The analysis of demand supply gap of skilled workforce, in terms of vocational training, shows that for eight trades—machine operators, helpers, cooks, waiters, plant operators, boiler operators, graphic designer and printing machine operators, the unmet demand adds up to 30,320 workers representing 65% of total unmet demand across all the vocational training areas across a total of 137 vocational professions, the overall unmet demand of employers in different sectors stands at around 46,250, while in 46 vocational training areas, existing supply exceeds the industry demand, with excess supply totalling just over 21,000.

In terms of overseas employment, there is potential for increasing supply of skilled manpower from Sindh, as there is considerable demand for drivers, masons, electricians, steel fixers, plumbers and fitters in overseas markets. The significant majority of overseas workers that have proceeded for employment abroad from Sindh up to 2016 is from Karachi district accounting for 57.8% of all overseas employment from the province, making up over 520,000 workers. This is followed by Hyderabad 4.8%, Larkana 4.5%, Jacobabad (3.6%) and Dadu (3.3%), with the lowest overseas flow from Matari, Tando Muhammad Khan, Tando Allah yar and Sujawal districts.

On the basis of the findings of this skills gap analysis, it is recommended that Sindh TEVTA should make concerted efforts for ensuring that annual skilled workforce supply matches with the demand of local labour market. The technical education and vocational training institutes in the province should prepare trade wise and level wise skilled workforce in accordance with the demand and needs of local industry/employers. A research centre should be established at provincial TEVTA for conducting research and analytical work including regular collection of data on supply and demand to reduce mismatch. Development of a web based linkage of the National database and provincial TVETA’s database is essential for reducing skilled workforce supply and demand gaps. At the national level, the task of standardization and codification of technical and vocational courses needs to be urgently taken up by TVET stakeholders to harmonize technical and vocational education across the country.
The development of a skilled workforce plays an important role in the growth and development of a country. The measurement of skills gaps in the labour market assists and guides policy makers towards promoting a balanced labour market based on validated information. In case of Pakistan, the persistence of skills gap is an important barrier to higher industrial growth and productivity and linking it with international standards in skilled workforce productivity. To gather and make available required skills related information to different stakeholders, the National Skills Information System (NSIS) (www.skillingpakistan.org) is established in the National Vocational and Technical Training Commission.

To determine the skills gap in the province of Sindh, the NSIS conducted demand side data collection from 9,000 industries/employers in manufacturing, construction, services, energy & power sectors. The survey was designed to determine the pattern of existing skilled workforce in different sectors/industries, current skills deficiency and future requirement of skilled workforce. The existing demand of labour market has been matched with the annual supply of skilled workforce coming from TVET institutes to calculate the skills gap of the provincial labour market.

Employers in the manufacturing sector have the highest coverage of the demand side survey at over 83%, followed by services (12.5%), construction (3.8%) and energy & power (0.5%). The share of TVET graduates in skilled workforce is highest in the services and manufacturing sectors at 26% and 25%, followed by the construction and energy sectors at 21% and 17%, respectively.

The main source of skilled workers in the surveyed industry is through work-based learners in informal sector, indicating that TVET institutes are meeting only a small share of the industry demand.

In terms of the employer's satisfaction with the skills of TVET graduates, the highest proportion of satisfied employers is in the manufacturing sector at 38%, followed by services and construction sector, both at 37%, while employer satisfaction being relatively lowest (33%) in the energy and power sector. The proportion of employers reporting facing deficiency of skilled work force is the highest in energy & power sector (50%), followed by manufacturing (21%), construction (21%) and services (19%).

The analysis of unmet demand for skilled workforce by level of technical/vocational education shows that in the manufacturing sector, which has the largest overall unmet demand for skilled workers, the highest proportion of demand is for diploma holders (47%), followed by certificate holders (25%) and DAE qualified workers (15%). For the services sector, highest share of demand is for diploma holding workers at 58%, followed by certificate holders (30%). In case of the construction sector, demand for certificate holders is highest at 45% followed closely by diploma holders (39%). Demand for the higher qualified skilled workers, such as DAE and B. Tech qualified is relatively highest in the energy and power sector, where 47% of the total unmet demand is for DAE holders and 13% for B.Tech qualified technicians.

There is a large mismatch between the supply and demand of technical skills across different DAE programs, with the supply of DAEs by technical institutes greatly exceeding demand, in case of 5 disciplines–civil, electrical, CIT, mechanical and electronics. On the other hand, demand exceeds the available supply in four DAE disciplines– apparel, chemical and garments and B. Tech electrical.