



PARC NEWS

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Dr. Muhammad Azeem Khan assumes as Chairman, PARC

Dr. Muhammad Azeem Khan has assumed as Chairman PARC. Dr. Azeem holds a Ph.D in Resource Economics from the University of Reading, UK and was the Member, Food Security and Climate Change, Planning Commission, Ministry of Planning, Development and Reforms, Islamabad. He also worked as Director General of the National Agricultural Research Centre (NARC) in Islamabad, a federal organization carrying out research in all areas of agriculture including food and fiber crops, horticulture, vegetables, livestock, poultry, fisheries, farm mechanization, natural resources, alternate energy, genetic resources, biotechnology, honey bees, food processing, eco-toxicology etc. As a research manager, Dr. Khan's main responsibility lies in the interaction with policy makers, international centres and development partners, for planning R&D activities in high priority areas. Dr. Khan also served as a Dean / Rector of Pakistan Institute of Advanced Studies in Agriculture (PIASA). Throughout his career, he has focused on crop-livestock development, coordination of the socioeconomic component in the multi-disciplinary research (system diagnostic studies, need assessments, priority setting, technological interventions choices, baseline studies, farm profitability analyses, etc.) throughout Pakistan, in collaboration with local research, as well as on the Integrated Pest Management (IPM) and impact analysis. As a Chief Executive of PARC Agro-Tech Company (PATCO), Dr. Khan worked jointly with rural communities and the private sector for the commercialization for new technologies and value added agro products in Pakistan. He served as a Member of the High Level Panel of Expert (HLPE) Steering Committee for the man-

(Contd. on page 8, Col. 2)

World Food Day Celebrated Government taking strides in Food Security: Mehboob

The World Food Day was celebrated at the National Agriculture Research Centre (NARC) organized by the Food and Agriculture Organization of the United Nations (FAO) in Collaboration with the Ministry of National Food Security & Research, Pakistan Agricultural Research Council (PARC), World Food Programme (WFP), Oxfam and other research institutes. The theme for this year was "Our Actions are our Future. Healthy: Diets for a Zero Hunger

World". The day was marked the 74th anniversary of the Food and Agriculture Organization's founding, and brought together key stakeholders including government representatives, development partners, UN agencies and farmer communities. The speakers at the event stressed on the need for action across sectors to make healthy and sustainable diets accessible and affordable to everyone. It was further pointed out that achieving zero hunger is not

(Contd. on page 7, Col. 1)



Sahibzada Muhammad Mehboob Sultan, Federal Minister for NFSR, Dr. Muhammad Hashim Popalzai, Federal Secretary to M/o NFSR, Dr. Muhammad Azeem Khan, Chairman PARC, Ms. Mina Dowlatchahi, FAO Representative in Pakistan, Mr. Finabarr Curran, Representative and Country Director WFP Pakistan, Mr. Mohammad Qazilbash, Country Director OXFAM, Pakistan and Mr. Knut Ostby, The Resident Coordinator of United Nations in Pakistan are sitting on the stage on the occasion of World Food Day function held at NARC on Oct. 16.

Gomal Zam Dam project to bring economic prosperity: Dr. Azeem

A two-day training workshop on Watershed Planning and Management for Gomal Zam Dam organized by United States Agency for International Development (USAID)/ United States Department of Agriculture (USDA) and International Center for

Agricultural Research in the Dry Areas (ICARDA) was held in Serena Hotel Islamabad. Mr. Muhammad Israr, Secretary Agriculture, Khyber Pakhtunkhwa inaugurated the workshop. Speaking at the opening ceremony of the workshop, Dr. Muhammad

(Contd. on page 7, Col. 2)



Dr. Muhammad Azeem Khan, Chairman PARC, Mr. Muhammad Israr, Secretary, Agriculture, Khyber Pakhtunkhwa and Dr. Abdul Majid, Country Manager, ICARDA-Pakistan and others are sitting on stage during a Two-day USAID/ USDA-ICARDA Training Workshop on Gomal Zam Dam Watershed Planning and Management held at Serena Hotel on Dec. 4-5

China to extend technical support to PARC, says Dr. Azeem

A Chinese Delegation on Pak China Socio-Economic Joint Working Group (JWG) headed by Li Jun, Dy. Director / Associate Professor Institute of Oil Crops, Chinese Academy of Agricultural Sciences, China visited Pakistan Agricultural Research Council (PARC) and held meeting with Dr. Muhammad Azeem Khan, Chairman, PARC for Pak-China Collaboration in Agriculture Sector under CPEC.

On the occasion, Dr. Muhammad Azeem Khan, Chairman, PARC acknowledged the support of China in various projects of PARC. He gave a detailed presentation about PARC, its mission and vision to achieve sustainable food security and poverty alleviation through knowledge and innovation.

The Chairman, PARC also briefed the delegation about presence of PARC in the Country, National Agricultural System of Pakistan, PARC discipline of in-house research, i.e, Plant Sciences, Natural Resources, Animal Sciences, Agricultural Engineering and Social Sciences. He also highlighted the Pakistan Agricultural Scenario and PARC major achievements. Chairman, PARC further added that agriculture and socio economic development are also included in Pak-China Economic Corridor (CPEC).

In the meeting, Pak- China experts also exchanged the agricultural information and discussed the areas of mutual interest to accelerate the development of Agriculture sector in Pakistan. The Projects of the Socio-

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Dr. Muhammad Azeem Khan, Chairman, PARC presiding over a meeting with Chinese Delegation of Socio Economic Joint Working Group (JWG) under CPEC on Dec. 03 at PARC. Dr. Humayun Javed, Sr. Joint Secretary, M/o NFS&R and high officials of PARC are also present in the meeting.

Chairman PARC chairs IPARCC moot

The 11th meeting of IPARCC was held at PARC Dr. M. Azeem Khan, Chairman PARC presided over the meeting. Dr. Shahid Hameed, Director (Coordination) PARC, welcomed the distinguished members of the meeting. He briefly described that the main objective of the august forum is to have greater research coordination among the federal & provincial research partners and academic institutions to avoid duplication, overlapping and to develop a concrete agenda of agriculture research at national

level.

Speaking on the occasion, Chairman PARC said that PARC, has a broad mandate to coordinate research among federal, provincial and higher education agencies on one side and with international agencies (CGIAR) on another. PARC operates 12 satellite institutes across the country. He briefed the house regarding the new initiatives in agriculture and described that present government has launched mega projects with worth of Rs. 310 Billion focused on wheat, rice & sugarcane

(Contd. on page 8, Col. 1)



Dr. Muhammad Azeem Khan, Chairman, PARC presiding over 11th inter-Provincial Agriculture Research Coordination Committee meeting at PARC on Nov. 28.

AZRC-PARC introduces new varieties

Arid Zone Research Center (AZRC) D.I. Khan developed high yielding wheat line AZRC-11 which superseded all the 60 lines included in Wheat National Uniform Yield Trial-Rainfed-2018-19. DUS as well as Spot examination of this candidate line has been completed. Varietal approval for Expert committee has been submitted to Provincial Seed Council (KP). Groundnut Experiments under tube well irrigated conditions. This was the first time cultivation of groundnut in the history of these areas. Quite encouraging result were obtained. The highest yield were recorded as 5411 and 4455 kg per hectare respectively. This is quite higher yield and double than yield being obtained at Talagang and other part of country at farmers' fields. Garlic and Onion Experiments at Riverine area, D.I.Khan. Two varieties of Onion one each from AARI Faisalabad (Phulkara) and ARS, Swat (Swat-1) and two varieties of Garlic (Lahson Gulabi and local selection (AZRC Thoom) have been successfully tested at farmer's fields at two locations in Riverine area, D.I. Khan. This is first time cultivation of Onion and Garlic in this belt where farmers never cultivate such high values crops. The yield of onion exceeded 19700 kg per hectare (Swat-1).while Yield of garlic was more than 13500 kg per hectare (AZRC Thoom).

Under the supervision of PARC-AZRC, D.I. Khan, Cotton promotion activities in DI Khan were designed to promote cotton cultivation in Gomal Zam command area and other areas of DI Khan. A group of three scientists was given the task to develop a liaison with Cotton Research Station (CRS) DI Khan to carry out these activities. ARICA and Layyah seed corporations were contacted for free seed distribution among farmers and proper visiting for guidance of the farmers about cultural and insect pest management was managed throughout the season in 2018. Line sowing of Quinoa in Southern KP is introduced. Also Moringa and Pongamia have proven best for an agro forestry model for wheat and chickpea. Established Silage and Hay production technology at AZRC farm for increased meat and milk production besides the objective provision of fodder during fodder scarcity period. Prepared the Silage from Corn (Zea mays) and Mott grass and Hay from Barseem. The Center has Provided the Advisory Services to the farmers of the areas about Health, Management, Care, Treatment and Feeding of small and large ruminants. Moreover, training camps (03) & 2 field days were organized at Centre for awareness of farming communes. Adaptive Measures for acclimatization of Angora Rabbits in warm climate of DI Khan were

(Contd. on page 7, Col. 3)

JICA training to increase agricultural productivity, food security: Dr. Azeem

Training program under JICA supported project for "Capacity development of Agriculture Extension services in Balochistan Province inaugurated at NARC from Dec. 10 to 13th. The inaugural ceremony of 1st Cycle of training courses of Agriculture Officers and Field Assistants was held in the auditorium of National Agriculture Research Centre (NARC).

Speaking at the inaugural ceremony, Dr. Muhammad Azeem Khan, Chairman Pakistan Agricultural Research Council (PARC) said that this is a very important project particularly for Balochistan as well as for Pakistan. He appreciated the concept and methodology of the project which will strengthen the weak link between research and extension for dissemination of latest

agriculture development and new techniques to farmers at grass root level. The chairman thanked Government of Japan and JICA for their cooperation. Dr. Azeem also added that the main object of the project is to increase Pakistan's agricultural productivity by improving skills, conducting research and increasing adoption of new agricultural practices and technologies. The trainees should improve soil fertility through demonstration and dissemination of best management practices to farmers.

The Government of Balochistan and National Agriculture Research Centre (NARC) requested JICA to support the Capacity Development of Agriculture Extension Services in Balochistan Province. Keeping in view the importance of the development

(Contd. on page 6, Col. 1)



Dr. Muhammad Azeem Khan, Chairman PARC, Dr. Shuichi MATSUSHIMA (Team Leader) JICA Project Team, Dr. Ghulam Muhammad Ali, DG NARC and Mr. Inam ul Haq, DG (Agriculture Extension), Balochistan are sitting on stage on the occasion of "Follow-up Workshop & Certificate Distribution Ceremony of 1st Cycle of Training Courses under JICA-API/ NARC Project being held at NARC from Dec. 10-13.

Training course on cold water fisheries held

Pakistan Agricultural Research Council (PARC) and Gansu Fisheries Research Institute (GFRI), China jointly organized three days Training Course on "Cold Water Fisheries (Trout Farming)" at Islamabad from Sep. 12th to 14th. The purpose of this training session was to facilitate potential investors in Trout Fish Farming Business by providing them with a general understanding of the business and cold water fisheries research and development in Pakistan. Under the Belt and Road initiative of Chinese Government, the Gansu province of China has initiated this project.

While addressing to its opening ceremony of the training course, Muhammad Ayub Chaudry, Chairman, PARC shared his views to the participants of the course and said that

this training course has provided an opportunity for the scientists, industry and farmers to interact and learn latest techniques in cold water and trout fisheries. He further added that Khyber Pakhtunkhwa, AJK and Gilgit Baltistan are the major cold water fish potential areas of Pakistan. They possess a rich variety of freshwater habitats, including major rivers and numerous streams and lakes. These fresh water resources offer significant opportunities for the development of inland fisheries and aquaculture.

PARC has decided to establish a cold water fish laboratory at its research station namely Mountain Agriculture Research Centre (MARC) Juglote, Gilgit with the technical cooperation of GFRI, China to produce seed of new cold water fish species and to

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Muhammad Ayub Chaudry, Chairman, PARC, Hu Yongbiao, Researcher, Gansu Fisheries Research Institute, China, Dr. Johar Ali, Member (ASD) PARC and Dr. Sarfraz Ahmed, Member (NRD) PARC are sitting on stage on the occasion of three days training course on "Cold Water Fisheries (Trout Farming)" from Sep. 12-14 held at Grand Regency Hotel, Club Road, Islamabad.

Olive plantation, resources needs to be enhanced

USAID supported Center of Excellence for Olive Research and Training (CEFORT) partnered with Pakistan Agricultural Research Council (PARC) and USAID Punjab Enabling Environment Project (PEEP) for organizing seminar on sharing experiences on olive sector development, at NARC Islamabad on Sep. 19th. The Project Director "Promotion of Olive Cultivation on Commercial Scale in Pakistan" Dr. Muhammad Tariq, Director General Agriculture Dr. Abid Mehmood and BEE specialist USAID PEEP Mr. Asad Zahoor joined 60 olive sector stakeholders, researchers, entrepreneurs and expert on the occasion.

While addressing to the participants of the Seminar, Dr. Muhammad Tariq, Project Director Olive said that "This Seminar has brought olive researchers, experts, farmers and investors together to share experiences and enhance coordination for olive sector development in Pakistan". The seminar has provided an effected opportunity to olive farmers, researchers and olive related institutions to strengthen mutual linkages besides sharing experiences from across the country. The activity will help stakeholders adopt a shared strategy for scientific research, best olive farming practices and value addition. Dr. Tariq further added that the pace of olive plantation and resources needs to be enhanced considerably and Precious foreign exchange could be saved if olive cultivation is stepped up in Pakistan and the country begins processing its own olive oil to help reduce oil imports.

Dr. Abid Mehmood, DG (Agriculture) also shared his views that the seminar has provided participants with an opportunity to share their respected experiences related to olive sector development in Pakistan.

Tea plantation a wonderful agro-asset: Chairman PARC

Mr. Muhammad Ayub Chaudry Chairman PARC along with the Joint Secretary M/o National Food Security & Research, Islamabad Dr. Muhammad Khurshid visited PARC - National Tea & High Values Crops Research Institute (NTHRI) Shinkari (Mansehra) on Sep. 21st to 22nd.

Dr. F.S. Hamid CSO/Director, NTHRI welcome the Chairman and Joint Secretary MnFSR at the Institute. In the welcome session CSO/Director of the Institute briefed about the long history of tea cultivation and present status with potential of this high valuable crop. Later on the Chairman was briefed through presentation on research and developmental work with new activities of high value crops i.e., Tea, Kiwi, Olive, Litchi, Fruits, Vegetables. The Director,

(Contd. on page 9, Col. 3)

Chairman PARC presides over ALP moot

The objective of the Agricultural Linkage Program (ALP) is to promote and support agricultural research and development activities in accordance with the Pakistan's long term development goals and to promote the scientific cooperation between Pakistan and the United States in agricultural sector on Sep. 3rd. Mr. Muhammad Ayub Chaudhry, Chairman PARC presided over 32nd meeting of Board of Directors (BOD) of Agricultural Linkages Program (ALP) at PARC. Besides technical members of PARC, Member (Agriculture), P & D

Board, Punjab, Assistant Chief (Agriculture), P & D Department, Sindh, Chief (Agriculture & Environment Section), Planning and Development Department, Government of Khyber Pakhtunkhwa, Chief (Food & Agriculture), Ministry of Planning, Development and Reforms, GoP, Food Security Commissioner-I, MNFS&R, GoP attended the meeting. The agenda of meeting was to evaluate and award the research and development projects received from National Agricultural Research System of all provinces

(Contd. on page 8, Col. 1)



Muhammad Ayub Chaudhry Chairman PARC, presiding over 32nd meeting of Board of Directors of Agricultural Linkages Program (ALP) at PARC on Sep.03.

VEC okays seven rice varieties for commercial cultivation

Meeting of Variety Evaluation Committee (VEC) on rice was held at Pakistan Agricultural Research Council (PARC) on Sep. 02. The meeting was attended by technical members from NARS system including the Director General, Federal Seed Certification & Registration Department, Food Security Commissioner from Ministry of National Food Security & Research. The representatives of seed companies including Chairman Seed Association of Pakistan also attended the meeting.

Muhammad Ayub Chaudhry, Chairman, PARC while speaking to the participants appreciated the role of private and public sector for taking interest in research and development of rice in the country. He briefed about upcoming projects on rice

under Prime Minister's "National Agriculture Emergency Program". He added that he is happy to see foreigner's participation in the VEC meeting.

Presiding the variety evaluation committee meeting, Dr. Abdul Ghafoor, Member, Plant Sciences Division, PARC emphasized the role of quality seed for the productivity and profitability of farmers and appreciated the role of seed companies and public sector institutes for making efforts to improve the potential of rice hybrids/varieties in Pakistan. National Coordinator (Rice) of PARC presented the working paper for all the thirty three proposals of rice hybrids / varieties for recommendation to the Federal Seed Certification & Registration Department. The VEC recommended 7 rice hybrid varieties

(Contd. on page 8, Col. 3)



Muhammad Ayub Chaudhry, Chairman PARC chairing a meeting of Variety Evaluation Committee (VEC) on Rice held at PARC on Sep. 02.

Dr. Azeem hails ex-Chairman services

A farewell party in honor of Muhammad Ayub Chaudhary, Ex-Chairman, PARC was held at PARC to remember his distinguished and inspiring services provided to PARC as well as employees of the Council.

Speaking on the occasion, Dr. Muhammad Azeem Khan, new Chairman, PARC appreciated the efforts of Muhammad Ayub Khan as a thorough professional, a diligent and hardworking administrator. Dr. Muhammad Azeem also appreciated since taking over the charge as Chairman, PARC by Muhammad Ayub Chaudry. He played a leading role in various ways to boost PARC/NARC and its allied agri. research stations. On the farewell occasion, Ex-Chairman, PARC, Muhammad Ayub Chaudry paid vote of thanks to all PARC Scientists and Employees for their cooperation as and anticipates that under the leadership / Chairmanship of Dr. Muhammad Azeem Khan, PARC will play a vital role in Agri. Research & Development and he will lead the PARC Scientists towards achieving goals & targets.



Dr. Muhammad Azeem Khan, Chairman, PARC presenting PARC-Shield to Mr. Muhammad Ayub Chaudhary, Ex-Chairman, PARC on the occasion of his farewell party held at PARC on Oct. 14.

Sindh Club team visits SARC

A delegation comprised of management and members of Sindh Club, Karachi including Mr. Shuja Baig, Col. (R) Muslihuddin Saadi and Syed Fahim Ahmad visited PARC-SARC, Karachi on 17-10- 2019. Dr. Syed Asim Rehan Kazmi, and Dr. Akhlaq Ahmed welcomed the guests. DG (PARC- SARC) briefed about the R&D activities of SARC and its allied research institutes located in Sindh province. Mr. Baig informed about initiation of Urban forests in Sindh Club premises including variety of exotic plants. They showed keen interest in initiation of Kitchen gardening at Sindh Club and sought technical help from PARC-SARC.

After meeting delegation visited Tissue Culture Laboratory and screen house, FQSRI, PARC, SARC. Mr. Parwaiz Ahmed Baloch, PSO/Incharge TCL informed about the different procedures being adopted for

(Contd. on page 5, Col. 2)

Mehfil-e-milad at PARC

The annual Mehfil-e-Milad (S.A.W) was held at Pakistan Agricultural Research Council (PARC). Dr. Turab Haider Member (Finance) PARC was the Chief guest while Professor Noor Hussain Chisti, was the guest of honor at the occasion. The Auditorium was decorated with multi-color electric bulbs and it presented beautiful scene. The venue had become full of participants. The regular proceedings of the program got underway with the recitation from the Holy Quran by Qari Nazeer Ahmed Naeemi followed by Naat Khawani. The famous / renowned Naat Khawan, Mr. Muhammad Rashid Khan and other Naat Khawans carried it forward with their beautifully recited Naats. Expressing his views, the Honorable Guest Prof. Noor Hussain Chisti said that efforts

were being made by certain quarters to deprive the Muslims of the love for the Holy Prophet (S.A.W). Holding Mehfil-e-Naat and Mehfil-e-Milad formed an important part of reconstruction efforts. He paid glowing tribute to the efforts of PARC Management in this regard. A time would come when every member of this universe would celebrate Milad. Dr. Turab Haider, Member (Finance) PARC also highlighted the life of Hazoor (S.A.W) as a role model for all the human beings.

The program came to an end with the recitation of Darood-o-Salam in the Honor of Hazoor (S.A.W). Qari Shafiq Chisti led the special Dua. Langar-e-Meelad was also distributed amongst the participants of the event.



Dr. Turab Haider, Member (Finance) PARC, Professor Noor Hussain Chisti, and others addressing to the participants of Milad-e-Mustafa (S.A.W) ceremony held at PARC, on Nov. 21.

Sino-Pak symposium committed to enhance crop productivity

(Contd. from page 9, Col. 2)

plentiful achievements. They hope to further deepen cooperation field and will strive to promote the development of two countries agriculture industries. The event provided the opportunity of collaboration among academia, researchers, industry and progressive growers to address the issues related to Rice, Wheat, Sugarcane and Cotton production for enhancing the production of better crops. The symposium aims to bring together academia, scientists, researchers, progressive farmers, industry and students to share and enhance the knowledge about innovations in breeding and biotechnology of these crops and to solve the problems faced by cotton for improving yield and quality.

Dr. Muhammad Azeem Khan expressed on the occasion that Sino-Pak Symposium on innovation in Rice, Wheat, Sugarcane and Cotton breeding and Biotechnology brought together scientists and research scholars to discuss the enhance the knowledge about recent advanced technologies in major crops and to find the solutions of the contemporary issues in crop production through recent technological advances in

genetics and to provide the valuable awareness about technological advances in agriculture to cope with the current rising problems of crops production.

Sindh Club team visits SARC

(Contd. from page 4, Col. 3)

micro propagation as well as hardening of bread fruit and banana. Mr. Baig and his colleagues appreciated the efforts of TCL team being attached with the task. On his request six (06) tissue cultured plants of bread fruit (*Artocarpus altilis*) were handed over to Mr. Baig for plantation in Urban forest of Sindh Club, Karachi.

DG (SARC) thanked Mr. Shuja Baig and his colleagues to visit PARC-SARC.



Sindh Club team at SARC

Picture News



Dr. Muhammad Hashim Popalzai, Federal Secretary for M/o National Food Security & Research (NFS&R), presiding over a meeting of Project Steering Committee (PSC) on PSDP Projects titled "Wheat & Oilseeds Umbrella Project" held at PARC. Muhammad Ayub Chaudhary, Additional Secretary M/o NFS&R, Dr. Muhammad Azeem Khan, Chairman PARC and other members of the committee are also present in the meeting on Sep. 30.



Rao Muhammad Ajmal Khan, Chairman NA Standing Committee on NFS&R presiding over the meeting held at PARC, Dr. Muhammad Hashim Popalzai, Federal Secretary for M/o NFS&R, Dr. Muhammad Azeem Khan, Chairman PARC and other members of the committee are also present in the meeting on Oct. 16.



Dr. Muhammad Azeem Khan, Chairman, PARC chairing a meeting with Scientists of PARC / NARC held at NARC. Dr. Ghulam Muhammad Ali, DG NARC is also present on the occasion on Oct. 09.



Dr. Muhammad Azeem Khan, Chairman, PARC presenting a PARC-Shield to Syed Fakhir Imam, Chairman Kashmir Committee on the occasion of his participation in One day Sino-Pak Symposium on "Genomic Selection for Productivity Enhancement of Crops (Rice, Wheat, Sugarcane and Cotton)" organized by National Institute of Genomics and Advanced Biotechnology (NIGAB) at NARC on Dec. 12.



Dr. Muhammad Azeem Khan, Chairman, PARC in a panel discussion with Associate Press of Pakistan (APP) team at APP Headquarter on Dec. 24.

VEC recommends maize, sorghum, fodder, cereals new varieties

(Contd. from page 9, Col. 2)

two hybrids from public sector (MMRI, Yousafwala) were also recommended. These hybrids produced 14% higher yield than check.

Dr. Muhammad Ayub Khan, Member, PSD emphasized to introduce/develop hybrids having heat tolerance, keeping in view the yield losses occurred in Punjab and Sindh due to heat wave in Sindh. Climate change is a serious threat and we have to develop hybrids varieties tolerant against heat, moreover, planting time of the crop may also be optimized as it is done in wheat.

Dr. Waseem-ul-Hassan, Food Security Commissioner, said that bring your issues at this forum and I assure you that PARC as well as M/o. NFS&R will certainly solve your genuine problems. Crop Life as well as SAP President, Ch. Bilal Ahmad assured cooperation to maximum level. Crop Life and SAP representatives requested for the issuance of minutes of the meeting at earliest convenience. Dr. Waseem-ul-Hassan proposed that the list of hybrids/varieties may be signed by the VEC member today and distributed to all stake holders so that they can manage import of seed or local production well in time. All the members agreed, signed the list and provided to all stake holders and it was highly appreciated. Representative from FSC&RD also accepted this proposal to facilitate timely import or plant local seed production.

Chairman, PARC high lightened the role of Private Seed Sector for exponential growth of maize. He added that intercropping with legume is the need of the day to improve the soil health for sustainable maize production, Chairman, PARC also appreciated the role of PARC coordination to build the trust of people on the system in private sector in particular dedication of Coordinator, MSMF & OC, Dr. Mozammil Hussain for convening three VECs merely in 6 months. Honorable Chairman urged to use success story of maize as a role model for other crops in the country.

JICA training to increase agricultural productivity

(Contd. from page 3, Col. 2)

of agriculture sector, JICA agreed to support three years project "Capacity Development of Agriculture Extension Services in Balochistan Province" under the framework of JICA's cooperation for stabilization and development Agriculture Extension Services in Balochistan.

Under the project, Agriculture Poly-technique Institute (API) NARC will train 30 (30 Agriculture Officer & 50 Field Assis-

stants) of Directorate of Agriculture Extension (Balochistan). The training consist lectures, practical demonstration as well as field visit for on field orientation to the participants. For dissemination of knowledge about new agricultural practices, and farming techniques to farmers, JICA will also provide equipment to Model Farms Service Centers in Balochistan province besides providing necessary equipment to Agriculture Poly-technique Institute at NARC to strengthen its capacity.

The Japanese experts briefed the participants on the methodology and overview of the project which includes the practical training at NARC as well as field implementation in Balochistan Province. Dr. Shuichi MATSUSHIMA, Chief Representative / Team Leader of JICA while speaking at the inaugural ceremony said "agriculture is the major source of livelihoods in Pakistan particularly in Balochistan province. She further said "through JICA assisted project the capacity of Agriculture Extension staff of the Balochistan province will be strengthened, which will improve extension services for farmers and ultimately increase the agriculture productivity and farmer's income. This will also contributes in the livelihood improvement, economic growth, poverty reduction and food security in Balochistan".

The Inaugural Ceremony was attended by Chief Representative, JICA Pakistan office; Chairman PARC, Director General Agriculture Extension, Govt. of Balochistan, Director General, National Agricultural Research Centre, (NARC) and Directors and officials of different institutes in NARC.

Climate Smart Agriculture to increase farm productivity

(Contd. from page 10, Col. 2)

highly impressed the new technologies Grow Stream, the world first plant-responsive irrigation system - a smart sub-surface irrigation system that interacts and responds to signals released by plants roots. It allows the plant to regulate its water delivery, resulting in unmatched plant performance, water saving by 30% compared to conventional drip irrigation system. It is a new type of drip irrigation system "Plant-responsive water delivery systems" that has completely reset the irrigation method. PARC is thankful to Dr. Michael Davidson of RDI choosing Pakistan for testing this innovative technology and also Maj Pervaiz of EVA-ANA-Farms for its pilot testing at NARC, Behawalpur, Ummer Kot and Quetta.

At the end of the Speech, Dr. Muhammad Azeem Khan, Chairman, PARC said that let me appreciate Climate Energy and Water Research Institute (CEWRI) NARC team

and DG NARC for pilot testing of this new technology and hosting this informative dialogue. I am also thankful to Dr. Michael Davidson of RDI and Maj Pervaiz of EVA-ANA-Farms for sharing their knowledge and pilot testing of this future technologies. We at the national government level are determined to go to any extent in tackling the issue of climate change with integrated and well-articulated efforts with global community. Hopefully, we all will continue joining hands together for safe and sustainable future.

Training course on cold water fisheries held

(Contd. from page 3, Col. 2)

multiply them in Gilgit Baltistan, KPK and AJK after necessary initial research and in order to transform these opportunities into economic gains and maximize the livelihood of the northern areas training of farmers and industry is key component.

Chairman, also expressed that a delegation of GFRI and Lanzhou University has also visited Trout Research Station of MARC Gilgit and investigated water resources in various districts of GB and declared the water bodies highly suitable for cold water fisheries having huge potential for cold water fish production.

Yu Yongbiao, Researcher, Gansu Fisheries Research Institute, China also spoke on the occasion and told that Cold water fisheries especially trout farming is an area with immense potential for the poverty reduction and providing livelihoods to the population of northern areas. Developing this section of fisheries can also enhance the food security of malnourished communities as fish is an important source of protein. Chinese Researcher ensured the support of China for development and research of cold water fisheries sector in Pakistan.

Dr. Ali Johar, Member (Animal Sciences) PARC, said in his address to the participants that despite having huge potential for promotion of cold and fresh water fisheries in the region, this sector has not been able to contribute significantly towards the local and national economy. There is dire need to develop cold water fish sector and to acquire the advance technology from GFRI China as well as fast growing cold water fish species Rainbow, golden trout, brook trout and salmon fish besides building the capacity of the stakeholders.

Dr. Sarfraz Ahmed, Member (NRD), PARC also shared his views and said that there is a need to recognize the importance of cold water fisheries and its potential, it can play in optimizing rural economy of northern areas. Development of cold water fisheries can provide us a valuable tool to achieve targets to this immense challenge.

World Food Day

(Contd. from page 1, Col. 3)

only about addressing hunger but also nourishing people, while nurturing the planet. This year, World Food Day called on everyone to start thinking about what we eat.

Globally the number of undernourished people is on the rise again and same is the case in Pakistan. More than 820 million people in the world, or roughly one in nine people, are going hungry, which in Pakistan is 40.0 million people.

“The ministry under the instructions of Prime Minister has started various projects pertaining to agriculture that encompasses wheat and rice too. The current projects will guide the farming communities of Pakistan in better production technologies that will increase their production levels,” said Sahibzada Muhammad Mehboob Sultan, Minister for National Food Security and Research, Islamabad. Dr. Muhammad Azeem Khan, Chairman, PARC stressed on the strengthening the efforts for food security, and increase access to sufficient amount of food was key to promoting and sustaining good health. The Chairman, PARC further added that World Food Day is celebrated in 150 countries each year, bringing together governments, businesses, NGOs, media agencies, civil society organizations and the general public, and call for action to achieve SDG2 - Zero Hunger by 2030.

FAO Representative in Pakistan, Ms. Minā Dowlatchahi stated that “This year World Food Day echoes messages raised in the UN’s State of Food Security and Nutrition in the World (SOFI 2019) and calls for action to make healthy diets available to all, with the slogan “Our actions are our future. Healthy diets for a zero hunger world.”

“World Food Day is an opportunity to strengthen the global commitment towards Zero Hunger – one of the 17 Sustainable Development Goals (SDGs) adopted by 193 countries. The SDGs commit us to work together to end hunger and promote health diets by 2030, here in Pakistan and around the world,” pointed out Finabarr Curran, Representative and Country Director WFP Pakistan.

Mr. Mohammad Qazilbash, Country Director OXFAM Pakistan while delivering his message said that it was important to seize the opportunity for change and set course towards a new prosperity, in an age of cooperation rather than competition, in which the wellbeing of the many will be ensured.

The Resident Coordinator of the United Nations in Pakistan Mr. Knut Ostby also attended the ceremony and read the message from the United Nations Secretary General for World Food Day. Various events marking the day were held across the country.

Dr. Ghulam Muhammad Ali, Director General NARC paid vote of thanks in the end and said that with the collaboration of international partners we will cope with food security by working together.

Gomal Zam Dam project to bring economic prosperity

(Contd. from page 1, Col. 3)

Azeem Khan, Chairman PARC, said that this workshop takes a critical next step in allowing Pakistan's farmers to expand agricultural productivity through the preservation of soil and water by integrated planning and this workshop will also support Pakistan's ongoing efforts to conserve and manage watersheds and water usage benefiting small shareholder farmers. The Chairman further added that USDA has been actively working in Pakistan to increase productivity in the agricultural sector. Dr. Azeem also expressed that Gomal Zam Dam is a project of vital national interest and will open a new chapter of prosperity for Pakistan.

Mr. Malick Haidara - Deputy Director - USAID Islamabad, Mr. Rey Santella - Agriculture Counselor USDA Islamabad, Dr. Abdul Majid Country Manager - ICARDA Pakistan and Mr. Michael Kucera - Agronomist USDA-NRCS USA. Seventy professionals including guests from USAID, USDA office Islamabad and USA, ICARDA, FAO, CGIAR Centers, PARC and other federal and provincial institutions / universities, private sector (FFC) and farmers participated in the inaugural session of the workshop. Twenty five participants of the workshop were engineers, scientists, managers, farmers and policy makers involved directly or indirectly in the Gomal Zam Dam (GZD) project. Resource Persons are from USDA (USA), USAID Islamabad and ICARDA Pakistan. The Gomal Zam Project is located at Khajuri Kuch (South Waziristan) approximately 135 Kilometers from Dera Ismail Khan of Khyber Pakhtunkhwa Province.

The workshop is focusing on current on the ground situation in the areas and various ways for watershed planning and management. During two days the participants discussed the issue/ problems faced in the catchment, watershed and command area and try to find their solutions. The participants will come up with strategies, recommendations and action plan to use water and land resources more efficiently and economically and reduce soil erosion.

Other speakers from USAID, USDA and ICARDA also spoke on the occasion and highlighted the main purpose of training workshop and contribution of their respective institutes.

China to extend technical support to PARC

(Contd. from page 2, Col. 2)

Economic Development under CPEC were also discussed i.e China Pakistan Joint Agricultural Technology Laboratory, Provision of Agriculture Equipment and tools, Pakistan Agriculture Vocational Training, China-Pakistan Rural Poverty Reduction Joint Research Project, Drinking Water Equipment Supply. Through a two-week study and field investigation by the Chinese Expert Group in Pakistan, both sides have already shortlisted 27 projects as priority projects based on exchange of opinions, considering Pakistani Peoples needs.

Li Jun, Dy. Director / Associate Professor Institute of Oil Crops, Chinese Academy of Agricultural Sciences, China discussed the mutual priorities for development in agriculture sector under Pak-China Socio Economic joint Working Group. The Chinese delegation appreciated the PARC's role of collaboration with international partners for the development of agricultural sector in Pakistan. The Chinese delegation was of the view that this meeting would definitely prove fruitful to further strengthen existing collaboration between the both countries. Chinese delegation also stated that China intends to provide help in different agri. Research projects being carried out at NARC and also aims assistance for training of NARC's agri. Scientists according to their field.

The Delegation also visited at NARC and took keen interest about the agri. research activities carried out at NARC. Dr. Muhammad Azeem Khan, Chairman PARC also presented a PARC Shield to the head of Chinese delegation on the occasion.

AZRC-PARC introduces new varieties

(Contd. from page 2, Col. 3)

successfully demonstrated.

PARC-AZRC. D.I. Khan has also established a system of information provision, advisory services and free veterinary camps facility to farming community for effective cure for animal wounds/burns by application of herbal extracts and traditional medicines.

Arid Zone Research Center (AZRC) D.I. Khan was established under the umbrella of Pakistan Agricultural Research Council (PARC) to cater the needs of arid and semi-arid areas of Khyber Pakhtunkhwa and playing a key role for ensuring national food security and developing the agri. sector of Khyber Pakhtunkhwa. PARC-Arid Zone Research Centre (AZRC), D.I. Khan has worked on Chickpea variety, Indus 2019 & Lentil 2019 and released from Provincial seed council, KP.

Chairman PARC chairs IPARCC moot

(Contd. from page 2, Col. 2)

inclusive enhancing command area of small and mini dams in barani areas, water conservation in barani areas of Khyber Pakhtunkhwa. These initiatives will play key role in promoting agriculture, economic development, job growth, infrastructure improvements, technological innovation, and quality of life in rural area of Pakistan.

He further elaborated that on overcoming the emerging issues, challenges and realizing the opportunities for prosperity in rural area required action on multiple fronts, including promoting economic development, advancing Innovation and Technology, ensuring a well trained and productive work force and improving the quality of life in rural communities. He said that the success depends, in large part on promoting two key drivers of long term growth and prosperity; broad-based productivity growth in the rural economy and connectivity of rural people to each other, to urban areas and to rest of the world. National Food Policy, Promotion & Maximization of Pulses, Promotion of production deficit crops (tomato, onion and oilseed) and Agriculture Coordinated Program is discussed in meeting. The meeting was attended by Vice Chancellor's of agriculture universities, reps of Provincial / Gilgit Baltistan Agriculture Livestock and Federal & Provincial planning departments. The forum emphasized that government should take up fast steps for making legislation in

Chairman PARC presides over ALP moot

(Contd. from page 4, Col. 2)

Dr. Muhammad Munir Ahmad, DG P&DD and Executive Director of ALP briefed about the agenda of the meeting and apprised the BoD that ALP is an endowment fund established for competitive grants at PARC with the support of Government of USA to use for activities/projects in line with the Pakistan's long-term research/development goals of the agriculture sector.

In this meeting, 36 projects presented for evaluation and approval. Out of these 18 were from Plant Sciences Division, 08 from Animal Sciences Division, 06 from Social Sciences Division and 04 from Natural Resources Division. Technical members presented projects for their respective divisions and each project was discussed in detail by all the participants. After detailed discussion finally 27 Projects were approved of Crop, Animal, Social and Natural Sciences by Board of Directors (BOD) of Agricultural Linkages Program (ALP) for funding under ALP.

Subsidy on Canola

(Contd. from page 10, Col. 2)

wing population of country, it is necessary to increase the area of oil seed crops. Low yields due to cultivation of traditional low yielding varieties have been playing a negative role in the low productivity in the country so the challenge is to minimize/ or end edible oil import bill through increased oilseed production by increasing per acre yield.

Dr. Muhammad Azeem Khan, Chairman PARC further briefed the participants of the Ceremony that in early 1980s, PARC took initiative to overcome the ever increasing deficit of edible oil through research on quality improvement of rapeseed oil (Canola) in Pakistan and research on canola started at NARC with introduction of Canadian canola cultivar. PARC first time extracted canola oil from the local production and marketed it as Mumta canola through Utility Stores. This resulted in the establishment of different oil industries in the country marketing pure/ branded canola oil i.e., Season canola oil, Kisan canola oil, Dalda canola oil, Habib canola oil, etc. The Chairman also urged that there is needed for development of more uniform and competitive parent lines and testing of more hybrid combinations to identify higher yielding and stress tolerant hybrids. Dr. Anjum Ali Butter, DG, Agriculture (Extension) Punjab said that Govt. is taking revolutionary steps for progress of Agriculture in Pakistan.

Workshop on strengthen community based seed systems in SA concluded

(Contd. from page 9, Col. 3)

seed systems into other communities and countries. This scaleup is critical to enhancing food security, preserving biodiversity, and facilitating the sustainable development of these rural agro-systems.

Dr. Muhammad Azeem Khan assumes as Chairman, PARC

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date of 2015 to onward.

As a member of HLPE Steering Committee (StC) of FAO during 2015 to onward contributed in the completion of reports that included: 1) Sustainable agriculture development for Food Security and Nutrition (FSN); included the role of livestock (2016); 2) Sustainable forestry for food security and nutrition (2017); 3) Nutrition and food systems (2017). Dr. Azeem as a HLPE oversight Group member also participated in the process of identifying and reporting "critical and emerging issues in the area of food security and nutrition" during 2017.

Tea plantation a wonderful agro-asset: Chairman PARC

(Contd. from page 3, Col. 3)

NTHRI also briefed about Tea processing of both black & green tea and highlighted key role of NTHRI for the developmental activities of aforementioned crops in District Mansehra (KPK).

Later on both guest visited the black tea processing plant "gifted by Turkey" and they took very keen interest during all the processing process on this automatic plant. Here after had a step to green tea processing plant. Muhammad Ayub Chaudry, Chairman, PARC said that Tea plantation is a wonderful agro-asset and contributes a lot in maintaining ecological balance. Chairman, PARC further added that he emphasized to boost up the plantation area so the processing cost could reduce and farmers gain more attraction for generation of their income either by direct involvement or indirect source which can be utilized for tea production on a large scale make a great revolution in agricultural sector as present government very much on keen interest in agricultural sector to save the foreign exchequer burden on our GDP as we are far behind the target. At the end, the guests visited tea nursery, plantation, progeny garden, Kiwi Fruits orchard, Fruit orchards (germplasm), Olive nursery, Vegetables Section, and NTHRI display center. They took very keen interest in all parts of activity and highly impressed the achievements of NTHRI (PARC). The Chairman PARC along with Joint Secretary also paid a visit to farmer tea garden (Sum area) at the last leg of his visit both the guests were planted trees of Olive and Pine. At the end Dr. F.S Hamid CSO/Director, NTHRI offer vote of thanks to both the dignities.



Muhammad Ayub Chaudry, Chairman, PARC is visiting Tea Processing Plant along with Dr. Muhammad Khurshid, Joint Secretary M/o NFS&R, at National Tea & High Values Crops Research Institute, Shinkhari, Mahsehra on Sep. 21 to 22.

VEC okays seven rice varieties for commercial cultivation

(Contd. from page 4, Col. 2)

for commercial cultivation in the country. Representatives of seed companies appreciated the role of Pakistan Agricultural Research Council for setting the new benchmarks for testing of rice hybrids/varieties in Pakistan for the benefits of farmers as well as rice sector in Pakistan.

Sino-Pak symposium committed to enhance crop productivity

One day Sino-Pak Symposium on “Genomic Selection for Productivity Enhancement of Crops (Rice, Wheat, Sugarcane and Cotton)” was organized by National Institute of Genomics and Advanced Biotechnology (NIGAB) at National Agricultural Research Centre (NARC) on Dec. 12. Eminent Scientists led by Prof. Dr. Zhikang Li, Chief Scientist CAAS, Founder of GSR, PR China shared their research experiences on new breeding technologies for crop improvements. Syed Fakhar Imam, prominent Politician, Dr. Muhammad Hashim Popalzai, Federal Secretary for M/o NFS&R, Dr. Muhammad Azeem Khan Chairman, PARC, Dr. Muhammad Ali, DG, NARC and other prominent scientists participated and

highlighted the importance of the event. The experts made communications and discussions on related aspects, such as germplasm, transgenic against insect and herbicide, transformation technology as well as the mechanized planting. They also discussed the concept, theory and practices for Genomics and Biotechnology, Sugarcane genetic improvement through breeding, the genetic basis of Cotton fiber quality and yield related traits and its utilization for variety development, Selective introgression lines-based QTL mapping and QTL-designed Molecular breeding in Wheat.

The experts of both countries agreed the China-Pak Joint Cooperation has made

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Syed Fakhar Imam, Chairman, Kashmir Committee, Dr. Muhammad Hashim Popalzai, Federal Secretary for M/o NFS&R, Prof. Dr. Zhikang Li, Chief Scientist CAAS, Founder of GSR, PR China, Dr. Muhammad Azeem Khan, Chairman, PARC and Dr. Ghulam Muhammad Ali, DG, NARC are sitting on the stage of One day Sino-Pak Symposium on “Genomic Selection for Productivity Enhancement of Crops (Rice, Wheat, Sugarcane and Cotton)” organized by NIGAB at NARC on Dec. 12.

VEC recommends maize, sorghum, fodder, cereals new varieties

Variety Evaluation Committee (VEC) is a forum at PARC under Plant Sciences Division, where candidate varieties/hybrids of different field & horticultural crops are presented and their performance under different agro-ecological conditions is presented, evaluated and recommended for approval by the provincial or National Seed Councils. The seventh meeting of VEC on maize, sorghum, millet and fodder crops was held at PARC on Nov. 14th.

Chairman, PARC, Dr. Muhammad Azeem Khan, inaugurated the meeting and in aural address he said that Maize is success story in Pakistan. In this meeting, Food

Security Commissioner, Dr. Waseem-ul-Hassan, Mr. Nazar Iqbal, Representative from Federal Seed Certification & Registration Department (FSC&RD), Representative of Crop Life, Seed Association of Pakistan (SAP) and different seed companies also participated and presented their hybrids before VEC. A total of 17 hybrids/varieties of Maize, Lucern (Aalfa) and Sorghum Sundargrass were presented and it is highly encouraging that in Maize twelve out of 13 hybrids with yield potential ranging from 3-24% higher than the existing commercial hybrids were recommended and it is also very good news that

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Dr. Muhammad Azeem Khan Chairman, PARC chairing Variety Evaluation Committee (VEC) meeting on Maize, Sorghum, Millet and other Cereals in PARC, on Nov. 14.

Workshop on strengthen community based seed systems in SA concluded

Regional partnership to strengthen community based seed systems in South Asia is being organized from Nov. 5th to 7th at NARC Islamabad with the main purpose to discuss for strengthening Community based Seed System in South Asia.

The Program has been jointly organized by SAARC Agriculture Centre (SAC), Dhaka, Asian Farmers Association (AFA) and PARC, Islamabad. This program has three types of papers, presentation: i) National Focal Points Experts will give presentation on “Strengthen Community Based Seed Systems for Improving Food and Nutrition Security in the Country”; ii) Invited experts will present papers on thematic areas and iii) Farmer's leaders will give presentation on the best practices of Community Based Seed System (CBSS). It is a high level seed forum for policy guiding to community seed systems and easy access of improved seeds to the small holder farmers. CBSS is an informal arrangement wherein members of farming community or a group follows a collective system of producing, exchanging and selling good quality seeds especially in times of disaster.

Addressing to the inaugural Ceremony, Mr. Rudra Bahadur Shrestha, Sr. Program Specialist, SAARC Agriculture Centre (SAC), Dhaka said that the Community Seed Banks give farmers access and control over seeds and strengthen local seed supply systems. With CBSS farmers are able to raise their productivity, thus reducing their hunger months, enhance their cropping system resilience and ultimately increase their income from the sale of seed so it should be noted that main purpose of CBSS is to enhance seed security.

Dr. Ghulam Muhammad Ali, Director General, National Agricultural Research Centre (NARC) in his address expressed that in order to facilitate country-led growth, there is a need to expand this research and extend activities for strengthening informal

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Dr. Ghulam Muhammad Ali, Director General, NARC and Mr. Rudra Bahadur Shrestha, Sr. Program Specialist, SAARC Agriculture Centre (SAC) and Dr. Umer Farooq, Member, SSD, PARC is sitting on stage on the occasion of three days SAARC Regional Meeting on partnership to strengthen Community Based Seed System (CBSS) in South Asia held at NARC, on Nov. 05 to 07.

Climate Smart Agriculture to increase farm productivity: *Dr. Azeem*

Pakistan Agricultural Research Centre (PARC) hold expert talk and dialogue on Climate Smart Agriculture - tools and solution to mitigate, adapt to changes while saving water and increasing farmer profitability at the same time. Dr. Muhammad Azeem Khan, Chairman PARC, Mr. Michael Davidson from USA on Climate Smart Agriculture, Lieutenant General Muhammad Afzal Chairman NDMA and Mr. Muhammad Asad CEO, Buraq Integrated Solutions, was participants of the event. Addressing to the event, Dr. Muhammad Azeem Khan said that Climate change has become the major challenge faced by the World today. Global warming resulting from elevated concentrations of Greenhouse Gases in the atmosphere have signi-

ficantly altered global climate during the last six decades resulting in severe and frequent floods, droughts, heat & cold waves, rapid glacier melting, changing snow pattern, Glacial lake outburst floods, sea level rise, resources degradation, and reduced agricultural productivity are potential threats posed by climate change. The Chairman, PARC further expressed that the future climate change projections warrant for concerted efforts by the government agencies and civil society at all levels to mitigate and adapt to the growing threats of climate change. There are various solution space to tackle the adverse impacts of climate change. We are lucky that today we have renowned expert Dr. Michael Davidson on climate smart agriculture. I am

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Dr. Muhammad Azeem Khan, Chairman, PARC, Lieutenant General, Muhammad Afzal, Chairman, National Disaster Management Authority (NDMA), Michael Davidson from USA, Climate Smart Agriculture and Mr. Muhammad Asad CEO, Buraq Integrated Solutions sitting on stage on the occasion of one day Seminar on Climate Smart Agriculture in collaboration with Climate Energy & Water Research Institute (CEWRI) held at NARC on Oct. 22.

Subsidy on Canola to fulfil edible need: *Dr. Azeem*

The inauguration ceremony of Canola Subsidy Scheme under Prime Minister Oil Seed Crops Development Program was held in Pind Noshery Tehsil Taxila organized by Agriculture Department, Govt. of Punjab. Dr. Muhammad Hashim Popalzai, Federal Secretary for M/o National Food Security & Research, Islamabad, Mr. Ghulam Sarwar Khan, Federal Minister for Aviation, Malik Nauman Langrial, Minister for Agriculture, Punjab, Dr. Muhammad Azeem Khan, Chairman, PARC and Dr. Anjum Ali Butter, DG Agriculture Extension, Punjab were

also the participants of the ceremony. Addressing to the ceremony, Dr. Muhammad Azeem Khan, Chairman, PARC said that Canola is an important crop grown as oil seed crop in Pakistan. Canola oil is one of the healthiest and most affordable oils available for cooking and the canola meal remaining after oil extraction is an important source of high-protein meal for livestock feed. The Chairman, PARC further added that Canola Subsidy Scheme will prove an important step in fulfilling the need of edible oil of country and to feed the gro-

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Dr. Muhammad Azeem Khan, Chairman, PARC sharing his views with the participants of Canola Subsidy Scheme under Prime Minister Agriculture Emergency Program for promotion of Oil Seed Crops Development held at Pind Noshery, Tehsil Taxila on Oct. 20.

PATCO, Fins & Gills inked MoU

The "Fish Cold Chain and Processing Unit is an investment to prevent food loss and waste is widely used in developed countries. It can be highly cost effective compared to continually increasing production to meet increasing demands for these foods. The primary segments of an integrated cold chain include cooling fresh food products, Food processing. Cold storage is used to store a variety of already frozen fish and fish products and is a key component of wholesale, processed, export and retail value chain activities in many countries. Processing Unit refers to mechanical or chemical operations performed on Fish in order to transform or preserve them.

Pakistan Agricultural Research Council (PARC), M/s. Agro Tech Company (PATCO.) signs MoU with M/s. Fins & Gills (Private) Limited for fish production and development of Fish Cold Chain and Processing Unit at NARC on Dec. 12th. On the occasion of signing of MoU, Dr. Muhammad Azeem Khan, Chairman, PARC said that due to this Unit the resident of Islamabad and its nearby areas will be able to get fresh Fish with full of nutrition. All steps will be taken to maintain the freshness of Fish and Vacuum Packing will be used to save germs free Fish. This is an exemplary step taken for the development of Fish Farming by Pakistan Agricultural Research Council (PARC). Chairman, PARC also shared that the partnership of both parties will become fruitful to remove the poverty through up lifting the agriculture of country and in future both parties become the precious partners. Dr. Muhammad Amjad Chief Executive Officer, PATCO, PARC and Mr. Afzal Sipra, Chief Executive Officer, Fins and Gills signed the MoU on behalf of their respective departments.

Mr. Afzal Sipra, Chief Executive Officer, M/s Fins and Gills, Private Limited appreciated PARC efforts in agriculture sector and also thanked Dr. Muhammad Azeem Khan, Chairman PARC who has kindly consented to get MoU signed between M/s Fins and Gills, Private Limited and Pakistan Agricultural Research Council (PARC). He also appreciated the efforts of Dr. Muhammad Azeem Khan, Chairman, PARC for development of agriculture sector in the Country.



Dr. Muhammad Amjad, CEO PATCO and Mr. Afzal Sipra, CEO Fins & Gills signing a MoU for Fish Production. Dr. Muhammad Azeem Khan, Chairman, PARC also present at the occasion. on Dec. 12.