Apparel (Pvt.) Ltd.	Medium	Lahore

SR #	Entity Name	Entity Size	District
154	Sefam (Pvt.) Ltd.	Medium	Lahore
155	Crystal Sourcing	Medium	Lahore
156	Malik Garments	Medium	Lahore
157	Azgard9 Ltd.	Large	Lahore
158	3A Apparel	Medium	Lahore
159	Excel cotton (Pvt.) Ltd.	Large	Lahore
160	Zainab Enterprises	Medium	Lahore
161	Elegant (Pvt.) Ltd.	Medium	Lahore
162	Chaudhry Fabrics	Medium	Lahore
163	Sunny Textile (Pvt.) Ltd.	Medium	Lahore
164	Stitch Craft(Pvt.) Ltd.	Medium	Lahore
165	Style Textile	Small	Lahore
166	Imperial Connections	Small	Lahore
167	Fine Garments	Small	Lahore
168	Tempo Sports	Medium	Lahore
169	Spry Sports	Medium	Lahore
170	Mansha Brothers	Medium	Sialkot
171	Little Wood Corporation	Medium	Sialkot
172	Dekhan Corporation	Medium	Sialkot
173	Vision Technologies	Large	Sialkot
174	Long View	Medium	Sialkot
175	Vital (Pvt.) Ltd.	Large	Sialkot
176	Sesil (Pvt.) Ltd.	Medium	Sialkot
177	KM Ashraf Sons (Pvt.) Ltd.	Medium	Sialkot
178	Ittehad Implex	Small	Sialkot
179	Isra Sports	Medium	Sialkot
180	BJ Sports	Medium	Sialkot
181	Leatherfield (Pvt.) Ltd.	Large	Sialkot
182	Silver Star	Large	Sialkot
183	Green Hill	Medium	Sialkot
184	Meyer & Co.	Medium	Sialkot
185	Magadon Classic International (Pvt.) Ltd.	Medium	Sialkot
186	Aksa Sports	Large	Sialkot
187	Fine Group	Large	Sialkot
188	Libermann International	Medium	Sialkot
189	Shahzad Corporation	Small	Sialkot
190	Amir Gulzar Stitching Centre	Small	Sialkot
191	Ahmad Gloves	Small	Sialkot
192	First American	Medium	Sialkot

SR #	Entity Name	Entity Size	District
193	FOX and Associates	Medium	Sialkot
194	Peak Garments	Medium	Sialkot
195	Kapur (Pvt.) Ltd.	Medium	Sialkot
196	Kirama Trading	Medium	Sialkot
197	Nasa Corporation	Medium	Sialkot
198	Sheikhan International	Medium	Sialkot
199	Shehzada Gloves	Medium	Sialkot
200	Helicon Enterprises	Large	Sialkot
201	High Scope International	Small	Sialkot
202	First Barna Company	Medium	Sialkot
203	Europlus Sialkot (Pvt.) Ltd.	Medium	Sialkot
204	Thapur (Pvt.) Ltd.	Medium	Sialkot
205	Ryzo International (Pvt.) Ltd.	Medium	Sialkot
206	Techniques Garments (Pvt.) Ltd.	Medium	Sialkot
207	FHA Industries	Medium	Sialkot
208	Craftsman	Small	Sialkot
209	De-Sports Casper	Medium	Sialkot
210	Major Products (Pvt.) Ltd.	Medium	Sialkot
211	Forward Sports (Pvt.) Ltd.	Medium	Sialkot
212	Remington Sports (Pvt.) Ltd.	Medium	Sialkot
213	World of Martial Arts	Medium	Sialkot
214	DK Industries	Large	Sialkot
215	Shiekh of Sialkot	Medium	Sialkot
216	Penna Overseas Corporation	Large	Sialkot
217	NTC International	Medium	Sialkot
218	Anwar Khawaja Industries	Small	Sialkot
219	Eureka	Medium	Sialkot
220	Momin Sports	Small	Sialkot
221	StarPak	Medium	Sialkot
222	Ashraf Industries (Pvt.) Ltd.	Medium	Sialkot
223	Taj Mahal	Medium	Sialkot
224	Colaro Sports	Small	Sialkot
225	Capital Sports (Pvt.) Ltd.	Medium	Sialkot
226	Talon (Pvt.) Ltd.	Medium	Sialkot
227	CA Sports	Medium	Sialkot
228	Azka Sports	Small	Sialkot
229	ACE	Small	Sialkot
230	Amin Enterprises	Medium	Sialkot
231	Ali Murtaza Associate (Pvt.) Ltd.	Small	Lahore

SR #	Entity Name	Entity Size	District
232	Thapur Industries	Medium	Sialkot
233	Seminar (Pvt.) Ltd.	Medium	Sialkot
234	Recto Sports (Pvt.) Ltd.	Medium	Sialkot
235	Fircos International (Pvt.) Ltd.	Medium	Sialkot
236	Karim SA (Pvt.) Ltd.	Medium	Sialkot
237	Ennoable International (Pvt.) Ltd.	Medium	Sialkot
238	VIP Wears (Pvt.) Ltd.	Medium	Sialkot
239	Spotlight(Pvt.) Ltd.	Medium	Sialkot
240	Nizam Sons (Pvt.) Ltd.	Medium	Sialkot
241	Modesty Sports (Pvt.) Ltd.	Medium	Sialkot
242	Cospo Agencies (Pvt.) Ltd.	Medium	Sialkot
243	Muta Industries (Pvt.) Ltd.	Medium	Sialkot
244	Asif Ali Enterprise	Medium	Sialkot
245	Cobija Industries	Small	Sialkot
246	Comot Sports (Pvt.) Ltd.	Medium	Sialkot
247	Asuf Brothers Sportswear	Medium	Sialkot
248	Estern Sports	Medium	Sialkot
249	Spry Sports Corporation	Medium	Sialkot
250	Black Bird Corporation	Small	Sialkot

10.5 Annexure E: List of TSPs Surveyed

Table 28 – List of TSPs Surveyed

SR #	Training Institution Name	District
1	PRGTTI	Lahore
2	PKTI	Lahore
3	University of Gujrat	Lahore
4	STEPS	Lahore
5	Dandy School of Fashion Design	Lahore
6	Punjab University Art and Design	Lahore
7	SABAC	Lahore
8	Punjab Vocational Training Council	Lahore
9	Hajvery University	Lahore
10	Sanatzar	Lahore
11	Allied College of Textile Management and Administration	Lahore
12	PIFD	Lahore
13	Lahore School of Fashion Design	Lahore
14	British Education and Training System	Lahore
15	HUNARKADA	Lahore
16	TEVTA	Lahore
17	University of Management and Technology	Lahore
18	GC University	Islamabad
19	Sanatzar	Islamabad
20	GIFT University	Islamabad
21	National Textile Institute	Islamabad
22	Islamabad College of Management and Design	Rawalpindi
23	University of Faisalabad	Faisalabad
24	Rawalpindi Institute of Art & Design	Faisalabad
25	HUNARKADA	Faisalabad

10.6 Annexure F: List of Sector Experts Interviewed

Table 29 – List of Sector Experts Interviewed

SR #	Name	Organisation (if any)	Position Held	Qualification	Sector Experience (years)
1	Dr. Khalid Farooq	Shahzada Gloves	Professor/ Trainer	M.Sc., Ph.D. (SME Segment Development)	25
2	Kamran Sandhu	PRGTTI	Project Director	Ph.D. (Continued), M.Phil.	15
3	Tayyab Mir	PKTI	Vice Principal	Masters	11
4	Saira Alam	Rawalpindi Institute of Art & Design	Principal	Masters (Interior Designing)	12
5	Tehmina Afzal	Faisalabad Institute of Textile and Fashion Design	Dean - Fine Arts Dept.	Masters (Fine Arts)	18
6	Amir Butt	Master Textile	CFO	FCA	20
7	Imran Shareef	Star Pak	Company Secretary	FCCA UK	18
8	Ahsan Rasheed	Image Garments (Pvt.) Ltd.	CFO	ACA, ITP, APFA	22
9	Jamsheed Iqbal	Masood Textile	Manager	ACA	8
10	Adil Butt	Shahkam Industries	Director	Intermediate	45
11	Shahid Rafi	Rafi Sons (Pvt.)Ltd.	Director	Intermediate	25
12	Hamid Sharif	Stitch and Style (Pvt.) Ltd.	CEO	Masters	18
13	Mubasher Butt	Body Media	CEO	Masters	25
14	Tahir Rehman	PHMA	Secretary-(Regional)	Masters	20
15	M. Sumair Aslam	Outlook Brand	CEO	MBA	12
16	Imran Amjad	US Apparel	Director (Business Excellence)	MS	10
17	Amjad Mehmood	Stitch and Style (Pvt.) Ltd.	GM	Masters	20

18	Ijaz Ali	Verona Apparel	CEO	Graduate	10
19	Hamid Baig	AGF Apparels	CEO	Masters	20
20	Khawaja Ahmad	KhawajaCotton Industries	CEO	MBA	35
21	Shahid Majid	Musterhaft	GM	Masters	20
22	Azhar Babar	Klash (Pvt.) Ltd.	GM (Planning and Industrial Engineering)	B.Sc. (Industrial Engineering)	15
23	Aman Ullah	-	CEO	MBA	17
24	Rana Ghulam Raza khan	Tauseef Enterprises(Pvt.) Ltd.	GM (Admin)	Masters	11
25	Capt.Abdul Majeed	Combined Fabrics	GM - HR & Compliance	Masters	10
26	Kamar Lateef	Texcot International	GM	MBA, MS Statistics	20
27	Javeed Qayyum	KMA Group of Industry	CFO	FCA	19
28	Raheel Soni	Remington	Director	Masters	20
29	Ch. M. Iqbal	Warya Bikes Sports	GM	Masters	26
30	Sohail Afzal	Limton (Pvt.) Ltd.	Director	Masters	20
31	M. Lukman Ameen	Thabar Pakistan (Pvt.) Ltd.	MD	Masters	20
32	Mr. Sohail Khuwaja	Mir Yousaf Leatherwear (Pvt.) Ltd.	CEO	Masters	25
33	Shahzad Kamboh	Crystal Sourcing	CEO	MPA	12
34	Adeel Riaz	Radiations	Director	M.Phil.	3
35	Rizwan Ghani	Knittex Apparel (Pvt.) Ltd.	Director (Marketing)	Masters	5
36	Mehdi Hassan	Hafeez Knitwear(Pvt.) Ltd.	GM	B.Sc.Textile	8
37	Umer-uz-Zaman	Helicon Enterprises	CEO	Masters	12
38	Ahmad Hanif	Pensy	Director	BBA	2
39	Asif khan	Emmi Garments	GM	M.Sc. Math	19
40	Faisal khan	Sajjad Knitwear	GM	MPA	20

41	M. Haseeb	Scoutex	CEO	Masters	20
42	Ansar Naseer	Hallmark	CEO	Masters	25
43	M. Rizwan	GC University	Faculty Member	B.Sc.	9
44	Muzzamil Rasheed	Delta Group	Operation Manager	Masters	25
45	Ikram Ullah	Masterhaft	Compliance Manager	MBA	15
46	Mehmood Farooqi	Drifiti	Manager	B.Sc.	10
47	M.Aslam	Alliance Textile	Manager Expert	MBA	10
48	Sohail Anwar	Jeans Company	Manager	MBA	19
49	Umair Azhar	Tauseef Sadique Enterprise	HR Manager	MBA	8
50	M. Farman	Harm Textile Mills	Export Head	MBA	10

10.7 Annexure G: Bibliography

Following is the list of documents reviewed for the purpose of this study:

Table 30 – List of Documents Reviewed

Sr No.	Reports / Papers	By
01	Skill Need Assessment for the Garments Sector-Workshop	Punjab Skills Development Fund
02	Punjab Skill Gap Study India	N.S.D.C , India
03	Maharashtra Skill Gap Study India	N.S.D.C , India
04	Rajasthan Skill Gap Study India	N.S.D.C , India
05	Human Resource and Skill Requirements in Textile Sector	N.S.D.C , India
06	Competitiveness in the Garments and Textiles Industry: Creating a supportive environment	The Asia Foundation
07	Textiles Skill Mapping-India	N.S.D.C , India
08	The Global Garment Industry and the Informal Economy-Discussion Paper	Nina Ascoly
09	The Textile and Clothing Sector and EU Trade Policy	
10	The National Skills Strategy 2009-2013	NAVTTC
11	The National Vocational Qualifications Framework(NVQF)	NAVTTC
12	Punjab Development Statistics	Bureau Of Statistics Government of The Punjab Lahore
13	Punjab in Figures 2013	Bureau Of Statistics Government of The Punjab Lahore
14	Training of Trainers	Trainer's Guide J. David Hawkins
15	Pakistan Millennium Development Goals Report 2013	Ministry of Planning, Development and Reform-Pakistan
16	Statement Showing Export of Textile Manufacturing Items	Pakistan Bureau of Statistics
17	Report on Manufacturing of Readymade Garments	Onicra's Outlook India
18	Readymade Garment Manufacturers - Report	Dr. Noor Ahmed Memon
19	Apparel Industry Trends from Farm to Factory-Report	Haley Wrinkle, Free2Work Senior Researcher
20	Critical Issues for the Garment Industry	Ministry of Foreign Affairs-

Sr No.	Reports / Papers	By
		Amsterdam
21	Industrial Clusters (Punjab)	SMEDA
22	Better Work Haiti: Garment Industry6th Biannual Synthesis Report Under the HOPE II Legislation-2013	ILO and IFC
23	HS Codes Pakistan	Pakistan Customs
24	Status of Teachers in Pakistan	Idara-e-Taleem-o-Agahee
25	Population Situation of Punjab	Population Census Organisation Punjab Statistics Bureau
26	Status of Education	Pakistan Economic Survey 2012-13
27	The Textile and Clothing Industry-Discussion Paper	Ratnakar Adhikari and Yumiko Yamamoto
28	A Comparative Analysis of the Competitiveness of the Readymade Garment Industry	The Institute for Competitiveness
29	Distribution of Formal Industry Across Districts	Industrial Directory Punjab
30	Pakistan Textile Industry: A Major Player in the Recovery of the Global Textile Industry-Discussion Paper	Pegasus Consultancy Pvt. Ltd.
31	Punjab Employment Trends-Pakistan	Government of Punjab (Pakistan) and ILO
32	Guidelines for Development of Regional Model Competency Standards (RMCS)	ILO
33	The Global Apparel Value Chain, Trade and the Crisis-Policy Research Working Paper	Gary Gereffi Stacey Frederick
34	Indian Textile and Garment Industry-An Overview	University of Mysore Department of Commerce Hassan, India
35	The Global Textile and Garments Industry: The Role of Information and Communication Technologies (ICTs) in Exploiting the Value Chain-Working Paper	McNamara and Kerry

10.8 Annexure H: Questionnaires

10.8.1 Demand Side Questionnaire (Garments Sector Entities)

PUNJAB
Skills Development Fund

PUNJAB SKILLS DEVELOPMENT FUND

GARMENTS SECTOR SKILLS STUDY – DEMAND ASSESSMENT

JUNE, 2014

SECTOR SKILLS STUDY

Assalam-O-Alaikum, we represent Punjab Skills Development Fund (PSDF), and are in the process of conducting Sector Skills Study for Garments Sector.

In order to conduct this study, we, the Anjum Asim ShahidRahman, Chartered Accountants, Member Firm of Grant Thornton International, are undertaking a primary survey to develop our understanding of the jobs and skills requirements of Garment Sectorvis-a-vis its workforce so that based on the findings of this study, PSDF can accordingly design its training program to enhance the skills set of the workforce employed/to be employed by the Garments sector.

We will not use your identity or your individual response in reporting findings gathered through this study, instead, your suggestions and responses will be aggregated along with the responses of other Garments sector entities. We would like to assure you any information that you share with us will be held strictly confidential within our offices and shall not be used for any purpose other than the one described above.

If there is anything you do not understand during the interview, please feel free to seek clarification. Thank you for taking time out for this interview. This interview will take approximately ____ minutes.

Interviewer:	
Reviewed By:	
Approved By:	

ENTITY BACKGROUND

Sr. No.	Questions	Responses
1	District / Cluster	Lahore ☐ Sialkot ☐ Faisalabad ☐ Other _____ ☐
2	Establishment Name	
3	Mailing/Physical Address	
4	Year of Establishment	
5	Nature of Entity	☐ Sole Proprietor ☐ Partnership Firm ☐ Private Limited Company ☐ Public Unlisted Company ☐ PublicListed Company ☐ Any other _____
6	E-Mail Address	
7	Telephone Number	
8	Website Address	
9	Contact Person *(Name, Designation)*	
10	Which departments/agencies do you approach for obtaining permissions/licenses/NOCs etc?	☐ Ministry of Textile ☐ FBR ☐ SECP ☐ Registrar of Firms ☐ Labor Department ☐ Social Security Department ☐ Environmental Department ☐ Any other _____
11	Representative of which department/agency visit you and how frequently?	___Ministry of Textile ___FBR ___SECP ___Registrar of Firms ___Labor Department ___Social Security Department ___Environmental Department ___Any other _____

1. Under which of the following categories, does your entity fall?

Small ☐	Medium ☐	Large ☐

Small: Annual sales up to PKR 75 Million.

Medium: Annual sales more than PKR 75 Million but up to PKR 400 Million.

Large: Annual sales more than PKR 400 Million.

2. In which Sub- Sector does your entity operate?

Sector	Category	Tick
Woven Garments ☐	1. Denim garments 2. Twill wear 3. Technical wear 4. Sports wear 5. Uniforms 6. Fashion wear 7. Casual wear	☐ ☐ ☐ ☐ ☐ ☐ ☐
Knitted Garments ☐	1. Sportswear 2. Under garments 3. Casual wear 4. Swimwear 5. Skiwear 6. Technical wear	☐ ☐ ☐ ☐ ☐ ☐

3. Which products does your entity deal with (manufacture or sell)?

Sr. No	Products	Sr. No.	Products
1	☐ Jackets (denim, nylon, polyester, knit etc)	7	☐ Shorts
2	☐ Shirts	8	☐ Socks
3	☐ T-Shirts	9	☐ Baby wear
4	☐ Pullover	10	☐ Inner Garments
5	☐ Sweaters	11	☐ Any Other _____
6	☐ Trousers		

4. How would you categorize your entity among the following?

Manufacturer ☐	Exporter ☐	Local Trader ☐

5. What has been the trend of revenue growth of your entity during last 3 years?

Trend	Exports	Local Trade
Upward	☐	☐
Downward	☐	☐
Varied	☐	☐

6. What percentage of your revenue is attributable to domestic and export markets? Also, what is the expected percentage increase in revenue for the next two years?

Target Market	Current Revenue Mix (%age)	Expected Percentage Increase in Next 2 Years
Export Market		
Domestic Market		

7. What is the current capacity utilization of your production facility?

_____%

If it is less than 100%, please identify the limiting factors creating hurdles in reaching installed capacity.

Lack of Funds ☐	Lack of Skilled HR ☐	Old Technology and Infrastructure ☐
Limited Demand ☐	Shortage of Material ☐	Other_____

8. Do you have any plan for enhancing your capacity utilization beyond the current level in the coming year?

Yes ☐	No ☐

If yes, please mention % increase in the current level of capacity utilization by _____

9. Do you have any plan for improving the production capacity beyond existing level of installed capacity in the coming two years?

Yes ☐	No ☐

If yes, please mention % increase in the current level of installed capacity by _____

10. What are the three most important technologies in your sector?

1. _____
2. _____
3. _____

SKILLS MAPPING

11. Which of the following departments have your entity established? Please mention the number of employees and monthly salary range in each department?

Sr. No	Departments	Tick	Number of Employees		Range of Salary/Month
			Male	Female	
1	Knitting	☐			
2	Weaving	☐			
3	Production Planning	☐			
4	Dyeing	☐			
5	Designing / Product Development (Pattern Making) ☐ Manual ☐ CAD/CAM Computerized Pattern Designing	☐			
6	Embroidery	☐			
7	Cutting	☐			
8	Stitching	☐			
9	Laundry / Washing	☐			
10	Finishing	☐			
11	Packing	☐			
12	Quality Control	☐			
13	Repair and Maintenance / Industrial Engineering	☐			
14	Marketing and Sales	☐			
15	HR and Admin	☐			
16	Accounts and Finance	☐			
17	Procurement	☐			
18	Research and Development	☐			
19	Logistics	☐			
20	Any other *(please explain)*	_____ _____			

12. How would you categorize technical/production staff working in your entity under the following categories of employment?

Category	Current Employees *(Total Number)*	
	Male	*Female*
Permanent Employees		
Contractual Employees		
Piece Rate Employees / Daily Wagers		

13. Compared to twelve months ago, has the number of employees in your organization:

Increased ☐	Decreased ☐
Remained the same ☐	Entity did not exist one year ago ☐
Do not know ☐	

14. What are the preferred skill areas for female workforce?

Categories	Skills	
Technical	☐ Fashion Designing	☐ Stitching
	☐ Pattern Making ☐ Manual ☐ CAD/CAM Computerized Pattern Designing	☐ Quality Control
	☐ Dyeing	☐ Laundry
	☐ Merchandising	☐ Industrial Engineering

Categories	Skills	
	☐ Production Planning and Control	☐ Finishing and Packing
	☐ Cutting	☐ Any other
Soft Skills	☐ Interpersonal Skills	☐ Professionalism
	☐ Occupational Health and Safety	☐ Workplace Ethics
	☐ Motivation	☐ Timeliness
	☐ Communication	☐ Team Work
	☐ Any other	

15. What is the number of vacancies against each of the following job positions? Among total vacancies, do you have any vacancies that are proving hard-to fill (Hard-to-fill vacancies are those posts against which entities are unable to find a suitable candidate possessing the desired skills set within a reasonable time, at prevailing wages through normal recruitment procedures)? If yes, please identify these positions in your entity and intimate the projected requirement in respect thereof in the next two years?

Levels	Job Positions	Current Vacancies (Number)	Hard to fill vacancies (Number)	Expected hiring in next two years (Number)
Senior Management	☐ GM Operations ☐ GM Production ☐ GM Marketing ☐ GM HR ☐ GM Supply Chain ☐ GM Finance ☐ Any other			

Levels	Job Positions	Current Vacancies (Number)	Hard to fill vacancies (Number)	Expected hiring in next two years (Number)
Middle Management (Managers / Assistant Managers)	☐ Manager/Assistant Marketing ☐ Manager /Assistant Production ☐ Manager /Assistant Before Washing (cutting, stitching) ☐ Manager/Assistant Washing ☐ Manager/Assistant Finishing and Packing ☐ Manager/Assistant Quality Assurance and Control ☐ Manager/Assistant Production Planning and Control ☐ Manager/Assistant Maintenance ☐ Manager/Assistant HR ☐ Manager/Assistant Finance ☐ Manager/Assistant Purchase ☐ Commercial Manager ☐ Product Development ☐ Any other			
Technical / Production Staff:				
Knitting	☐ Knitting Master ☐ Knitting Machine Operator ☐ Knitting Machine Mechanic ☐ Knitting Helper ☐ Any other			
Weaving	☐ Weaving Master ☐ Weaving Machine Operator ☐ Weaving Machine Mechanic ☐ Weaving Helper ☐ Any other			
Production Planning	☐ Deputy PPC Manager ☐ Any other			

Levels	Job Positions	Current Vacancies (Number)	Hard to fill vacancies (Number)	Expected hiring in next two years (Number)
Dyeing	☐ Dyeing Master ☐ Dyeing Machine Operator ☐ Laboratory Assistant ☐ Sampling Man ☐ Any other			
Designing / Product Development (Pattern Making)	☐ Supervisors ☐ Sampling Expert ☐ Coordinators			
Cutting	☐ Cutting Master ☐ Fabric Layer Operator ☐ Tracer ☐ Cutting Machine Operator ☐ Bundle Maker ☐ Any other			
Embroidery	☐ Designer ☐ Sampling Man ☐ Machine Operator ☐ Any other			
Stitching	☐ Production In charge Cum Supervisor ☐ Line Supervisor ☐ Quality Checker ☐ Machine Operator ☐ Sewing Machine Mechanic ☐ Any other			
Laundry / Washing	☐ Washing Master ☐ Laboratory Assistant ☐ Washing Machine Operator ☐ Hydro Operator ☐ Steam Operator ☐ Mechanic ☐ Any other			

Levels	Job Positions	Current Vacancies (Number)	Hard to fill vacancies (Number)	Expected hiring in next two years (Number)
Finishing and Packing	☐ Packing In Charge ☐ Finishing In Charge ☐ Button, Rivet Machine Operator ☐ Thread Cutter ☐ Press Man ☐ Any other			
Industrial Engineering	☐ Industrial Engineer ☐ Any other			
Quality Control	☐ Inline Quality Checker ☐ End of the Line Quality Checker ☐ Any other			
Others: _____				

16. What are the reasons for these positions to be hard-to-fill in respect of each of the following levels?

Level	Reasons	
Middle Management Level	Lack of demand driven skills	☐
	High turnover of skilled workers	☐
	Incompatibility of curricula with industry requirements	☐
	Higher flight of workforce to abroad	☐
	Lack of career guidance and job placement services	☐
	Any other reason (Please Specify)_____	☐
Technical/ Production Staff	Lack of demand driven skills	☐
	High turnover of skilled workers	☐
	Incompatibility of curricula with industry requirements	☐
	Higher flight of workforce to abroad	☐
	Lack of career guidance and job placement services	☐
	Any other reason (Please Specify) _____	☐

17. What is the existing skills level of the workforce employed by your entity?

Skills	Highly Skilled	Reasonably Skilled	Poorly Skilled
Production Planning	☐	☐	☐
Dyeing	☐	☐	☐
Designing / Product Development (Pattern Making)	☐	☐	☐
Cutting	☐	☐	☐
Embroidery	☐	☐	☐
Stitching	☐	☐	☐

Laundry / Washing	☐	☐	☐
Finishing and Packing	☐	☐	☐
Industrial Engineering	☐	☐	☐
Quality Control	☐	☐	☐
Logistic	☐	☐	☐
Merchandising	☐	☐	☐
Others: _____	☐	☐	☐

18. How would you rate your production and technical staff in the following technical skills? What remedial measures do you suggest to overcome deficiencies in these skills?

Technical Skills	Criticality Level			Remedial Measures		
	High	*Medium*	*Low*	*Need for Specialized Trainings*	*Designing Special Courses*	*Any Other*
☐ Fashion Designing	☐	☐	☐	☐	☐	
☐ Pattern Making ☐ Manual ☐ CAD/CAM Computerized Pattern Designing	☐	☐	☐	☐	☐	
☐ Dyeing	☐	☐	☐	☐	☐	
☐ Merchandising	☐	☐	☐	☐	☐	
☐ Production Planning and Control	☐	☐	☐	☐	☐	
☐ Cutting	☐	☐	☐	☐	☐	
☐ Stitching	☐	☐	☐	☐	☐	
☐ Quality Control	☐	☐	☐	☐	☐	
☐ Laundry/Washing	☐	☐	☐	☐	☐	
☐ Industrial Engineering	☐	☐	☐	☐	☐	
☐ Finishing and Packing	☐	☐	☐	☐	☐	
☐ Any other_____	☐	☐	☐	☐	☐	

19. How would you rate your staff in the following soft skills? What remedial measures do you suggest to overcome deficiencies in these skills?

Soft Skills	Criticality Level			Remedial Measures		
	High	*Medium*	*Low*	*Need for Specialized Trainings*	*Designing Special Courses*	*Any Other*
☐ Interpersonal Skills	☐	☐	☐	☐	☐	
☐ Occupational Health and Safety	☐	☐	☐	☐	☐	
☐ Motivation	☐	☐	☐	☐	☐	
☐ Communication	☐	☐	☐	☐	☐	
☐ Professionalism	☐	☐	☐	☐	☐	
☐ Workplace Ethics	☐	☐	☐	☐	☐	
☐ Timeliness	☐	☐	☐	☐	☐	
☐ Team Work	☐	☐	☐	☐	☐	
☐ Any other_____	☐	☐	☐	☐	☐	

Garments Sector Skills Study- Demand Assessment
Punjab Skills Development Fund

20. What percentage of your employees do you consider fully proficient at their jobs:

Out of Senior Management	_____%age
Out of Middle Management	_____%age
Out of Technical/Production workers	_____%age

21. What is the frequency of workforce turnover for the positions/roles possessing following skills?

Skills	High	Medium	Low
Production Planning	☐	☐	☐
Dyeing	☐	☐	☐
Designing / Product Development (Pattern Making)	☐	☐	☐
Cutting	☐	☐	☐
Embroidery	☐	☐	☐
Stitching	☐	☐	☐
Laundry / Washing	☐	☐	☐
Finishing and Packing	☐	☐	☐
Industrial Engineering	☐	☐	☐
Quality Control	☐	☐	☐
Logistic	☐	☐	☐
Merchandising	☐	☐	☐
Others: _____	☐	☐	☐

22. Which of the following sources does your entity use to hire employees?

Level	Tick
Senior Management	☐ Internet ☐ Newspapers ☐ Job Postings ☐ Help Wanted Signs ☐ University/Training Centre Recruitment ☐ Contractors ☐ Personal Referrals ☐ Others _____
Middle Management (Managers / Assistant Managers)	☐ Internet ☐ Newspapers ☐ Job Postings ☐ Help Wanted Signs ☐ University/Training Centre Recruitment ☐ Contractors ☐ Personal Referrals ☐ Others _____
Technical / Production Staff	☐ Internet ☐ Newspapers ☐ Job Postings ☐ Help Wanted Signs ☐ University/Training Centre Recruitment ☐ Contractors ☐ Personal Referrals ☐ Others _____
Others	☐ Internet ☐ Newspapers ☐ Job Postings ☐ Help Wanted Signs ☐ University/Training Centre Recruitment ☐ Contractors ☐ Personal Referrals ☐ Others _____

Laundry / Washing	☐	☐	☐
Finishing and Packing	☐	☐	☐
Industrial Engineering	☐	☐	☐
Quality Control	☐	☐	☐
Logistic	☐	☐	☐
Merchandising	☐	☐	☐
Others: _____	☐	☐	☐

18. How would you rate your production and technical staff in the following technical skills? What remedial measures do you suggest to overcome deficiencies in these skills?

Technical Skills	Criticality Level			Remedial Measures		
	High	*Medium*	*Low*	*Need for Specialized Trainings*	*Designing Special Courses*	*Any Other*
☐ Fashion Designing	☐	☐	☐	☐	☐	
☐ Pattern Making ☐ Manual ☐ CAD/CAM Computerized Pattern Designing	☐	☐	☐	☐	☐	
☐ Dyeing	☐	☐	☐	☐	☐	
☐ Merchandising	☐	☐	☐	☐	☐	
☐ Production Planning and Control	☐	☐	☐	☐	☐	
☐ Cutting	☐	☐	☐	☐	☐	
☐ Stitching	☐	☐	☐	☐	☐	
☐ Quality Control	☐	☐	☐	☐	☐	
☐ Laundry/Washing	☐	☐	☐	☐	☐	
☐ Industrial Engineering	☐	☐	☐	☐	☐	
☐ Finishing and Packing	☐	☐	☐	☐	☐	
☐ Any other _____	☐	☐	☐	☐	☐	

19. How would you rate your staff in the following soft skills? What remedial measures do you suggest to overcome deficiencies in these skills?

Soft Skills	Criticality Level			Remedial Measures		
	High	*Medium*	*Low*	*Need for Specialized Trainings*	*Designing Special Courses*	*Any Other*
☐ Interpersonal Skills	☐	☐	☐	☐	☐	
☐ Occupational Health and Safety	☐	☐	☐	☐	☐	
☐ Motivation	☐	☐	☐	☐	☐	
☐ Communication	☐	☐	☐	☐	☐	
☐ Professionalism	☐	☐	☐	☐	☐	
☐ Workplace Ethics	☐	☐	☐	☐	☐	
☐ Timeliness	☐	☐	☐	☐	☐	
☐ Team Work	☐	☐	☐	☐	☐	
☐ Any other _____	☐	☐	☐	☐	☐	

20. What percentage of your employees do you consider fully proficient at their jobs:

Out of Senior Management	_____%age
Out of Middle Management	_____%age
Out of Technical/Production workers	_____%age

21. What is the frequency of workforce turnover for the positions/roles possessing following skills?

Skills	High	Medium	Low
Production Planning	☐	☐	☐
Dyeing	☐	☐	☐
Designing / Product Development (Pattern Making)	☐	☐	☐
Cutting	☐	☐	☐
Embroidery	☐	☐	☐
Stitching	☐	☐	☐
Laundry / Washing	☐	☐	☐
Finishing and Packing	☐	☐	☐
Industrial Engineering	☐	☐	☐
Quality Control	☐	☐	☐
Logistic	☐	☐	☐
Merchandising	☐	☐	☐
Others: _____	☐	☐	☐

22. Which of the following sources does your entity use to hire employees?

Level	Tick
Senior Management	☐ Internet ☐ Newspapers ☐ Job Postings ☐ Help Wanted Signs ☐ University/Training Centre Recruitment ☐ Contractors ☐ Personal Referrals ☐ Others _____
Middle Management (Managers / Assistant Managers)	☐ Internet ☐ Newspapers ☐ Job Postings ☐ Help Wanted Signs ☐ University/Training Centre Recruitment ☐ Contractors ☐ Personal Referrals ☐ Others _____
Technical / Production Staff	☐ Internet ☐ Newspapers ☐ Job Postings ☐ Help Wanted Signs ☐ University/Training Centre Recruitment ☐ Contractors ☐ Personal Referrals ☐ Others _____
Others	☐ Internet ☐ Newspapers ☐ Job Postings ☐ Help Wanted Signs ☐ University/Training Centre Recruitment ☐ Contractors ☐ Personal Referrals ☐ Others _____

23. Which of the following are preferred choices of your entity for recruitment at the following levels?

Level	Level	Experience (Years/Months)
Managerial	☐ Master Degree/ Professional Qualification ☐ Graduate / Professional Degree ☐ Under Graduate ☐ Vocational / Technical Diploma Holder ☐ Others	
Supervisory	☐ Graduates / Professional Degree ☐ Vocational / Technical Diploma Holder ☐ S.S.C. ☐ H.S.C. ☐ Others	
Worker and Operational Staff	☐ Vocational / Technical Diploma Holder ☐ S.S.C. ☐ H.S.C. ☐ None ☐ Others	

24. Does the prevailing educational and vocational training system serve the needs of your entity in terms of providing quality workforce?

If Yes ☐	If No ☐
Please tick the following:	What improvements do you suggest?
☐ Highly satisfied	☐ Need to introduce improved technical courses
☐ Satisfied	☐ Need to review curricula of existing courses
☐ Somewhat satisfied	☐ Need to increase practical skill through competency based training and assessment
☐ Others	☐ Others

TRAINING

25. Does your entity provide formal training to its workforce?

Yes ☐	No(Give reasons & move to Q No.32) ☐

If No, please explain the reasons.

Lack of resources(Ask Q No. 31) ☐	Not considered beneficial ☐

Any other reason:

_____
_____
_____

26. If yes, please explain the number of employees trained during the last 12 months.

Numbers _____

27. Do you have a specific budget allocated for training and professional development of your employees?

Yes ☐	No ☐

28. If yes, what percentage of your total expenditure do you spend on training?

Less than 1% ☐	Between 10 - 15% ☐
Less than 5% ☐	Greater than 15% ☐

29. Do you have a training centre at your location?

Yes ☐	No ☐

30. What is relative share in percentage of the following types of training that your entity provides to your workforce?

Category	Training through vocational training institutes (%)	On job training (%)	Apprenticeship (%)	Other *(Please Specify)* (%)	Average Duration of Training *(Period)*
New workers					
Existing workers					

31. Which of the following modes of training does your entity prefer as opposed to your current practice? In case the preferred mode is different from those currently employed, what are the reasons debarring you for not opting the preferred modes?

☐Training through vocational training institutes	☐On job training	☐Apprenticeship

Please specify reasons/hurdles not allowing the entity to use the preferred mode?

1) _____

2) _____

32. Have you hired a trainee as a production worker who is in a vocational course (such as TEVTA)? If yes, how have you found him in relation to work?

Poorly prepared	☐
Reasonably prepared	☐
Well prepared	☐

If poorly prepared, in which of the following reasons are attributable to his/her poor performance:

☐ Lack of technical skills; ☐ Lack of experience; ☐ Lack of literacy/numeracy skills; ☐ Lack of motivation/ work ethics; ☐ Any other (Please specify) _____

33. Is there any National or International Vocational/ Technical Training Institute or Training Provider from whom you prefer to recruit your workforce?

Yes ☐	No

If yes, please provide the name(s) of the institute(s) and preferred program(s) of the training provider(s).

National Institutes	Preferred Program
International Institutes	**Preferred Program**

34. What new skills do you see emerging from the introduction of new technologies, which the employees usually lack? Please provide a list of these skills:

1) _____	2) _____
3) _____	4) _____
5) _____	6) _____

APPRENTICESHIP

35. Does your entity currently run any Apprenticeship Program?

Yes ☐	No (Please proceed to Question No. 42) ☐

36. If yes, what is the average number of Apprentices does your entity hire each year? _____

37. Below is a list of courses related to the Garments sector, If you are offered people trained in these areas, please write down the number of trained human resources you would demand in the next twelve (12) months for each:

Courses	HR Demand (No.)
Quality Control and Quality Assurance	
Apparel Entrepreneurship (Know About Business KAB)	
Garment Washing Techniques	
Computerized Industrial Embroidery	
Fashion and Design	
Fashion Designing	
Industrial Stitching Machine Operator	
Stitching Machine Mechanic	
Knitting Machine Operator	
Knitting Machine Mechanic	
Pattern Drafting and Cutting	
Machine and Hand Embroidery	

Quality Control in Garments	
Sportswear Stitching	
Merchandising Management Techniques	
Production Planning and Control	
CAD/CAM Computerized Pattern Designing	
Industrial Engineering	
Import Export Procedures and Documentations	
Pattern Drafting and Grading	
Apparel Supervisor	
Fabric Cutting Expert	
Fabric Inspector	
Knitting Machine Operator	
Machine Embroidery	
Industrial Stitching Machine Operator	
Industrial Stitching Machine Operator	
Fashion Designing	
Pattern Making and Cutting	
Industrial Stitching	
Fashion Designing	
Computer Pattern Designing	
Others: _____	

38. What percentage of the Apprentices does your entity employ upon completion of Apprenticeships? _____ %

39. What is the average period of Apprenticeship in your entity?

3 Months ☐	6 Months ☐	1 Year ☐
3 Years ☐	Others_____ ☐	

40. What percentage of normal salary does your entity pay to the Apprentices of that particular position? _____%

41. Does your entity provide experience letter / certificate at the end of the Apprenticeship period?

Yes ☐	No ☐

42. What problems does your entity face in taking or continuing with Apprentices?

Wastage of Resources ☐	Leave for Higher Pay Elsewhere ☐	Lack of Relevant Skills ☐
Business Confidentiality Threats ☐	Others _____	

Any Other Suggestions:

Thank you for your time!

10.8.2 Supply Side Questionnaire (Training Service Providers)

PUNJAB
Skills Development Fund

PUNJAB SKILLS DEVELOPMENT FUND

GARMENTS SECTOR SKILLS STUDY – SUPPLY ASSESSMENT

JUNE, 2014

SECTOR SKILLS STUDY

Assalam-O-Alaikum, we represent Punjab Skills Development Fund (PSDF), and are in the process of conducting Sector Skills Study for Garments Sector.

In order to conduct this study, we, Anjum Asim Shahid Rahman, Chartered Accountants, Member Firm of Grant Thornton International, are undertaking a primary survey to develop our understanding of the jobs and skills requirements of Garments sector vis-a-vis its workforce so that based on the findings of this study, PSDF can accordingly design its training program to enhance the skills set of the workforce employed / to be employed by the Garments sector.

We will not use your identity or your individual response in reporting findings gathered through this study, instead, your suggestions and responses will be aggregated along with the responses of other Garments sector entities. We would like to assure you any information that you share with us will be held strictly confidential within our offices and shall not be used for any purpose other than the one described above.

If there is anything you do not understand during the interview, please feel free to seek clarification. Thank you for taking time out for this interview. This interview will take approximately ___ minutes.

Interviewer:	
Reviewed By:	
Approved By:	

TRAINING SERVICE PROVIDER'S BACKGROUND

Sr. No.	Questions	Responses
1	District	Lahore ☐ Sialkot ☐ Faisalabad ☐ Kasur ☐ Gujranwala ☐ Other ________ ☐
2	Name of Institute / TSP	
3	Year of Establishment	
4	Status	☐ Public ☐ Private ☐ Non for Profit ☐ Other ________
5	Do you get your Financial Statements audited?	☐ Yes ☐ No
6	Affiliation / Registration	☐ Government Department *(please specify)* ________ ☐ TEVTA ☐ PVTC ☐ PBTE ☐ NAVTTC ☐ University / HEC ☐ Autonomous Body ☐ Any other ________
7	Please provide the list of affiliation/ certification from International/ Local Universities.	1. ________ 2. ________ 3. ________
8	In-process affiliation/ certification	☐ Yes ☐ No If yes please provide detail ________ ________
9	Number of campuses and cities these are located in?	
10	E- Mail Address	
11	Mailing/ Physical Address	
12	Telephone Number	
13	Website Address	
14	Contact Person *(Name, Designation)*	
15	Have you heard about PSDF?	☐ Yes ☐ No
16	Will your company be interested in obtaining information about PSDF's training initiatives?	☐ Yes ☐ No

Garments Sector Skills Study - Supply Assessment
Punjab Skills Development Fund

1. Which of the following levels of Garment Sector related educational programs are currently being offered by your institute?

☐ Degree	☐ Certificate / Diploma	☐ Short Course	☐ Any other________

2. Which of the Garments Sector related programs does your institute offer, please specify their levels, available seats, current enrollment, passing percentage and training fee charged?

Name of Programs	Level	Available Seats	Current Enrolment		Passing %age	Fee Charged (In Rs.)
			Male	Female		
	☐ Degree ☐ Certificate / Diploma ☐ Short Course ☐ Any other_____					
	☐ Degree ☐ Certificate / Diploma ☐ Short Course ☐ Any other_____					
	☐ Degree ☐ Certificate / Diploma ☐ Short Course ☐ Any other_____					
	☐ Degree ☐ Certificate / Diploma ☐ Short Course ☐ Any other_____					
	☐ Degree ☐ Certificate / Diploma ☐ Short Course ☐ Any other_____					
	☐ Degree ☐ Certificate / Diploma ☐ Short Course ☐ Any other_____					
	☐ Degree ☐ Certificate / Diploma ☐ Short Course ☐ Any other_____					

3. What is the number of permanent and part time employees/trainers at your institute?

Permanent Basis	Part time Basis	Total

4. Do you have sufficient infrastructure to train your students at your institute?

Yes ☐	No ☐

If NO, please describe in detail what infrastructure is required?

_____

_____

5. Do you have any expansion plan to be pursued in near future?

Yes ☐	No ☐

If Yes, please identify the type of expansion:

New Courses ☐	Physical / Infrastructural Expansion ☐
Geographical Outreach / new campus ☐	Any other _____ ☐

6. What is the source of funding of your institute?

Government ☐	Industry ☐
Donor(s) ☐	Self-generated ☐
Any other _____	

7. How would you divide your students (in percentage) in terms of how fee is charged at your institute?

☐ Full fee _____ %	☐ Concessional fee _____ %
☐ Free of charge _____ %	☐ Paying stipend _____ %

8. Which of the following sources does your institute use to enroll new students?

☐ Internet	☐ newspaper	☐ industrial linkages / trade bodies
☐ Billboards / banners	☐ handouts / brochures	☐ community awareness and mobilization
☐ Tv / cable network	☐ radio	☐ any other_____

9. In your opinion, what is the demand of following skill areas in each level?

Skill Areas	Level	Demand of the Skill Areas
Production Planning	☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	☐ High ☐ Medium ☐ Low
Dyeing	☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	☐ High ☐ Medium ☐ Low
Designing / Product Development (Pattern Making)	☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	☐ High ☐ Medium ☐ Low
Cutting	☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	☐ High ☐ Medium ☐ Low
Embroidery	☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	☐ High ☐ Medium ☐ Low

5

Garments Sector Skills Study - Supply Assessment
Punjab Skills Development Fund

Skill Areas	Level	Demand of the Skill Areas
Stitching	☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	☐ High ☐ Medium ☐ Low
Laundry / Washing	☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	☐ High ☐ Medium ☐ Low
Finishing and Packing	☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	☐ High ☐ Medium ☐ Low
Industrial Engineering	☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	☐ High ☐ Medium ☐ Low
Quality Control	☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	☐ High ☐ Medium ☐ Low
Logistic	☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	☐ High ☐ Medium ☐ Low
Merchandising	☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	☐ High ☐ Medium ☐ Low
Any other _____	☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	☐ High ☐ Medium ☐ Low

EDUCATION AND TRAINING OF STUDENTS

10. How does your institute develop the curricula of the programs being offered?

By own experts ☐	With collaboration of industry ☐
Follow curricula developed by government bodies ☐	Any other_____

11. Is there any mechanism in place to obtain endorsement from the industry regarding the curricula and the training contents being offered to students?

Yes ☐	No ☐

If YES, please describe in detail:

_____

_____

_____

_____

12. Do you have any mechanism in place to arrange Training of Trainers (TOT) sessions for your trainers on regular basis?

Yes ☐	No ☐

If YES, please provide the mode of trainings:

6

13. Do you think that there is a gap between the skills set of your graduates and their demand in the job market?

Yes ☐	No ☐

If YES, what measures do you propose to bridge this gap?

14. Which of the current educational/training program(s) offered by your institute require improvement vis-a-vis the following three options?

Name of Program	Level	Improvement Options
		☐ Elimination of Program
		☐ Need for Curriculum Review
		☐ Need to Increase Practical Training
		☐ Elimination of Program
		☐ Need for Curriculum Review
		☐ Need to Increase Practical Training
		☐ Elimination of Program
		☐ Need for Curriculum Review
		☐ Need to Increase Practical Training
		☐ Elimination of Program
		☐ Need for Curriculum Review
		☐ Need to Increase Practical Training

15. Which of the following measures would you like to take to improve the quality of skills set possessed by the students of your institute for better job placements?

Development of training material ☐	Continuous Professional Development of training staff ☐
Improvement in technical infrastructure / Labs ☐	Development of Industrial Linkages ☐
Any other_____	

16. Please identify any new programs you are planning to introduce in the wake of future needs of the industry, based on national and international vocational training needs and trends?

Skill Areas	Name of the Programs	Level	Required Competencies
Production Planning		☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	
Dyeing		☐ Certificate / Diploma ☐ Short Course	

Skill Areas	Name of the Programs	Level	Required Competencies
		☐ Any other_____	
Designing / Product Development (Pattern Making)		☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	
Cutting		☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	
Embroidery		☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	
Stitching		☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	
Laundry / Washing		☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	
Finishing and Packing		☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	
Industrial Engineering		☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	
Quality Control		☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	
Logistic		☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	
Merchandising		☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	
Any other _____		☐ Certificate / Diploma ☐ Short Course ☐ Any other_____	

JOB PLACEMENTS

17. What are the common reasons of non-employment of your graduates who could not find the relevant job within 60 days of passing out?

1_____

2_____

3_____

18. Does your institute take any follow up steps to find suitable jobs for your unemployed graduates?

Yes ☐	No ☐

If yes, please describe these steps: _____

19. Which of the following programs enable majority of the graduates to obtain a relevant job within sixty (60) days of graduating?

Name of the Programs	Percentage of Graduates Employed Within 60 Days

20. What is the average starting monthly salary of your graduates?

Sr. No.	Programs / Courses	Amount (PKR)
1		
2		
3		
4		
5		

INTERNSHIP / APPRENTICESHIP

21. Does your institute currently have any form of Internship / Apprenticeship arrangements in place with any Garments sector entity?

Yes ☐	No (Skip all the Questions ahead) ☐

22. What is the average number of Interns / Apprentices intake of your institute each year?

Number _____

23. What is the average period of Internship?

☐ 1 Month	☐ 3 Months	☐ 6 Months
☐ 1 Year	☐ Other *(please specify)*: _____	

24. What allowance / remuneration do most interns/apprentices receive?

_____Rupees

Any Other Suggestions:

_____

_____

_____

_____

_____

_____

_____

_____

_____

Thank you for your time!

10.8.3 Sector Experts Questionnaire

PUNJAB
Skills Development Fund

PUNJAB SKILLS DEVELOPMENT FUND

GARMENTS SECTOR SKILLS STUDY – BUSINESS EXPERTS

JUNE, 2014

SECTOR SKILLS STUDY

Assalam-O-Alaikum, we represent Punjab Skills Development Fund (PSDF), and are in the process of conducting Sector Skills Study for Garments Sector.

In order to conduct this study, we, Anjum Asim Shahid Rahman, Chartered Accountants, Member Firm of Grant Thornton International, are undertaking a primary survey to develop our understanding of the jobs and skills requirements of Garments sector vis-a-vis its workforce so that based on the findings of this study, PSDF can accordingly design its training program to enhance the skills set of the workforce employed / to be employed by the Garments sector.

We will not use your identity or your individual response in reporting findings gathered through this study, instead, your suggestions and responses will be aggregated along with the responses of other Garments sector entities. We would like to assure you any information that you share with us will be held strictly confidential within our offices and shall not be used for any purpose other than the one described above.

If there is anything you do not understand during the interview, please feel free to seek clarification. Thank you for taking time out for this interview. This interview will take approximately ___ minutes.

Interviewer:	
Reviewed By:	
Approved By:	

PERSONAL PROFILE

Sr. No.	Questions	Responses
1	Name	
2	Organization *(if any)*	
3	Position Held	
4	Qualification	
5	Sector Experience *(Years)*	
6	E - Mail Address	
7	Mailing/ Physical Address	
8	Telephone Number	

1. In the wake of recent award of GSP Plus status by EU, do you think that our Garment sector can benefit from this status?

   If Yes, what strategy would you like to propose to reap full benefits from this development?

   _____
   _____
   _____
   _____
   _____
   _____

   If No, what are the issues that you think are creating hindrances for the sector to benefit from this development?

   _____
   _____
   _____
   _____
   _____
   _____

2. In your opinion, does the Garments sector have sufficient workforce available?

☐ Freely Available	☐ Available	☐ Poorly Available	☐ Not Available

3. How would you rate the skills set possessed by the workforce available to Garments sector?

☐ Excellent	☐ Good	☐ Average	☐ Poor

4. Do you think there is a gap between the skilled workforce being produced by TSPs and their demand in the job market?

Yes ☐	No (Please proceed to Question No. 6) ☐

5. If yes, what is the underlying reason for existence of such gap?

1_____
_____
2_____
_____

What suitable measures would you like to propose to bridge the gap?

1_____
_____
2_____
_____

6. In your opinion, which of the following deficiencies exist in the skills set of existing workforce in the Garments sector?

Lack of Technical Skills	☐
Lack of Soft Skills	☐
Both	☐

7. Kindly elaborate skill deficient areas of existing workforce in Garments sector; please also tick the appropriate suggestive measure(s).

Category	Skill Deficient Areas	Suggested Measures			
		Designing of Demand Driven Programs	Need for Revision in Existing Curriculum	Improvements in Mode of Training	Any other *(Please Explain)*
Technical Skills	Knitting	☐	☐	☐	
	Weaving	☐	☐	☐	
	Production Planning	☐	☐	☐	
	Dyeing	☐	☐	☐	
	Designing / Product Development (Pattern Making)	☐	☐	☐	
	Cutting	☐	☐	☐	
	Embroidery	☐	☐	☐	
	Stitching	☐	☐	☐	
	Laundry / Washing	☐	☐	☐	
	Finishing and Packing	☐	☐	☐	
	Industrial Engineering	☐	☐	☐	
	Quality Control	☐	☐	☐	
	Logistic	☐	☐	☐	
	Merchandising	☐	☐	☐	
	Others: _____				

	Skill Deficient Areas	Suggested Measures (Tick all that apply)		
		Development of Training Programs	Modifications in Existing Curriculum	Any other (explain)
Soft Skills	Interpersonal Skills	☐	☐	
	Communications	☐	☐	
	Occupational Health and Safety	☐	☐	
	Motivation	☐	☐	
	Professionalism	☐	☐	
	Timeliness	☐	☐	
	Team Work	☐	☐	
	Workplace Ethics	☐	☐	

8. Does the prevailing formal Educational and Vocational Training System serve the needs of Garments sector?

Yes ☐	No ☐

If No, why?

_____
_____
_____

9. How would you rate the quality of Technical and Vocational Institutes providing trainings relating to Garments sector?

☐ Excellent	☐ Good	☐ Average	☐ Poor

10. How would you rate the effectiveness of existing curricula being offered by the Technical Service Providers?

☐ Excellent	☐ Good	☐ Average	☐ Poor

11. Please suggest the measures for improvement in curricula of programs being offered by various TSPs?

☐ DACUM Approach	☐ FUNCTIONAL Approach

Any other, please specify:

_____
_____
_____
_____
_____
_____
_____

12. Please specify the programs currently being offered to the Garment sector, which need updating / modification in your opinion? (Please ask this question if the respondent is a service provider or trainer)

Name of Programs	Level	Updating/Modification Required
		☐ Elimination of Program ☐ Need for Curriculum Review ☐ Need to Increase Practical Training
		☐ Elimination of Program ☐ Need for Curriculum Review ☐ Need to Increase Practical Training
		☐ Elimination of Program ☐ Need for Curriculum Review ☐ Need to Increase Practical Training
		☐ Elimination of Program ☐ Need for Curriculum Review ☐ Need to Increase Practical Training
		☐ Elimination of Program ☐ Need for Curriculum Review ☐ Need to Increase Practical Training

13. In the light of above question, what suggestions would you furnish to help design new curricula in the context of the following table?

Name of the Programs	Required Skills	Required Skill Areas to be Covered
	☐ Technical / Practical Skills ☐ Management Skills / Soft Skills	
	☐ Technical / Practical Skills ☐ Management Skills / Soft Skills	
	☐ Technical / Practical Skills ☐ Management Skills / Soft Skills	
	☐ Technical / Practical Skills ☐ Management Skills / Soft Skills	

14. Please identify the need of new programs in the wake of future needs of the industry and programs being offered by other countries competing in the market?

Name of the Programs	Sub – Sector	Level / Degree / Certificate
		☐ Degree ☐ Certificate / Diploma ☐ Short Course ☐ Any other_____
		☐ Degree ☐ Certificate / Diploma ☐ Short Course ☐ Any other_____
		☐ Degree ☐ Certificate / Diploma ☐ Short Course ☐ Any other_____
		☐ Degree ☐ Certificate / Diploma ☐ Short Course ☐ Any other_____
		☐ Degree ☐ Certificate / Diploma ☐ Short Course ☐ Any other_____

15. Please name institutes, which can be identified distinctly with reference to effectiveness of curriculum they teach and training that they impart to their graduates?

1_____
2_____
3_____
4_____
5_____

16. How do you see the future growth prospects of Garment Sector in Pakistan? What percentage growth do you see in the coming two years in the sector?

17. In the wake of emerging developments in the global garment industry, what new technological advancements do you foresee in the near future?

18. How would you tackle the skills-related challenges emerging as a result of these technological developments?

19. What improvements in skill set will be required in the light of above technological developments?

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Any other suggestion for the improvement of skills set of the workforce for the Garments sector:

Thank you for your time!