

# TUSDEC

Technology Upgradation and Skill Development Company

NEWSLETTER  
ISSUE 06



**T**USDEC is established by Ministry of Industries & Production, Government of Pakistan, with a mission to upgrade technology and skills of key and strategic industrial clusters, connecting Pakistan to the global value chain in an emphatic manner. Since inception, TUSDEC has realized many of its objectives and has successfully become a premier knowledge management company on technology upgradation, skills development and conducting detail research & development and consultancy in various potentials areas of our industrial clusters. The Company has so far implemented number of projects working with Delegation of European Union (The EU), ADB, GIZ, ACTED, UNDP, PSDF, in its efforts for supporting industrial sector in Pakistan. TUSDEC has also successfully completed projects ranging from training of workforce in diversified disciplines for becoming earning hand of their families, rehabilitating earthquake affected areas, technical and management training programmes like CAD/CAM, Project Management, Process Designing and Improvement, Garments Manufacturing, Organization Development, HRM, Interpersonal Skills, Retailing & Marketing and creating access link to micro finance for skilled but marginalized community of Pakistan.

# EDITORIAL

A black and white portrait of Basit Maqsood Abbasi, CEO of TUSDEC. He is a middle-aged man with dark hair and a mustache, wearing a dark suit jacket, a light-colored shirt, and a dark tie. He is looking directly at the camera with a neutral expression. His hands are clasped in front of him on a desk. The background is slightly blurred, showing what appears to be a window with blinds.

from

**BASIT MAQSOOD ABBASI**  
CEO-TUSDEC

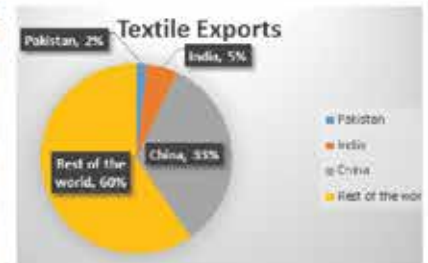
TUSDEC is successfully endeavoring to fuel the industrial development by technological transformations and provision of skilled workforce for the local industry. Effectively steering its strategic aspirations, the company is implementing a large-scale project of supporting TVET sector in Pakistan. Funded by European Union, the project is aimed at providing the local employer of KP and FATA with pertinently trained labor force. The Project is driven on a rigorous baseline study so that the trainings would be imparted in the trades categorically demanded by the local industry. The project is greatly impelling socioeconomic improvement in the underprivileged areas of Sindh, AJK and FATA by skilling the individuals from local community. The company is also augmenting its pursuits of TVET reform through various other medium-scale projects funded by provincial governments and donor parties.

Industrial expansion coupled with readily available skilled manpower, sets the requisite basis for economic progression. TVET sector has considerable potential in this context, as with the promotion of need-based skills development, the prevalent socioeconomic crisis can be effectively mitigated. We need to take a holistic approach towards addressing the skills requirements of the country, which calls for greatly coordinated efforts driven by federal and provincial governments, local industry and the international donor fraternity.

I believe, promotion of demand-led TVET qualifications must be granted priority equivalent to the mainstream education system both on strategic and operational turfs. Economies surfing in the global economic limelight render significant models of developed TVET education sectors which had catalyzed the prosperity for these nations. Through consistent skills needs analysis, we can formulate the medium and long term plan of actions, under which effective policies and procedures could be commissioned to address the skills paucities on national level. I am confident that with our well-devised strategic approach for technology up-gradation and manpower development, TUSDEC will keep on contributing to national industrial development and I would like to urge all the concerned entities to play an all-out role for developing a skilled and technologically modernized economic base for the country.

## EDITORIAL From CEO

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NABEEL ASGHAR  
Head Projects & Operations  
TUSDEC

## IT CAN ACHIEVE

Since 'Industrial Revolution' industrialization is regarded essential for rapid development of the country, the countries which solely relied on agriculture lagged financially and remained economically underdeveloped, whereas the nations which gave weight to rapid development to industry achieved higher rates of economic development. Pakistan is no exception as the struggling industrial sector has negatively affected the pace of economic progress in the country.

The Government of Pakistan has developed an understanding of the significance of skill development being apriori to achieving sustained social and economic progress while remaining globally competitive and responding better to advancements in technology and work patterns. Skilled workers serve as a crucial element of a flourishing economic system. It is imperative for swift economic growth to provide relevant skills for industrial and economic development, assuring quality skill development and to improve access, equity and employability of youth possessing potential.

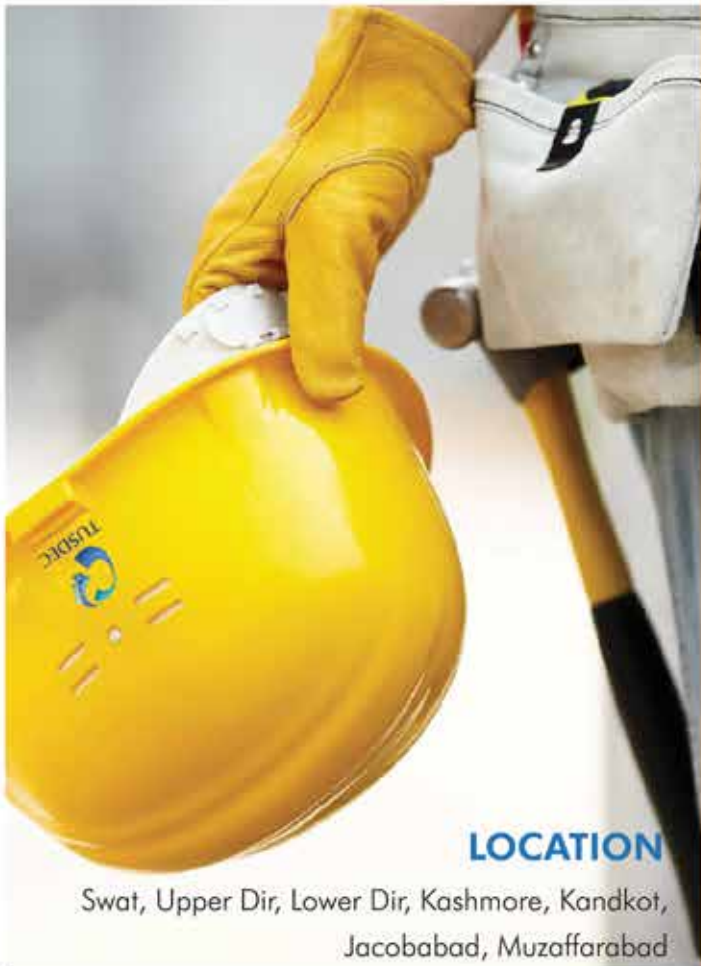
TUSDEC has joined hands with the Delegation of European Union to Pakistan in implementing a project supporting TVET sector through training 12000 men and women from the vulnerable communities of KP and FATA region. The aim is to train members of the modest tribal communities making them a part of mainstream economy by transforming them into skilled and adroit manpower for the private sector industry. By encouraging TVET sector, TUSDEC equips people not only with vocational skills, but with a broad range of

knowledge, skills and attitudes that are now recognized as indispensable for meaningful participation in work and life. The beneficiaries also gain self-awareness, self-esteem, strengthened interpersonal communication with improved confidence and entrepreneurial skills.

Pakistan's technical and vocational education and training (TVET) system is confronted with numerous challenges in areas of access, quality and relevance. It is evident that quality and relevance of the training is not up to the mark and there is a wide gap between availability of skilled labour and requirements of the industrial sector. There is a strong need to create increases awareness among the Pakistani youth, giving them a sense that skill development is key to extricating themselves from the throes of poverty. In this respect, a well-planned strategy to revitalize TVET sector will lead to an improved system with positive outcomes for trainees, ultimately helping them in raising the prestige of skills development.

TVET plays a very critical role in economic consolidation of Pakistan. However, there is a gap in the TVET sector of Pakistan that needs to be filled by a smart strategy. Firstly, promoting demand and making the supply of courses more demand oriented. Secondly, by improving involvement of private sector in technical and vocational trainings setups. Thirdly, there is a need for critical assistance to enhance capacities of technical and vocational training institutes to increase the process of skilled workforce development in our industry. The institutes should be provided with the latest training equipment and modernized workshops to meet the contemporary standards. Fourth, one of the most important features of TVET is its orientation towards the wage/self-employment. There should be strong market linkages among TVET pass outs, Micro Finance Institutes (MFIs) and job placement agencies. The provincial governments must coordinate with federal initiatives to catalyse the reformation of TVET sector in Pakistan. Undoubtedly, robust economic growth is a natural result of viable industrial sector substantiated with adequately skilled labour.





**LOCATION**

Swat, Upper Dir, Lower Dir, Kashmore, Kandkot,  
Jacobabad, Muzaffarabad



Technology Upgradation & Skill Development Company (TUSDEC) partnered with Agency for Technical Cooperation and Development (ACTED) pursued a project of Technical Vocational Education and Training (TVET) Support in Pakistan. The project was funded by the Delegation of European Union to Pakistan and remained actively involved in the areas of Upper Dir, Lower Dir, SWAT, Jacobabad, Muzaffarabad, Kashmore and Shikarpur. The project with a duration of three years was aimed at the socio-economic stimulation of the vulnerable communities residing in the target geographical proximity. Through the provision of expedient access to quality technical and vocational education in various trades, the project stipulated the improved livelihood opportunities for target beneficiaries. TUSDEC implemented the project by providing TOT (Training of the Trainers), Curricula Development, Selection & upgradation of TVET institutes alongside the downright project monitoring and evaluation.



## ACTIVITIES

- Assessment visits for development of demand driven curricula
- Development / Revision of demand driven curricula
- Training of Trainers (ToT)
- Development of Trainee and Trainer manuals
- Procurement of Tools, Machines and Equipment / Upgradation of TVET Institutes
- Exposure visits of the trainers
- Participation in 9th Expo Pakistan
- Refresher Courses
- Career Counselling Sessions
- Exhibition in Swat and Muzaffarabad
- Monitoring and Evaluation
- Project Documentary

## SUCCESS LEVEL

TUSDEC (Technology Upgradation & Skill Development Company) in partnership with ACTED, successfully implemented the three year project IMPROVING ACCESS, QUALITY AND SERVICE DELIVERY OF THE TVET SECTOR TO MARGINALIZED RURAL COMMUNITIES THROUGH INNOVATIVE APPROACHES to improve the TVET Education through innovative approaches in seven districts of Pakistan. The project worked with more than 20 technical institutes/centres in all seven districts and implemented ten (10) market demanded courses in these areas. The courses training was provided in were: building electrician, hand and machine embroidery, dress making, motorcycle mechanic, refrigeration and air conditioning (RAC), solar technician, generator mechanic, industrial electrician, computer application and office professional and know about business (KAB). TUSDEC successfully conducted Training of Trainers and trained 95 trainers in ten selected trades which further lead to almost 8000 beneficiaries from the project. Under the project TUSDEC also upgraded the provided institutes with latest equipment and modern techniques of training.



### YOUTH EMPLOYMENT PROJECT

TUSDEC in partnership with United Nations Development Program (UNDP) has successfully implemented Youth Employment Project (YEP) to provide training in certain garment sector areas. The project has been implemented in Lyari, Korangi and Sultanabad (Karachi). The CEO TUSDEC Basit Maqsood Abbasi and UNDP representatives shared optimistic notes at the end of the project and shared resolve to carry on cooperation in future as well. The project achieved its objective to create better livelihood and employment opportunities for youth in the local garment and home textile industry through skills development and trainings. Under the project, TUSDEC trained 700 youth in garment and home textile related trades and sub-trades.

### TRADES:

- Quality Checker Trainer
- Sewing Machine Operator
- Production and Quality Supervisor

TRANSFORMING TECHNOLOGY

# Supporting TVET sector in KP & FATA

Terrorism has long been hitting KP and FATA regions of Pakistan. The conflict situation has largely affected the fabrication of social life of the natives of Khyber Pakhtunkhwa & Federally Administered Tribal Areas (FATA). The people of FATA, due to the war on terror, have faced serious social, psychological and economic problems. There was never a greater need by development sector to initiate such projects in KP & FATA which could help locals to overcome their problems, particularly economic. TUSDEC in association with EU took a leap in this direction to support the local population of KP & FATA by skilling them to earn a better livelihood.

TUSDEC joined hands with the Delegation of European Union to Pakistan to implement a four year TVET reform programme in areas of KP and FATA. The Project "SUPPORTING TVET SECTOR IN KHYBER PAKHTUNKHWA AND FEDERALLY ADMINISTERED TRIBAL AREAS" focuses at improving the participation of private sector employers based at the target geographical areas in order to ensure quality and demand driven TVET trainings. The project also impels curricula standardization of the TVET institutes in KP and FATA keeping in view the training requirements of the local industries. The action encompasses regional trade bodies, TVET institutes, Technical Education Boards, NAVTTC and FATA Development Authority as its key stakeholders. The core purpose is to effectuate technical and vocational education in KP and FATA to move from a supply-driven to a demand-driven training mechanism. The project deliberates to train 12000 men and women of KP in various technical and vocational trades thereby increasing their chances towards employment.

Under the project, TUSDEC-PFU initiated vocational trainings having duration of one, three and six months in qualified TVET institutes with demand driven trades across KP & FATA. Tusdec has successfully accomplished its pilot and second phase of the project, training more than 4 thousands students in almost 38 demand driven trades. TUSDEC in partnership with EUs is now in its fourth phase of the project in which more than 3000 students are targeted to be trained in almost 36 trades, in three and six months training courses. To provide sustainable quality TVET training mechanism, TUSDEC is also going to upgrade 6 TVET institutes of the selected region to latest standards. The advancement will help the students to learn skills as per the modern lines.

## Skills for Job 2014-15

TUSDEC was awarded a contract "SKILLS FOR JOB 2014-15" by PSDF in November 2014 for training of 75 students in 3 batches. Under the agreement, TUSDEC trained 75 trainees on Solar Photovoltaic system in one year time period. The contract was further extended in December 2015 for the training of 4th batch with 25 students which would be concluding 31st March 2016. The certified students have received overwhelming response from the local industry.

## Activities

- Career Assessment Survey
- Self-Employment/Entrepreneurship Development Initiatives
- Training of Trainers (ToT) on Entrepreneurship for partner institutes
- Capacity Building of the Service providers for effective Industry
- Development of Business Plan for Trainees
- Career Counselling
- Market Linkages for Job Placement
- Community Mobilization
- ToT on Entrepreneurship Development
- Up-gradation of TVET Institutes
- Post-training professional situation monitored
- Monitoring and Evaluation
- Job opportunities for the trained graduates.
- Pakistan Micro finance network (PMN)
- SMEDA
- Bank of Khyber (BoK)
- Khushali Bank



Project funded by the EUROPEAN UNION





# IN THE GLIMPSE





Sadia Masood,  
Head R & D, TUSDEC

TUSDEC is mandated with the task to upgrade skills and technology of key industrial sectors to bring about a paradigm shift in the local industrial facade. TUSDEC R&D team has performed rigorous preliminary analyses to dig out few of the most yielding industrial fragments carrying the potential to feed the national economy with the latest machinery, equipment and skilled manpower. To materialize its mission, TUSDEC has initiated research studies in various industrial sectors involving key stakeholders to access the technological / skill deficits that are impeding sector progression. Over the years, TUSDEC has pursued numerous sectors for enhancing national competitiveness namely light engineering, garments, footwear, ceramics, cement, product design and development and skill development. At present, TUSDEC is actively doing in-depth research on the cutlery, energy, fan, composites, construction and textile sectors by conducting one-on-one brain-storming sessions with the relevant industries, associations and other vested stakeholders. The research studies are resultantly compiled to be translated into projects of national importance potentially contributing significantly to GDP growth, employment generation and export enhancement for economic melioration. TUSDEC has also similarly garnered a niche through its service portfolio among both national and international donors.

**TUSDEC R & D providing an integrated one-stop solution for socio-economic independence and industrial proliferation:**

TUSDEC research & development has provided an integrated one-stop solution for socio-economic independence and industrial proliferation through horizontal and vertically integrated interventions aiming for economic advancement in Pakistan.

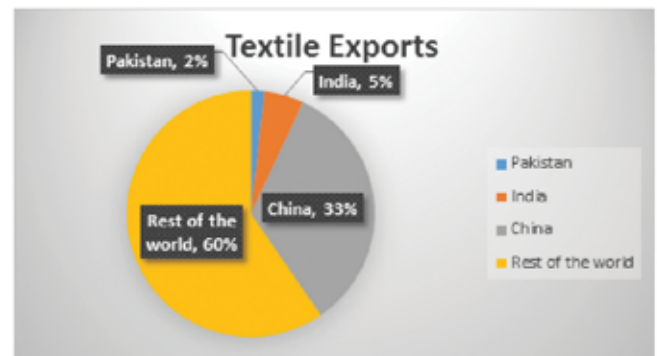
TUSDEC is carrying out assessments and plans to preparing PC-1s for technological upgradation and skill

development in the following manufacturing sectors in the FY2015-16 to realize 11 Five Year Plan contributing to realizing Vision 2025:

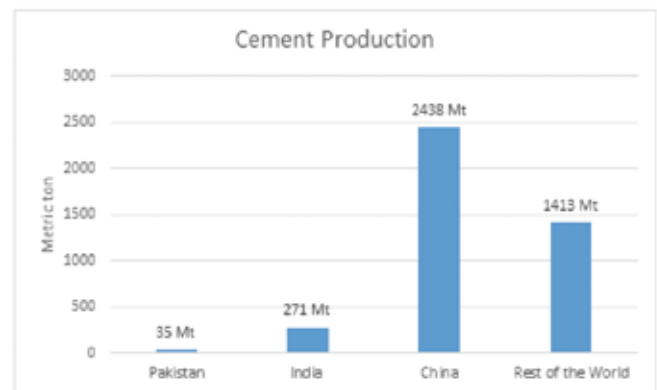
**We are supporting**

- Technical Textiles
- Leather/Footwear
- Electro-Medical Surgical Appliances
- Composites
- Light Engineering
- Carpets Manufacturing
- Fisheries Development

**PERFORMANCE REVIEW**



**PRODUCTION COMPARISON**



# RESEARCH & DEVELOPMENT

TECHNOLOGY UPGRADATION AND SKILL DEVELOPMENT COMPANY



# CEMENT

## RESEARCH & DEVELOPMENT INSTITUTE

### INTRODUCTION

Cement Research and Development Institute (CR&DI) was established in 1983 by State Cement Corporation of Pakistan (SCCP) under the administrative control of Ministry of Industries and Production, Government of Pakistan. After the merger of State Cement Corporation into PIDC, CR&DI remained dysfunctional. In 2005, TUSDEC (Technology Upgradation and Skill Development Company) was entrusted the task of rejuvenating the institute. The laboratory and testing facilities were reactivated and the institute re-launched its operations in 2006 under the patronage of TUSDEC management who have evinced an active role for CR&DI in cement testing and advisory services to ensure it keeps pace with Pakistan's cement industry.

### MISSION

Serve the cement and construction industry by providing materials testing according to international standards, diversifying products, initiating adoption of new technologies, standardising specifications, creating technical linkages between producers and consumers as well as conducting research on cement and allied materials.

### OUR QUALITY POLICY

We at CR&DI are committed to excellent standard of practices for consistently providing quality material testing services to our customers at competitive rates while complying to various international standards requirements. The company recognizes that quality is the key to meet the objectives and continually improves its system and procedures in order to provide efficient services to customer requirements.

Our goal is to not only meet regulatory requirements but to exceed them in all standards.



### SERVICES

#### Testing Services

Headquartered in Lahore, CR&DI offers state of the art testing facilities for cement and allied materials compliant to the following national and international standards:

- American Society of Testing & Materials (ASTM)
- British Standard Specification (BSS)
- Indian Standard Specification (IS)
- Pakistan Standard Specification (PSS)
- Sri Lankan Cement Standard (ISO)
- European Cement Standard (EN - 197)



Materials being tested

- Cement (all types):
- Clinker
- Fly Ash
- Slag
- Silica Fume
- Pozzolan Material
- Dolomite
- Gypsum
- Clays
- Raw Mix
- Fire Bricks
- Iron Ore
- Grout
- Concrete Pavers
- Bauxite
- Bagasse Ash

### TRAINING SERVICES

CR&DI offers training services for testing of cement and allied materials according to various international standards.

**Dedicated to standardisation  
and consistent quality**

# ON THE WAY FORWARD



## Project Planning , Scheduling & Progress Monitoring

Post training Group photo of the course titled "Project Planning , Scheduling & Progress Monitoring" @ NIDA Lahore

## Process Piping Design, Layout & Stress Analysis

Post training Group photo with Foreign Delegation of the course titled "Process Piping Design, Layout & Stress Analysis" @ NIDA Lahore



## NIDA Karachi Students Phenomenal Performance

NIDA Karachi – Students of "Textile Designing" won 1st & 3rd Position while students of "Computerized Accounting" were phenomenal by winning all three positions (1st, 2nd, 3rd) in Zonal Skills Competition 2016 (National Skills Competition Karachi Zone) at Memon Industrial & Technical Institute (MITI) organized by National Vocational & Technical Training Commission (NAVTTTC)



### New courses launched at NIDA Lahore

- Mechanical , Electrical & Plumbing
- Fundamentals of Oilfield and Drilling Operations
- Fundamentals of Health , Safety & Environment (HSE)
- Steel Structure Design
- Advanced Plant Design
- Stress Management
- Variable Frequency Drive (VFD)
- Leadership Skills



## Spiral Fan

# SUCCESS

## An Effort for Bringing FATA Youth into the Mainstream Economy

"The secret of change is to focus all of your energy, not on fighting the old, but on building the new." – Socrates

Breaking with the past and elevating FATA with sustainable development through educating and training its youth towards better livelihood was the objective of TUSDEC EU-TVET Program while organizing trainings at Bajaur agency. Trainings in Land Survey, AutoCAD and Quantity Survey produced 75 young graduates belonging to FATA. These young graduates proved their capabilities, utilizing their skills by earning sustained livelihoods.



Breaking with the past and putting FATA with sustainable development through education and training for its youth, TUSDEC EU-TVET Support Program at Bajaur agency played a pivotal role. Sultan Zeb, 26 is among these trainees who took a leap forward to change their careers through TVET Training. Zeb strived hard to turn his potential into profits by attaining skill oriented training.

Zeb is the son of a farmer with a very meagre income; however, he was motivated with the concept of self-employment, therefore, with career counselling and TVET Training, he decided to start his own business. He now runs a shop successfully in his native area, thereby supporting his family and inspiring others to follow in his suit. Sultan requests further training facilities for the youth of his area, so they can dispel the effects of terrorism through job creation.



TUSDEC in its TVET supporting program funded by European Union also helped Malakand tap career opportunities by TVET programmes. As welding one of the potential trades, TUSDEC trained a pool of 25 skilled individuals in the same trade, who are mostly currently employed at local markets earning their livelihoods. Three graduates, Sajjad Ahmad (aged 23) Tariq Khan (29) and Anpan Ahmad (22) applied in Bin Laden Company at Saudi Arabia and secured jobs successfully. Their high spirits and skilled hands have lead them towards this remarkable success.

According to pass outs, TUSDEC & EU efforts combined in providing skills to the youth, enabling them to earn better income and support for their entire families giving them a better living.



Bibi Rabbaniya, 30 is a graduate of Advanced Tailoring courses organized by TUSDEC in Chitral. Before the training, she got her graduation from Girls College at Chitral but was unable to gain employment. She had a handle on the skill of tailoring but when it came to professional advanced tailoring, she lacked the finesse in skill.

Advanced tailoring course at Sadabahar Institute, Chitral changed it all for her. By attaining advance training in tailoring from the TUSDEC TVET programme, on the one hand, she learned modern techniques of tailoring while on the other, increased her income. After completion of the course, her monthly income increased by up to 15000 rupees. Rabbaniya is extending the same knowledge to her sister as well. Rabbaniya's mother says that this is a great dowry parents can give their daughters in form of a skill that can help them in earning an income wherever they go.

# TUSDEC PARTNERS WITH

## Tusdec Collaborates with the Louis Berger Group

The Technology Upgradation and Skill Development Company (TUSDEC) is pleased to have Partnership with Louis Berger Group. By this understanding, TUSDEC will bring its in-depth sector knowledge and recent research/analysis of the SMEs in Pakistan to support Louis Berger's methodology for market testing the potential of different sectors/value chains and market segments. TUSDEC will assist Louis Berger in increased access to markets, increased access to finance, enabling women SMEs to run profitable businesses.



**Louis Berger**

## Tusdec & Chemonics have agreed to work together to revitalize the SME sector in Pakistan

The Technology Upgradation and Skill Development Company (TUSDEC) also signed a letter of collaboration with CHEMONICS INTERNATIONAL. TUSDEC & Chemonics will work together on recent research/analysis of the SMEs in Pakistan. Both have agreed to develop different sector, improved market value chains and increased access to finance.



CHEMONICS

## Tusdec signed MoU with Agfo Innova

With partnership, TUSDEC and Agfo Innova are providing consultancy for Agriculture Stakeholders such as Growers, Processors, Traders/Brokers, and logistic bodies involved in the on-site training, capacity building and implementation of the respective standards i.e. Global GAP (Good Agricultural Practices), IFS (International Featured Standards) Food, Broker, Logistics, ISO 22000, BRC, HACCP, Halal and etc.



## Tusdec Inks MoU With WASFD

TUSDEC EU-TVET has recently signed MoU with WASFD, an NGO offering interest free loans for micro enterprises development at KPK. The MFI currently has its operations in Swabi, Mardan, Peshawar and Malakand districts and is going to extend its services across the province within two months. As per the MoU, TUSDEC will link its trainees completing TUSDEC EU-TVET trainings with the MFI that will extend interest free loans amounting to Rs. 10,000-20,000 per individual with 3 months grace period without any collateral or guarantors.

## Tusdec entered into a Mou with Al-Khidmat Foundation

Technology Up-gradation and Skill Development Company (TUSDEC) entered into a Memorandum of Understanding (MoU) with Al-Khidmat Foundation to facilitate the youth trained in various vocational trades with the provision of interest free, micro-loans to embolden their spirit of self-employment. The Programme Manager, TUSDEC and Mr. Noor Hussain President, Al-Khidmat Foundation inked the MoU.



Editorial Crew: **Yasir Ghani** (Manager BD&M)  
Designed by: **Imran Ali**

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