



Highlights & Updates

TUSDEC's skill development efforts in Southern Punjab

NIDA aims for a skill sharing platform

Contract signing with Benazir Income Support Program

SDCs handed over to KPK Government

Coffee with CEO – PIDC

Successful completion of GTDMC

TUSDEC to setup 3 Engineering Support Centers

CDTCs anticipated industrial impact and offerings

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Message from the CEO

We live in an age where natural resources have diminishing importance. Knowledge has become the single most important factor for socio-economic growth. Countries that have realized that their real wealth lies in their human resource and invested massively in technology upgradation and skills development have surged forward, reaping extensive economic rewards in the process. Such nations have made research and development (R&D) the cornerstone of their developing programs as it plays a vital role in national and economic growth.

In Pakistan, the role of technology upgradation and skills development to catalyze national progress was never realized until lately. Recent governments have placed both the stated interventions among their highest priorities with TUSDEC at the forefront of undertaking related initiatives. TUSDEC was created with a mission to upgrade technology and skills of key and strategic industrial clusters and connect Pakistan to the global value chain. The vision is to make TUSDEC a premier knowledge management company on technology upgradation and related skills so that it is always well equipped with updated expertise to implement projects which enhance innovation, creativity, entrepreneurship and competitiveness. Staying true to its mandate, TUSDEC has an impressive portfolio of completed projects including KTDMC, GTDMC, CDTC, NIDA and SkillTech just to name a few. I would especially like to highlight TUSDEC's recent efforts to rehabilitate the flood victims of rural Southern Punjab by training them in employable skills thereby helping them earn a decent livelihood. I am extremely proud of what we have achieved and even more excited about our outlook for an equally promising future.

Syed Anwar Ali Pervez
Chief Executive Officer, TUSDEC

Board of Directors



Ms. Seema Aziz
Chairperson



Mr. Gul Muhammad Rind
Secretary
Ministry of Production



Mr. Syed Anwar Ali Pervez
Chief Executive Officer



Mr. Shafqat Akhund
Chief Mechanical & Electrical Engineer
Karachi Port Trust



Mr. Mohammad Masud Akhtar
Chief Executive Officer
KSB Pumps Company Limited



Mr. Sirbuland Khan Jomezai
Businessman
Loralai, Baluchistan



Mr. Rumi Moiz
Managing Director
Research & Development
Engineering Company



Mr. Yousaf Naseem Khokhar
Chief Executive Officer
SMEDA



Mr. Pervaiz Ahmad Khan
Chief Executive Officer
US Apparel & Textiles (Pvt) Ltd



Mr. Ahmad Hussain
Joint Secretary
Ministry of Finance



Mr. Abdul Hai
Director General
SES



Mr. Gul Muhammad Rind
Chief Executive Officer
Pakistan Industrial Development
Corporation



Mr. Zahid Saeed
Chief Executive Officer
Zahid & Co.



Ms. Seema Aziz
Chairperson TUSDEC

Spotlight on the “Board”

Seema Aziz is a well-known and respected Entrepreneur. She is Partner and Executive Director of Sefam Pvt. Ltd. retails under the brand name of “Bareeze”.

Sefam currently retails through more than 105 outlets in Pakistan and 12 outlets overseas. Sefam and Sarena Industries together employ a total of over 5000 people directly and provide jobs to hundreds more on contract. All SEFAM Brand products i.e. Bareeze, Leisure Club, Minnie Minors, Home Expressions, Chinyere, Urban Culture are proudly made in Pakistan, even the toys and accessories ranges in Minnie Minors are made exclusively in Pakistan and are holding their own against all foreign imports. Bareeze was the first “Chain Store” concept in Pakistan and the first Pakistani Brand to open Branded Stores abroad. The first foreign outlet was launched in Dubai in 1993.

She is also the Founder and Chairperson of CARE (Cooperation for Advancement, Rehabilitation and Education) which is a charitable trust. It was founded in 1988. Presently CARE runs a total of 215 schools, imparting quality ‘marketable’ education to over 150,000 children. Out of these schools 18 are custom built campuses and 197 schools are adopted from Government. CARE receives no funding from any foreign donor agency or from the Government of Pakistan. All CARE work is achieved with funds that CARE raises from individuals and businesses in Pakistan and abroad. Graduates from CARE schools are today doctors, teachers, software engineers and designers.

Her other notable affiliations include Governing body TEVTA (Technical Education & Vocational Training Authority), Pakistan Fashion Design Council, Punjab Board of Investment and Trade, Mobilink Foundation & Punjab Education Foundation.

TUSDEC's skill development efforts in Southern Punjab

The floods of July-August, 2010 devastated vast areas in Southern Punjab. Resettlement of villages destroyed by floods has been a major concern ever since. TUSDEC has been actively participating in the rehabilitation of flood affected areas in rural Southern Punjab. Some major initiatives and highlights are as follows:

CST with Engro Foundation



Engro Foundation was allocated 20 acres of land in Rakh Ehsanpur, District Muzaffargarh, for the construction of a model village for flood affected population under Punjab Government's Punjab Model Village Program. To help enable the community mobilized in the model village and earn a sustainable livelihood, a Construction Skills Training (CST) program was implemented by TUSDEC in collaboration with Engro Foundation and Farmers Development Organization (FDO). The project aims at providing employable skills in the trades of Masonry and Welding to the flood affected community. The first training batch recently graduated in November 2011, after completing a 3 months course in Masonry. A graduation ceremony was held at the model village and certificates were distributed to the successful candidates. Tool kits were also provided free of cost to the graduates to help



them jump start their careers and earn a decent livelihood utilizing the skills learned. Notable dignitaries from all the partner organizations namely Engro Foundation, FDO and TUSDEC were present at the ceremony. Speaking at the occasion, Mr. Tahir Jawaid, Vice President, Engro Corporation Limited praised TUSDEC's efforts in making the program a success and showed keen interest in replicating the program in other areas.

SD in Six Model Villages with PSDF



The Government of Punjab in collaboration with Department for International Development (DFID) UK has created Punjab Skill Development Fund (PSDF) which acts as a financier of skills development/vocational training projects. It intends to stimulate the market for skills development for the poor and the vulnerable populations of four districts of Southern Punjab (Bahawalpur, Bahawalnagar, Lodhran and Muzaffargarh). TUSDEC is actively working with PSDF (Punjab Skills Development Fund) under their 'Skills Development in Six Model Villages' program. After having conducted an elaborate Training Needs Assessment (TNA), TUSDEC is now imparting training to flood affected community in the employable trades of Masonry and Plumbing



in the two model villages of Rakh Jalwala and Bhulla Mouza Aalo Rid, District Muzaffargarh.



A two-member delegation of observers from DFID recently visited TUSDEC's training center at Rakh Jalwala. The delegation comprised of *Tom Owen-Edmunds*, Program Manager and *Vanessa Shade*, Policy Officer. The visit provided an opportunity to the observers to witness the ongoing training programs for the flood affected community of Muzaffargarh and interact with the trainees.



The team of observers appreciated the endeavors by all stakeholders for undertaking the timely initiative and recognizing the needs for livelihood generation and rehabilitation. They also sought feedback from the trainees and were impressed by their motivation levels.



TUSDEC's participation at the 'Hunar Mela'



TUSDEC has been keenly working towards the provision of employable skills to the marginalized and vulnerable communities of rural Southern Punjab. TUSDEC recently participated at a three-day vocational education expo for youth- the "Hunar Mela" at Bahawalpur (Bahawalpur Stadium) from 29th - 31st December 2011.



The event was organized by Punjab Skill Development Fund (PSDF) and was inaugurated by the Chief Minister Punjab, Mr. Mian Muhammad Shahbaz Sharif. Hunar Mela provided a chance to training organizations selected and financed by Punjab Skills Development Fund to set up their stalls and market the different trades being offered by them. While visiting TUSDEC's stall, CM Punjab praised the work being carried out by TUSDEC. The TUSDEC team also presented a 'TUSDEC logo cap' to Mr. Sharif which he happily accepted. Mr. Musa Dastgir Bhatti, Sr. Manager, Linkages and Communication led the TUSDEC team at the occasion.

NIDA aims for a skill sharing platform



National Institute of Design & Analysis (NIDA) is Public Sector Development Project (PSDP) of Government of Pakistan sponsored by Ministry of Production (MoP) and implemented by TUSDEC. Through NIDA, TUSDEC has established five CAD/CAM centers in Lahore, Karachi, Sialkot, Peshawar and Quetta. Furthermore, five similar centers are planned for the districts of Larkana, Hyderabad, Kasur, Bahawalpur, Okara and Sargodha. The objective of these centers is provision of trained professionals to overcome the shortage of skilled workforce in the area of product design and development. Through these centers NIDA is providing multi-disciplinary training in Computer Aided Design (CAD) to change the current industrial environment from analogue to digital.

Business Production Managers from local industry. The instructional staff is also hired from private sector design houses having valuable overseas design experience in the fields of CAD/CAM technologies.



At present, NIDA is imparting product design training and providing technical support to the industry using CAD/CAM/CAE/PLM software tools. Students certified by CAD/CAM Centers are working in different sectors of industry. Many of NIDA certified students are working abroad and sending foreign remittances.

In future the management of NIDA aims to convert the current centers to a skill sharing platform where senior design engineers and production managers of local industry will share their valuable expertise with junior technicians and engineers. The central institute of NIDA, plans to conduct "Train the Trainers" for the other similar centers in Pakistan and provide basic, as well as, professional CAD/CAM training. NIDA will serve as a Common Facility Centre (CFC) for design and development and will work on the benchmarking of related industries. The 'Trained Trainers' will populate other CAD/CAM centers and also find jobs in industry as expert professionals.

NIDA centers have successfully completed approximately 750 courses and trained over 8,500 professionals in product design and development. The courses are conducted by experts in their respective fields, using state-of-the-art classrooms where all practical training exercises are conducted on TUSDEC designed graphics-specific workstations. NIDA has highly experienced faculty including Universities Lecturers, Design Engineers and








Contract signing with Benazir Income Support Program

TUSDEC recently signed a one year agreement with Benazir Income Support Program (BISP) under their Waseela-e-Rozgar" initiative on December 26, 2011. The program aims to address the issues of poverty and un-employment through Human Resource Development in Pakistan. Short-term skill development courses spanning from 4 to 6 months will be provided to approximately 150,000 semi-literate and educated unemployed BISP beneficiaries' youth in Pakistan.

TUSDEC has been entrusted by BISP to provide training in 20+ pre-approved vocational trades

including AutoCAD (Civil & Electrical), Computer Hardware Technician, Computer Graphics, Masonry etc. Each course will have 25-30 trainees and will be run twice in the year. TUSDEC will be providing these trainings through its subsidiaries namely, National Institute of Design and Analysis (NIDA), Lahore and Skill Tech, Karachi while also collaborating with SZABIST, Hyderabad in the process. The TUSDEC team was led by CEO, Mr. Syed Anwar Ali Pervez at the contract signing occasion who was accompanied by Mr. Nabeel Asghar, Sr. Manager Projects and Mr. Tashbih-ul-Hassan, Head of Accounts, NIDA. Highlights of the program are as follows:

Training Parameters	
Project	12 Months
Course Description	4 & 6 Months (2 Batches)
Credit Hours	480 (4 months)
Daily Contact Hours	5 Hours per day
Per Class Trainees	25-30 Trainees per Class
Timing of Training	Morning Shift 8:30 AM to 1:30 PM (05 Hours) Evening Shift 1:30 PM to 6:30 PM (05 Hours)

Verified and Recommended Trades			
Institutes / Centers	Regions	Approved Trades	Duration
	Lahore	Mason	6 Months
		Draughtsman Civil with AutoCAD	6 Months
		Civil Surveyor	6 Months
		AutoCAD (Civil & Electrical)	4 Months
		Data Entry Operator	4 Months
		Computer Operator	4 Months
		Computer Hardware Technician	4 Months
		Computer Graphics	6 Months
	Karachi	Mason	6 Months
		Motor Cycle Mechanic	6 Months
		Generator Technician	6 Months
		Domestic Electrician	6 Months
		Receptionist / Front Office Assistant	4 Months
	Hyderabad	AutoCAD (Civil & Electrical)	4 Months
		AutoCAD (Mechanical)	4 Months
		Computer Operator	4 Months
		Computer Hardware Technician	4 Months
		Computer Graphics	6 Months
		Textile Designing	6 Months
		Fashion Designing	4 Months

TUSDEC to setup 3 Engineering Support Centers

The Common Facility Centre (CFC) Program is part of the 5-year GoP SME Sector Development Program (SDP). This Program was launched under a loan from Asian Development Bank (ADB). Under this loan, ADB provided 12 Million US dollars for the CFC Program to Ministry of Finance, GoP.



Under this project, TUSDEC will establish Common Facility Centers (CFCs) to provide a common pool of targeted technologies, training & skill development, testing & inspection services for the collective upgradation of groups/clusters of Small and Medium Enterprises (SMEs). Under this program, Light Engineering Centers (ESCs) being established in Khyber Pakhtunkhwa, Balochistan and Sindh are as follows:

1. Peshawar Light Engineering Centre
2. Light Engineering Upgradation Centre for SMEs in Baluchistan
3. Hyderabad Engineering Support Centre



The aim of these centers is to support the Light Engineering sector of Peshawar, Hub and Hyderabad and to train people on modern, conventional and CNC machines along with

CAD/CAM and Metrology equipment. These CFCs will help in improving the technical skills of local workforce. The CFCs will support the local industry to utilize facilities for improved product precision, quality and competitiveness.

These centers will facilitate local industry through provision of practical 'Common Facilities' with On the Job Training to provide latest manufacturing techniques and will encourage adoption of "international quality standards". PC-1s have been prepared after due need assessments and with the objective to provide the local engineering industry with 'absorbable' modern design, technical assistance, consultancy and facilities to improve precision manufacturing. The concept of On the Job training will provide need-based human resource development; demand-based technical assistance and support to the industry. This includes technical training with a focus on manufacturing and management training in various disciplines.



Current Status:

The Projects were approved by GoP in April 2011. Khyber Pakhtunkhwa Chamber of Commerce and Industries (KPKCCI) has already acquired free of cost land and building for the establishment of Peshawar Light Engineering Centre (PLEC). Site for establishment of Hyderabad Engineering Support Centre (HESC) has been finalized by Hyderabad Chamber of Commerce and Industries (HCCI) and Hyderabad Development Authority (HDA). Agreement is being finalized between Lasbela Industrial Estates Development Authority (LIEDA) and TUSDEC with the support of Lasbela Chamber of Commerce and Industries (LCCI) to allocate land free of cost for establishment of Light Engineering Upgradation Centre for SMEs in Balochistan (LEUC).



Soaring numbers for SkillTech

TUSDEC has created alliances with prestigious international organizations to offer courses in professional development which can help individuals in obtaining internationally recognized certifications. These certificates and diplomas have helped enormously in increasing overseas employment and immigration prospects of the certified individuals. Notable collaborations and their highlights are as follows:

City & Guilds - UK



City & Guilds - UK is the world's largest international examining and accreditation body for vocational, managerial and engineering training, offering over 500 qualifications in 28 industry areas, spanning from entry level to the equivalent of a postgraduate degree. With a presence in over 135 countries, a City and Guilds award opens the door to vast opportunities for employment progression.

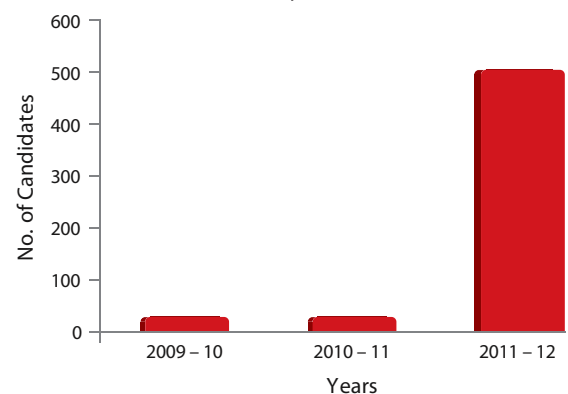
TUSDEC has signed an agreement with Skills International Sri Lanka (an authorized representative of City & Guilds UK in Pakistan) for providing technical diplomas and certificates as well as promoting and conducting examinations in the areas of Punjab, KPK, FATA and AJK. TUSDEC's subsidiary SkillTech International, which is also the first City & Guilds UK's approved center in Pakistan, has the mandate to implement the mentioned initiatives. SkillTech aims to impart skills that are at par with international standards and in turn ensure a level playing field for the local workforce. More recently the SkillTech team has been keenly involved in the conductance of C&G's International ESOL (English for Speakers of Other Languages) examination which is the alternative of IELTS for UK visa purposes.

SkillTech International has it's campuses in Lahore and Karachi. SkillTech International is providing

modern theoretical and practical training in fully-furnished classrooms and well-equipped laboratories. Instructors are well-conversant with the latest skill trends in industry and the national and international job market. In year 2010-11, SkillTech International Karachi has trained approximately over 500 participants through 27 courses.

Year	Exam Conducted	No. of Candidates
2009-10	1	29
2010-11	4	41
2011-12 (July - December)	24	505

Candidates for International Certifications
(EC UK and City & Guilds UK)



Similar, institutes are planned in Rawalpindi, Faisalabad and Multan. These institutes will also offer Skill Efficiency and Skills Proficiency awards in the fields of construction, electronics, food preparation and house-keeping to meet the requirement of overseas employers. This will allow youth to be equipped with internationally



certified skills and enable them to compete confidently with the global workforce.

In future, TUSDEC and Skills International Sri Lanka will promote City & Guilds UK, vocational and technical qualifications through TEVTA centers.

Engineering Council – UK



TUSDEC's subsidiary, SkillTech International, is the first Engineering Council - UK approved center in Pakistan. It registers candidates and conducts examinations on EC - UK's behalf. Successful candidates immediately move upwards in professional qualification and gain worldwide recognition and acceptability. EC- UK streams are available for engineering professionals from the following fields:

- | Electrical Engineering
- | Mechanical Engineering
- | Civil Engineering
- | Chemical Engineering

Engineering Council - UK examinations are available at three distinct and progressive levels. These have been designed to provide an Engineering Technician (DAE) or an Intermediate in Science student a flexible route for meeting the academic standard to progressively become a Chartered Engineer. Similarly, a Graduate Engineer is able to become an Incorporated Engineer and progress to a Chartered Engineer. This structure permits individuals to study at their own pace.

Management Training models by TUSDEC

Skill Development Department started providing management training to corporate sector. These programs help executives overcome any uncertainties in career plans by improving their knowledge-base through training courses that help hone their knowledge, their skills and abilities. TUSDEC has successfully conducted 37 training workshops with over 400 participants.



Training programs are offered under two separate models as follows:

Open Enrolment Training

This program is most suitable for companies and individuals who are interested in professional development based on latest knowledge-creation in their respective fields. Open Enrolment Programs are tailored to ignite creative thinking and help unleash the latent potential in the attendee to embrace innovative ideas and tools. This allows them to find hands-on solutions for seemingly complex organizational problems.

Customized In-house Training

TUSDEC also offers executive development programs tailored to the needs of companies and firms. Capitalizing on TUSDEC's ability to frame flexible solutions, TUSDEC's dedicated pool of trainers design and deliver customized and cost effective training programs for leaders, senior managers and supervisors.

While designing a program they work closely with the organizations to understand the dynamics of their core business objectives and produce an effective development program to enhance competitiveness and improve their bottom line.



Coffee with CEO - PIDC



Since 1952, Pakistan Industrial Development Corporation (PIDC) has played an anchor role in establishing, firming up and expanding the industrial base of the country, horizontally as well as vertically. Acting as an effective arm of the Government, PIDC has made considerable contributions in the key sectors of Engineering, Textile, Cement, Fertilizer, Ship building and Mining. Prominent entities like HMC, PMTF, Pak Arab Fertilizer, Karachi Shipyard, Khewra Salt Mines are just a few distinguished examples of the effort carried out by PIDC.

With over 40 years of extensive experience in Central Superior Services and a Master's degree in International Relations, Mr. Gul Muhammad Rind brings a wealth of experience to PIDC as their CEO. Before joining PIDC, Mr. Rind held key positions in notable organizations. A few significant examples include DG-National Aliens Registration Authority, DG-Ombudsman Sindh, MD-Sindh Small Industries Corporation, MD-Sindh Tourism Corporation, MD-Sindh Industrial Enterprises, Director-Export Promotion Bureau.

The TUSDEC newsletter team recently met with Mr. Rind over a cup of coffee to get his views on the joint efforts made by TUSDEC and PIDC as well as his thoughts on the way forward. The highlights of the session are being presented for our readers:

Q1. Over the past sixty years PIDC has played integral role in the industrialization of Pakistan. Would you please elaborate the core values of your organization?

Ans. PIDC believes in working with dedication and diligence, concentrating head down on delivering the goods, making optimum and tactful utility of available resources at hand, focusing on both micro and mega economic national goals and accomplishing the targets entrusted by the government. This statement is not jargon of words but a stark/irrefutable reality vouched by the wide spread of industry

in Pakistan.

PIDC was entrusted with the gigantic task of setting up industrial base for the country at the time, in 1952, when there was at all no industry, the agricultural base was also mild, and where the private sector was shy in investing in the fields where large amount of capital outlay with long gestation period was required. All that we find today in the industrial sector is the fruit of concerted efforts put in by PIDC by successfully undertaking the daunting task of building up the industrial base of the country virtually from scratch and bringing it up from infancy, nay, rather conception to the magnificent edifice as it exists today.

PIDC is proud to be an effective arm of the government in expanding the economy of the country, horizontally as well as and vertically. Point out to any area of industry, Engineering, Fertilizer, Ship Building, Mining etc. The trailblazer in each area is to the credit of PIDC. Indeed the entire spectrum of commerce and industry is rooted deep down to PIDC.



Q2. Please tell us to how has PIDC evolved under your supervision? What are PIDC's main priorities going forward?

Ans. When I took over as CEO, PIDC in November, 2009, 8 no. subsidiary companies and 2 no. JV entities had been established by PIDC and substantial funds had already been released to them during the previous three

years. There was however no adequate system to check the progress of these subsidiaries. Till that time, the work progress in most of these companies was not in balance with the funds released to them. Apparently in some companies financial discipline was lacking. Taking stock of such a situation I adopted three pronged strategy to arrest such tendency and bring the activities in order. As a first step system of periodic progress reports to be sent to PIDC has been enforced. Secondly, I initiated 3rd party audit of all the companies that was completed by end of 2010. Thirdly, PIDC's active involvement in the regular audit checks has been ensured through directives of BOD of PIDC whereby it has become mandatory for all the subsidiaries to nominate CEO PIDC and Chairman of Finance Committee of BOD on the Finance Committees of respective companies. Through such steps not only some flaws have been surfaced in working of the companies, that are being rectified, but also financial discipline has improved considerably. All these steps have proved a catalyst in improving performance of these companies. PIDC's endeavor is to ensure quick progress of all these companies through effective monitoring and financial discipline with the aim to achieve the goals of skill development and technology up-gradation in all the disciplines, which PIDC has ventured in.

Q4. TUSDEC has been involved in the rehabilitation of earthquake affected community by imparting employable skill to help them earn decent livelihood through the Skill Development Centers (SDCs) jointly setup by PIDC and TUSDEC. How do you perceive the effort undertaken?

Ans. Setting up skill development centers in earthquake affected areas is a remarkable activity under humanitarian, social and economic considerations. It is not just providing a helping hand to the Government towards rehabilitation of northern areas but it envelopes multiple gains in social uplift, expansion of education facilities and enhancement of skills in the disciplines of construction and hospitality, besides achieving the core purpose of rehabilitation. These SDCs will act as continuously flowing stream of knowledge and skill that would travel far ahead with time.



Q3. TUSDEC with the help of PIDC and MOP established various Common Facility Centers such as GTDMC, CR&DI and CDTC to support the local industrial Clusters in technology up gradation and skill development of the surrounding regions. Please comment on the combined efforts of the parties involved with special focus on TUSDEC and PIDC.

Ans. Of course such efforts of TUSDEC are commendable, which will prove quite effective and meaningful for national economy. Tool, Die and Automation are the key areas that have multiple gainful reflections on engineering industry. TUSDEC has indeed, addressed this important area quite effectively. KTDMC and GTDMC, I am confident, have proved/will prove yet more effectively in saving of foreign exchange, by way of providing the local market with quality stuff which hitherto was to be imported. It is noteworthy that KTDMC and GTDMC besides acting as skill development centers, have emerged as active market players, establishing their existence in the vendor industry in Pakistan.

Q5. TUSDEC through its NIDA- center has trained over 8,500 skilled human resources in advanced CAD/CAM technologies. Students certified by NIDA Centers are working in different sectors of the industry while many of them are working abroad, thus sending foreign remittance. Given the benefits tell us about the possibilities for expansion of NIDA Centers?

Ans. NIDA is a rightful effort put in at right time. Undoubtedly enhancement in computer literacy in production/industrial discipline is the dire need of time. NIDA has indeed proved purposeful for the trainees, who not only enhanced their own capacity but industry has been benefited through their skills. Yet there is need to expand the scope of NIDA. In this regard I would suggest that in order to make it more meaningful a link with the industry may be developed with the view to address the specific needs of relevant industry. In this regard courses at respective sites could be arranged for wider participation on one hand



and real practical demonstration of the trained skills on the other hand thereby demonstrating academia-industry linkage.



Q6. SkillTech Centers have been jointly setup by PIDC and TUSDEC in collaboration with City & Guilds to produce in internationally certified labor force thereby improving their job prospects abroad. Do you think such initiatives be replicated in other parts of Pakistan?

Ans. In my opinion this center has yet to establish its position in the market. It requires aggressive marketing to attract trainees for this center. Possibility of linkage of this center with Sindh Technical Board and Engineering Universities could be explored to make this center more need oriented.

Q7. TUSDEC has been actively involved in the rehabilitation of flood victim of rural southern Punjab by imparting employable skills to help the affected community earn a sustainable livelihood for their families. How do you perceive the effort undertaken by TUEDEC?

Ans. It is a good effort.

Q8. Tell us about a person who has had a tremendous impact on you as a leader? Please explain how has this person impacted your life?

Ans. Quaid-e-Azam Muhammad Ali Jinnah and Mr. Abdul Sattar Edhi are my ideal personalities. While the teachings of Quaid-e-Azam remained the propelling force in my professional life, Mr. Edhi encouraged me doing humanitarian services for the down trodden people, leading me to form an NGO in District Benazirabad.

I was impressed, since my childhood with the leadership qualities, eloquence, hard work, and honesty of Quaid-e Azam. Fond of reading his speeches, the excerpts concerning his advices to the civil servants inspired and lured me towards becoming a civil servant. As a civil servant, I believe, the cardinal principles of civil

servants, set by Quaid-e-Azam and reiterated by him, have been the guiding torch for me all through my career that paved the way for my success at every stage.

Q9. What in your opinion is the biggest challenge facing CEOs like you today and what could be a possible solution?

Ans. I have always felt it my bounden duty and taking as a challenge, wherever I served including PIDC, to create working environment where team spirit among colleagues is inculcated, righteousness is reflected from all corners and everybody works strictly as per the rules with no coercion. At PIDC also I started with the same challenging mission and I feel I am successful in developing an improved working environment, creating family like atmosphere among the staff and bringing in enhanced financial discipline, which are the corner stones of any healthy organization.

Q10. Would you like to give any message to your readers?

Ans. As a civil servant I worked in diversified situations and as a follower of Quaid-e-Azam, I will impress upon the readers to work with honesty, dedication, devotion and zeal, with the high spirit of proving gainful to the institution while at the same time keeping in focus the relevant goals of high national importance.

Interview conducted in December, 2011

Power station harnesses Sun's Rays

There is a scene in one of the Austin Powers films where Dr Evil unleashes a giant "tractor beam" of energy at Earth in order to extract a massive payment.



Well, the memory of it kept me chuckling as I toured the extraordinary scene of the new solar thermal power plant outside Seville in southern Spain.

From a distance, as we rounded a bend and first caught sight of it, I couldn't believe the strange structure ahead of me was actually real.

A concrete tower - 40 floors high - stood bathed in intense white light, a totally bizarre image in the depths of the Andalusian countryside.

The tower looked like it was being hosed with giant sprays of water or was somehow being squirted with jets of pale gas. I had trouble working it out.

In fact, as we found out when we got closer, the rays of sunlight reflected by a field of 600 huge mirrors are so intense that they illuminate the water vapor and dust hanging in the air.



The effect is to give the whole place a glow - even an aura - and if you're concerned about climate change that may well be deserved.

It is Europe's first commercially operating power station using the Sun's energy this way and at the moment its operator, Solucar, proudly claims that it generates 11 Megawatts (MW) of electricity without emitting a single puff of greenhouse gas. This current figure is enough to power up to 6,000 homes.

But ultimately, the entire plant should generate as much power as is used by the 600,000 people of Seville.

It works by focusing the reflected rays on one location, turning water into steam and then blasting it into turbines to generate power.

As I climbed out of the car, I could hardly open my eyes - the scene was far too bright. Gradually, though, shielded by sunglasses, I made out the rows of mirrors (each 120 sq m in size) and the focus of their reflected beams - a collection of water pipes at the top of the tower.

It was probably the heat that did it, but I found myself making the long journey up to the very top - to the heart of the solar inferno.

A lift took me most of the way but cameraman Duncan Stone and I had to climb the last four floors by ladder. We could soon feel the heat, despite thick insulation around the boiler.

It was like being in a sauna and for the last stages the metal rungs of the ladders were scalding.

But our reward was the cool breeze at the top of the tower - and the staggering sight of a blaze of light heading our way from down below.

So far, only one field of mirrors is working. But to one side I could see the bulldozers at work clearing a second, larger field - thousands more mirrors will be installed.

Letting off steam

I met one of the gurus of solar thermal power, Michael Geyer, an international director of the energy giant Abengoa, which owns the plant. He is ready with answers to all the tricky questions.



What happens when the Sun goes down? Enough heat can be stored in the form of steam to allow generation after dark - only for an hour now but maybe longer in future.

Anyway, the solar power is most needed in the heat of summer when air conditioners are working flat out.

Is it true that this power is three times more expensive than power from conventional sources? Yes, but prices will fall, as they have with wind power, as the technologies develop.

Also, a more realistic comparison is with the cost of generating power from coal or gas only at times of peak demand - then this solar system seems more attractive.

The vision is of the sun-blessed lands of the Mediterranean - even the Sahara desert - being carpeted with systems like this with the power cabled to the drizzlier lands of northern Europe. A



dazzling idea in a dazzling location.

How the Solar Tower Works

1. The solar tower is 115m (377ft) tall and surrounded by 600 steel reflectors (heliostats). They track the sun and direct its rays to a heat exchanger (receiver) at the top of the tower
2. The receiver converts concentrated solar energy from the heliostats into steam
3. Steam is stored in tanks and used to drive turbines that will produce enough electricity for up to 6,000 homes



Courtesy by:
David Shukman (Science Correspondent, BBC News, Seville)

Major skills challenges facing Pakistan and strategies to address them

Pakistan is facing multiple challenges on the front of skills development. Characterizing these challenges is the low technical vocational competence and productivity of its workforce, coupled with the inability of Pakistan's existing Technical Vocational Education and Training (TVET) system to produce highly skilled and adaptable human resources capable of responding to the fast changing needs of the globalized economy. Recent data indicates that the unemployment rate in Pakistan has reached nearly 18 percent. Moreover, an estimated 70 percent of the non-agricultural workforce is within the informal economy, often in very low skilled, low quality forms of employment.

The present TVET system can be characterized as fragmented with no standardization and uniformity. It is supply driven with poor linkages with industry, lacking institutional framework and a national direction. There has been a phenomenal growth during the last two decades in the number of institutions and enrollment of trainees but no significant change in the management and administration of TVET has been made.

Pakistan's training system is supply-driven, lacks meaningful participation of stakeholders, and is not geared to meet the current and foreseeable future needs of the skills market. Due to shortage of skilled labor, local industry is finding it difficult to adapt to the demands of the external market, particularly in the implementation of innovative processes. There is a lack of the equipment necessary to achieve higher quality and productivity in the face of increasing competition. This has resulted in poor enterprise competitiveness both at the local and international level.

Due to low budgeting provisions for training materials, poor quality of teachers and obsolete machinery, existing TVET institutions are not capable of imparting and developing skills required for competitiveness, productivity and employment. These factors have resulted in increasing unemployment on the one hand and a skills shortage on the other. The training system is structured such that it does not allow easy entry and exit to trainees, and does not provide customized and special training to vulnerable workers and workers whose skills have become

redundant.

Pakistan's training system imparts industry-specific courses, despite the fact that there is limited industry in the rural areas where the majority of the population lives. There is an urgent need to develop skills for agriculture and agro-based skills to support the rural population as well as to improve the skills, technical competence and quality of workers in the informal economy. Unemployed, educated youth are another target group which must be equipped with technical skills to help them gain productive work. However, there are very limited provisions for continuous in-service opportunity training to best respond to the changing requirements of the labor market. Another obstacle is the shortage of high-tech institutions in Pakistan to cater to the new emerging requirements of knowledge economy. As the current accreditation and qualification framework does not extend national competency standards linked with international recognized benchmarks, the locally trained workforce is experiencing difficulties in locating employment abroad.



Presently, Pakistan lacks an effective labor market information system to support skills development planning by reporting on current and future skills market requirements, annual additions to and the demographics of the national workforce and its demographics. There are very low budgetary provisions for research work into the good practices across the region that can be used to improve the system. Effective Public-Private Partnerships must be further encouraged to mobilize collective efforts and enhance the relevance, efficiency, equity and sustainability of TVET.



Countermeasures

In order to face the skills challenges, the Government has initiated measures that include the involvement of stakeholders particularly the employers in policy making for the development of the TVET system. Under the Chairmanship of local employers, Skill Development Councils (SDCs) and Centre Management Committees (CMCs) have been established to facilitate the arrangement of training courses to meet the requirements of the local industry and skills market. These organizations are in the process of being strengthened by promoting their role and responsibilities and integrating them into the mainstream of the TVET System.



The TVET System has been restructured as well. The National Vocational and Technical Education Commission (NAVTEC) at the Prime Minister Secretariat has been established as an apex body for the purpose of providing regulation, coordination and policy direction for TVET in Pakistan. One of the important functions of the NAVTEC is to implement a national strategy for reforming TVET with a focus on establishing uniform institutional mechanisms for its management and delivery across the country. Despite considerable efforts made in this regard the desired level of coordination and streamlining of the institutional machinery dealing with TVET has yet to be achieved.

A National Strategy is currently under preparation that aims to strengthen the TVET System so that it is able to deliver the training that meets the needs of individual, enterprises and the society as a whole. The strategy seeks to structure the training system to ensure it is:

1. Demand oriented, flexible, efficient and responsive to changes in technology, global environment and needs of the economy;
2. Provides adequate coverage and access to target groups,

3. Is industry-led and relevant in terms of its output and supports industrial and business competitiveness;
4. Encourages active role for private sector; and
5. Conforms to national standards of quality and is also bench marked against international quality standards.



The Strategy also suggests promoting a unified structure at the provincial level, bringing together all major public sector training providers under one umbrella, with the aim of setting-up sector skills councils led by industry, developing competency-based training packages, establishing centers of excellence in key economic sectors and designing institutional mechanism for curriculum development and quality control. It also focuses on the development of a national qualification framework. Extending competency based training, promoting flexible training delivery, vocationalizing school education, encouraging better governance and capacity building, supporting teachers' training, expanding the apprenticeship training program, integrating the informal economy, and instituting an effective labor market information system will be crucial to the successful implementation of the Strategy.



Courtesy by:
International Labour Organization

CR&DI's testing standards for the cement industry



Cement Research and Development Institute (CR&DI) was established in 1983 by the State Cement Corporation of Pakistan, under the administrative control of the Ministry of Production. In 2005, TUSDEC was entrusted with the task of refurbishing CR&DI's laboratory and testing facilities. The objectives of CR&DI is to serve the cement and the construction industry by providing materials testing services according to international standards, diversification of products, initiation of new technologies, standardization of specifications, creation of technical linkages and lastly to conduct research on cement and allied materials.

At present CR&DI is managed by TUSDEC with the help of highly experienced cement industry professionals, who are actively involved in advisory services and training. CR&DI offers state-of-the-art testing facilities for cement and allied materials as per the following international and national standards:

- | American Society of Testing Materials (ASTM)
- | British Standards Specifications (BSS)
- | European Standard (EN-197)
- | Indian Standards Specifications (IS)
- | Pakistan Standards Specifications (PSS)
- | Sri Lankan Cement Standards (SLS)

- | Motorway M-4
- | Balloki Barrage and canal project
- | West bank by pass project Muzaffarabad
- | Sehra Hydro power project AJ&K
- | Construction of fly over at Muslim town
- | CCP power project Guddu



In the near future, CR&DI will be upgraded to a Common Facility Centre with an emphasis on Cement Research and provision of latest testing facilities. CR&DI's ultimate goal is not only to meet regulatory requirements but to exceed them, hence they intend to build their system on GMP and ISO-17025 requirements.



CR&DI has launched the testing facilities of following materials during July-Nov, 2011.

- | Testing of Dolomite
- | Testing of fire stone

Total samples tested in the period of July-Nov, 2011 were 255. CR&DI is currently providing testing services to the following projects:





CDTCs anticipated industrial impact and offerings



CDTC (Ceramics Development and Training Complex) has been established by TUSDEC in Attawa, a suburb of Gujranwala. The project is sponsored under the Asian Development Bank



(ADB) Common Facility Centre's (CFC) Program and has been approved by Government of Pakistan. It targets Pakistan's main Sanitaryware Cluster located in and around Gujranwala, Gujrat, Shahdara & Sialkot. Major products of this industry are bathroom commodes, wash basins, pedestals, urinals, bath tubs and other similar items of daily use. These products are supplied to the local as well as the international markets and are particularly liked by the Middle Eastern markets.

Prior to setting up of CDTC, a Need Assessment Survey was conducted by TUSDEC which involved a series of visits to the factories as well as meetings with industrialists, experts and academia. It was found that approximately 25% of the material is wasted due to poor production facilities. Inefficient production technology increases the cost of production due to losses in productivity cycle hence reduces profitability. Productivity also suffers directly due to the lack of skilled labor. According to an industry sources the lack of skilled labor results in a reduction of 5 to 10% in productivity levels. The existing technical vocational training system has been unable to meet the dynamic training requirements of trade and industry. Furthermore, these institutes have now become obsolete due to their remoteness from the industrial clusters. Except for a few, almost all of the current human resource has learned on job without any formal training. A productive and innovative workforce is essential for the success of an industrial sector in today's era of globalization. This low productivity and lack of skills has resulted in a failure to produce

competitive products and enhance quality which are necessary to increase productivity and trade.

Keeping in view the results of the Needs Assessments Survey, an intervention in the form of CDTC has not only prevented further decline but has also helped in meeting the challenges through constant interaction with the industry thereby increasing the much needed competitiveness of the sanitaryware industry of Pakistan. The objectives of establishing CDTC were to:

- | Help upgrade Ceramics industry particularly the sanitaryware Cluster
- | Provide engineering and production support
- | Provide a Common Facility Center (CFC) to mitigate their current poor technical facilities
- | Provide modern machinery and technical equipment for replication as well as training
- | Enhance the productivity both in terms of quality and quantity

Anticipated Impact on Industry



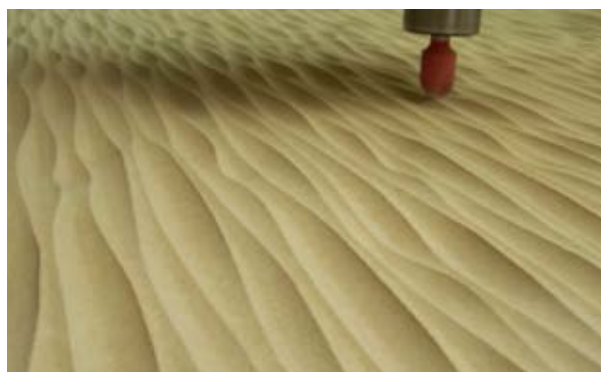
- | Exposure to contemporary technology through hands-on experience
- | Efficient kiln will enable the industry reduce energy losses (current energy losses are between 30-50%)
- | Facilitate production of better quality products at lower cost
- | Contribution towards making the local products globally competitive
- | Testing facilities to enable the industry to achieve consistent quality and meet international standards which is a pre-requisite for export
- | Contribution to the skill development of the workers in the cluster through On-the-Job

Training

Consultancy services to;

- | Solve production problems
- | Initiate new designs and techniques
- | Keep pace with new developments
- | Improve quality
- | Enhance productivity: optimize costs, reduce wastage

CNC Pattern Making



The center houses state-of-the-art modern CNC machines for Marble cutting, contouring and polishing. Ceramics / Gypsum / Marble patterns and mold making are also available in the center through Marble Shape Mill CNC machine. These machines would ensure that the center is able to set precedent in design and manufacture of state of the art sophisticated marble products in the industry while the industry will be able to utilize the expertise of the center for replication and technical skills.

Training:

The center provides practical 'on-the job' training and R&D facilities with an up-to-date library. CDTC aims to provide need-based human resource development and demand-based technical assistance and support to the industry. This includes technical training with a focus on manufacturing and management training in various disciplines. The trained manpower and engineering services provided will enable the industry to produce quality products, with the added advantage of reduced turnaround time and costs. At present, CDTC is actively in touch with local ceramics industry to provide on job training for the testing of raw materials and process control to improve quality and reduce wastage.

What CDTC Offers

CDTC provides the following services to the industry:

Modern Shuttle Kiln



The center is equipped with modern energy efficient shuttle kiln, which would help the industry in cutting down the firing cost by demonstrating reduction in losses, improvement in quality of products and optimal utilization of the process. Currently, Shuttle kiln is providing the much needed service to the industry with a long list of satisfied client.

Testing Laboratory



CDTC offers a fully functional lab that provides the physical and chemical testing facility for ceramics raw materials to the local industry. Notable services include composition and analysis of the raw material and strength as well as breakage and gloss tests for the final product.



Successful completion of GTDMC



GTDMC (Gujranwala Tools Dies and Moulds center) was established by the Government of Pakistan through TUSDEC in January 2010. It is a combined Common Facility and Skill Development Center, located at Gujranwala to support the industrial clusters in and around Gujranwala, Gujarat, Sialkot, Daska and Wazirabad.



Major aim of GTDMC is to enable local industry to produce Tools, Dies and Molds based finished products of international quality and assist local industry in producing high quality tooling, with direct benefits of foreign exchange savings. From prototype to production of Tools, Dies and Molds, GTDMC is capable of manufacturing molds for all types of Plastic /Rubber Parts, Pressure Die Castings, Jigs & Fixtures and Sheet metal Dies Development. It has latest CAD\CAM software packages like Catia, Pro Engineer, Power Mill & Master Cam and High Tech CNC machines. Technical assistance is also available and training on modern technologies/machines will be provided in future. GTDMC provides state of the art design & manufacturing services and facilities in the following areas:

- | CAD/CAM/CAE
- | Sheet Metal Dies
- | Injection Molds
- | Die Casting Molds
- | Die and Mold Accessories
- | Reverse Engineering
- | Rapid Prototyping
- | Heat Treatment
- | Surface Texturing
- | Laser Marking & Cutting
- | Inspection & Scanning

After successful completion of the project by TUSDEC, the Federal Government of Pakistan has constituted a new Board of Directors for GTDMC consisting of the following members:

Public Sector/Ex-Officio:

1. Joint Secretary, Ministry of Industries and Production
2. Joint Secretary, Ministry of Finance
3. Mr. Badar Suleman, Member (PS), PAEC
4. Director Projects, Technology Upgradation and Skill Development Company (TUSDEC)

Private Sector:

5. President, Multan Chamber of Commerce and Industries, Multan
6. Mr. Khalid Mehmood Chadda, New Stainless Steel Industries, Wazirabad
7. President, Gujarat Chamber of Commerce and Industry, G.T. Road, Near Bhimber Bridge, Gujarat
8. Mr. Usman Sheikh, Director, Usman International Private Limited, Gujranwala
9. Mr. Noman Wazir, Chairman, Pakistan Hunting and Sporting Arms Development Company, Peshawar
10. President, Karachi Chamber of Commerce and Industry, Karachi
11. President, Quetta Chamber of Commerce and Industry, Quetta
12. Chief Executive Officer, Gujranwala Tools Dies and Moulds Center, Gujranwala



SDCs handed over to KPK Government



SDCs (Skill Development Centers) were constructed in Batagram and Khaki to revive the skills and expertise of the earthquake survivors in the fields of construction, tourism and hospitality while involving them in the rehabilitation of the earthquake-hit areas. Four centers in Batagram and Khaki received a warm response from the local community. The SDCs are offering free-of cost courses in more than 15 different disciplines covering;

The 2005 earthquake in Northern Pakistan not only turned out to be fatal for thousands of people but also left large numbers battling for survival. Azad Jammu & Kashmir (AJK) and Khyber Pakhtunkhwa (KPK) were dealt the most devastating blow and suffered extensive damage to economic assets and infrastructure, with social service delivery, commerce and communications either debilitated or destroyed.

Ministry of Industries & Production (MoIP) though PIDC asked TUSDEC to assess how appropriate help could be provided to the affected. A task force was rapidly deployed by TUSDEC to AJK and KPK to identify the kind of intervention that could be made. The TUSDEC task force was able to quantify the setting-up of training institutes. During the survey it was observed that the local cottage industry had suffered badly and lost much of its skilled labor. In fact, there was very little adult skilled or unskilled labor available. To worsen the situation, there was an absence of adequate level of technology with virtually no understanding of standards and quality. This meant that there was a major future risk from poorly reconstructed housing and buildings.



- | Mason
- | Electrician
- | Shuttering carpenter
- | Steel Fixer
- | Welder
- | Plumber
- | Motor Winding
- | Tour Guide
- | Trekking Guide
- | Receptionist
- | House keeping
- | Food & Beverages (Services)
- | Food & Beverages (Production)
- | Kitchen helper
- | Courtesy Driver
- | Computer / IT
- | English Language



Over 6,500 students have graduated so far from the SDCs. Similar institutes are planned for Malakand and various districts of Balochistan.

The SDCs were recently handed over to the KPK Government after a successful run of more than five years. Moving forward, TUSDEC intends to provide mobile training workshops in the remote districts of KPK to increase the outreach of the training facilities to far-flung areas of Pakistan.



New Cyber Face for TUSDEC

TUSDEC recently launched its newly redesigned company website at www.tusdec.org.pk with an easier to navigate and user friendly design. It was an in-house effort by TUSDEC's design team and management which made it possible to re-design and launch TUSDEC's new online interactive face in a very short span. The domestic input kept the venture extremely economical yet quality conscious.

Visitors to the website can now access up-to-date information with ease. The website describes TUSDEC's operational philosophy, capabilities and projects undertaken. The site also focuses on the services TUSDEC provides to a broad spectrum of

customers in the development sector. Additionally, the portal helps customers access their desired information on the required services and learn about TUSDEC's various skill related initiatives and training programs launched by its subsidiaries.

The TUSDEC team is excited and thrilled to launch the new site and is determined to provide their customers with an informative and useful platform for all their needs.

For feedback, please visit us at www.tusdec.org.pk



Cement Research and Development Institute



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