

# COMMERCIALIZATION QUARTERLY

### Seminar on New Technologies & Techniques in Agriculture Sector

STEDEC Technology Commercialization Cooperation of Pakistan in collaboration with Regional Agricultural Economic Development Centre (RAEDC) organized a seminar on "New Technologies and Techniques in Agriculture Sector" at Regional Agricultural Economic Development Centre (RAEDC) hall, Vehari. Seminar was attended by representatives from STEDEC, RAEDC, PCRWR and PCRET. Dr Ghulam Abbas, Director RAEDC; Ch. Mustaq Ali, EDO Agriculture; District Officer, Irrigation Department; Dy. District Officer, Extensions; Mr. Maqbool Shah, Asst. Director PW & QC; Mr. Zulfiqar Ali, Haq Sons Burewala; Mr. Hafeezur Rehman, PECRET; Mr Atiq-ur-Rehman Quresh, DGM North STEDEC; Mr Zameer Ahmad Soomro, Regional Director PCRWR; and Syed Raza Abbas, Managing Director STEDEC were the notable members who participated. Apart from them progressive farmers of Vehari, adjacent area field officers and important dealers of agricultural products were also present at the seminar.



Speakers' emphasized on raising awareness of farmers and other stakeholders along with a need to build trust level with indigenous R &D institutions. Regional Director PCRWR discussed in detail new techniques regarding sowing of wheat and paddy crops which could yield substantial saving of water. Representative from PCRET briefly delineated on installation and advantages of solar tube wells.

PCRWR products, Water Filtration system and Soil tensiometer were demonstrated, which were highly appreciated by the participants. Soil tensiometers were subsequently installed within RAEDC premises for demonstration purpose so that efficiency of these can be observed first hand.



July-Sep, 2016 | Vol. 1 – Issue: 1





It is my pleasure to endorse the first newsletter being published by STEDEC Technology Commercialization Corporation of Pakistan, which is an organization under the Ministry of Science & Technology, and was established to support the R&D organizations of this Ministry in commercialization of their indigenously researched products, processes and technologies.

Indigenous Research & Development is essential for upgrading the productive capacity of the country, enhance productivity and improve the innovative capabilities of the national economy in general. It is however important that the R&D effort is synchronized with the industrial sector so that market and need based efforts result in technologies being developed which serve the needs of the country.

In is in this space that STEDEC is striving to develop effective and productive linkages between the business community as well as industrial sector of the country and the public sector R&D organizations. Creation of such an ecosystem is crucial for effective commercialization of indigenous R&D, which will lead towards reduced dependence on foreign technologies, enhance import substitution, increase exports, and generally upgrading of the national economy.

It is hoped and expected that this newsletter will provide more coverage and visibility to activities of this Ministry in the area of commercialization. I appreciate the efforts of STEDEC Technology Commercialization Corporation of Pakistan and wish them the very best with their endeavors.

Fazal Abbas Maken Secretary MoST PCSIR
PCRET
NIE
PCRWR
NIO
CWHR
PCST
PSF
CIIT
NUST
PNAC
PSQCA

**PEC** 

#### **National Workshop on Water Resources Management**

STEDEC Technology Commercialization Corporation of Pakistan with Centre of Excellence in Water Resources Engineering, University of Engineering & Technology Lahore arranged a workshop on Water Resources Management at Chemical Hall UET Lahore. Renowned experts from all over Pakistan participated in this prestigious. Concluding session of the workshop was addressed by honorable Federal Minister for Science and Technology, Mr. Rana Tanveer Hussain.



In his welcome address Vice Chancellor UET Lahore Prof Dr. Fazal Ahmed Khalid said that water related issues can be resolved through mutual consensuses and comprehensive strategies. While defining the role of academia in this regard he added that universities not only produce human resources but also deliver in research and commercialization to resolve the issues on scientific ground.

Mr. Rana Tanveer Hussain, Federal Minister for Science and Technology stated that water scarcity constitutes one of the biggest challenges to Pakistan. The country needs to seriously address how to provide adequate water to agriculture, industry and human consumption in the face of the rapidly dwindling reserves.

He urged that more of such initiatives should be taken to bring water sector stakeholders together on one platform for capability assessment of each other's organizations, and to identify areas of cooperation and collaboration of efforts.

The chief guest Federal Minister of science and technology Rana Tanveer applauded the efforts of the contributors and stakeholders. He assured that all workable recommendation from the stakeholders will be supported by the Ministry of Science and Technology with all its available resources.

R&D Innovation Technology Commercialization

#### **Industry Interaction Session with Renewable Energy Association of Pakistan**

An industry interaction session on renewable energy sector was held at Pakistan Council of Resource Energy Technologies (PCRET) Islamabad on 23<sup>rd</sup> June 2016. Notable members of organizations like STEDEC, PCRET, PCRWR, NUST and REAP participated. Main purpose of the meeting was to bring the main stakeholders of the sector together to brainstorm and deliberate upon how the Ministry of Science and Technology (MoST) R&D organizations could leverage to facilitate the renewable energy sector.

Participants of the R&D organizations briefed about their organization's role and mandate. They gave overview of their products and technologies in pipeline.

It was decided in the meeting that for a detail review of capabilities, facilities and equipments available within the Ministry of Science and Technology (MoST) R&D organizations, all the above listed R&D organizations would be visited by STEDEC and REAP team. Subsequently a report on effective utilization of facilities, technologies and products of the R&D organizations would be prepared.



#### **OBJECTIVE**

Facilitate Sustainable
Commercialization of
Products, Processes and
Technologies developed by
R&D Organizations.

#### **VISION**

Transforming STEDEC into a premier organization, facilitate commercialization of market driven indigenous research enhancing import substitution and strengthening export capacities for economic growth of Pakistan.

#### **Stakeholder Consultation on Agriculture sector**



STEDEC Technology Commercialization Corporation of Pakistan coordinated an Industry Interaction session on agriculture sector at STEDEC House Lahore on 20<sup>th</sup> June 2016. Notable members of organizations like STEDEC, Pakistan Council for Renewable Energy Technologies (PCRET), Pakistan Council for Research in Water Resources (PCRWR), UET Lahore, and PMAS – Arid Agriculture University, Rawalpindi participated.

The session was held to discuss ways in which the resources available within the public sector R&D organizations and universities could be leveraged and coordinated to overcome duplication which in turn will effectively facilitate agriculture sector of the country, thus furthering economic development of the country.

Participants of the R&D organizations briefed about their organizations, role and mandate, and also gave overview of their products and technologies in pipeline. It was mutually decided that assessment will be made on the capabilities of the universities and R&D organizations by visiting their premises. Subsequently a MoU would be deliberated upon to establish a basis for corporation between various stakeholders to support the agriculture sector on a long term, sustained and continued basis.

### **Exploratory Meeting with Sheikhupura Chamber of Commerce & Industry**

An Industry Interaction Session held with representatives of Sheikhupura Chamber of Commerce and Industry at STEDEC house Lahore on 20<sup>th</sup> June 2016. Members from Pakistan Council for Research in Water Resources (PCRWR), Pakistan Council for Renewable Energy Technologies (PCRET) and Shiekhupura Chamber of Commerce and Industry participated. Representatives of the R&D organization give overview about their respective organization, covering their role, mandate, products and technologies in pipeline.



Mr. Ashfaq Ahmed, Director General PCRWR briefed about his organization's research and infrastructure, work related to water logging and groundwater mapping, key achievements, and a few commercialized activities. Major infrastructure and capabilities discussed included Geographic Information System and Geo Hydrological lab, Tile Drainage capabilities, Solar Powered Drip system, Farmers Advisory irrigation services through SMS. Also the achievements in rainwater harvesting capabilities, satellite based groundwater monitoring, and

water quality labs were highlighted. DG PCRWR suggested that PCRWR has approximately 24 facilities around the country which could be used to facilitate the collection storage and delivery of samples between industry and PCSIR.

Mr. Afzal Kamboh, Deputy Director PCRET briefed about his organization's services and need based R&D products in the field of Photovoltaics (PV), solar thermal products, Microhydro power plant, Biogas plant, and Solar Cookers. He further informed that PCRET laboratories could be effectively used to optimize manufacturing parameter and standardize testing facilities. Apart from that the second generation solar cell, i.e. the Cadmium Telluride (CdTe) technology is most appropriate for the environment, performs 5-7% higher than the silicon based solar cells and is cost effective at high temperature.

Group head/former president Mr. Mansoor-ul-Haq urged the R&D organizations to inform people about their available expertise including research laboratories which if productively utilized, could even reduce imports. In this regard he offered to host an industry interaction session at the Chamber office in which member companies would be invited. R&D organization may brief the member companies about their skills, expertise, products and technologies.

Ministry of Science & Technology has given the following guidelines for R&D.

- All research conducted to be market driven.
- Establish linkages between Industry, Alumnae and R&D Organizations
- Conduct sector wise Focus Group Meetings with the participation of prominent industrial entrepreneurs.
- Identification of Market Driven (need based)
   Projects.
- Regular interaction with R&D Organizations of MoST.
- Publicity through Seminars, Brochures, Documentary Films, News letter etc.

### **Exploratory Meeting with Sialkot Chamber of Commerce & Industry**

Syed Raza Abbas Shah, Managing Director, STEDEC Technology visited Sialkot Chamber of Commerce & Industry on 27<sup>th</sup> July 2016. He briefed about STEDEC mandate to assist public sector organizations like Pakistan Council for Renewable Energy Technologies (PCRET), National Institute of Electronics (NIE) and Pakistan Council for Research in Water Resources (PCRWR) in developing market driven research programs and commercialization of their indigenously researched products, processes and technologies. He interacted with Mr. Ahtasham Mazhar, Vice President of the Chamber, and requested to collectively explore way forward as to how these public sector organizations may assist the industry with their R&D services and knowledge.

Mr. Ahtasham Mazhar agreed to schedule Industry Interaction Session in the near future so that members may be briefed firsthand about the indigenous research being conducted within the MoST R&D organizations and how this could be productively deployed to this benefit of the local industry.

## **Exploratory Meeting with Faisalabad Chamber of Commerce & Industry**

An exploratory meeting held at Faisalabad Chamber of Commerce & Industry on 2<sup>nd</sup> August 2016 with chamber President Ch. M. Nawaz and other officials. Syed Raza Abbas Shah, Managing Director, STEDEC gave an overview of his company and highlighted its mandate on commercializing technologies of R&D organizations of Ministry of Science and Technology (MoST). He briefed the President and members regarding the technologies, products, processes and capabilities of MoST R&D organizations. He requested the Chamber to explore avenues as to how these organizations can facilitate the industry.



It was decided that the Chamber would schedule an Industry Interactive Session in the near future in which it would invite MoST R&D organizations to brief the Chamber's members about their capabilities, products, and technologies which could benefit the industry.



STEDEC House Adj. Aiwan e Science Building Ferozepur Road, Lahore PH: 042 – 99230545 – 46

Fax: 042 - 99230543

Email: <u>info@stedec.com.pk</u> Website: www.stedec.com.pk