



# PARC NEWS

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## Engr. Shamim-ul-Sibtain Shah assumes DG, NARC



Engr. Shamim-ul-Sibtain Shah has assumed Director / General, NARC. He has experience of 32 years in Farm Development and Management, Diversified Human Resource Development and Management, Soil and Water Conservation Practices, Irrigation and Drainage Management, Optimum Utilization of Farm Machinery & other Limited Farm Resources, Fruit Orchards and Landscape Development & Management and Conflict Resolution between employees. He has enhanced NARC cropping intensity from 100% to 200%, Ensured 100% utilization of NARC cropped land in both Kharif and Rabi seasons, Successfully conducted visits of all dignitaries at NARC farm, Recalculated areas of each field of NARC Land Use map in September 2016, Developed and managed 40 acres Citrus and Olive Orchard at NARC, Developed layout map and field numbering of MARC, Jaglot GB. in 1998, Trained hundreds of extension workers, Students as Trainee during the last 10 years, Successfully conducted Farm Advisory Committee meetings as Secretary for the last ten years, Served as a Convener or Member of various inquiry and other committees by taking rules, regulations and procedures in to account with judicious conclusion, Sub-plotting all fields & laser leveling of 100 acres for moisture conservation & crop uniformity, Assisted in Development of Land Use and Land Capability maps of NARC along with field numberings in 1987, Developed Topographic/Contour map of National Tea Research Institute, Shinkiyari, Mansehra. in 1986 and Developed techniques for productive and cost effective farming practices. He rendered valuable services in Research articles in National/International Journals (2012-2017) = 8, Technical Reports = 5, Newspaper article = 1, Book

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## Dr. Sania hails PARC efforts on food security

Special Assistant on Poverty Alleviation and Social Protection Dr. Sania Nishtar visited National Agricultural Research Centre (NARC) to see the interventions by PARC in agricultural research and development. She was welcomed by Chairman PARC, Dr. Muhammad Azeem Khan, Director General NARC, Engr. Shamim ul

Sibtain Shah with scientists and other high officials.

The delegation visited various institutes established at NARC. During the visit of Yogurt Processing Plant, Dr. Azeem briefed her about the advanced technologies utilized in yogurt processing and developments achieved in producing high

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Dr. Sania Nishtar, Special Assistant to Prime Minister on Social Protection and Poverty Alleviation being briefed on Banana Tissue Culture Technology during her visit at NIGAB, NARC alongwith Dr. Muhammad Azeem Khan, Chairman PARC.

## PARC develops highest yielding garlic variety

A meeting on seed certification of newly developed Variety of Garlic was held at NARC, presided over by Dr. Muhammad Ayub Khan, Member (PSD), PARC and presented by Dr. Humayun Khan. PSO (Vegetable) HRI, NARC to determine the potential of NARC-G1 garlic variety and to acquire seed certification from Punjab Seed Certification Department and Federal Seed

Certification Department. Engineer, Shamim ul Sibtain, DG, NARC and Dr. M. Abdul Rauf, DG, Research, KP were present on the occasion.

Dr. Humayon Khan, PSO (Vegetable) HRI, NARC said that currently, Pakistan is spending huge amount of 66.84 billion PKR on Garlic import due to higher demand

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Dr. Muhammad Ayub Khan, Member (PSD) PARC chairing a meeting on Garlic held at NARC.

## Intensive Fish Farming to serve as pilot project: Dr. Azeem

While addressing to the inaugural ceremony of Intensive Fish Farming the Chairman, PARC, Dr. Muhammad Azeem Khan said that inland aquaculture in Pakistan is mainly based on semi-intensive farming which is gradually shifting towards intensive farming due to increased interest of people in Fish farming, availability of commercial fish feed, availability of suitable fish species for intensive farming such as Tilapia, Channel Catfish, African Catfish, Pangasius and enhanced fish production per unit area. Certain Scientists has got the foreign trainings of intensive farming through

PARC since 2019 such as In-pond raceway system and Biofloc fish farming. Moreover, on Farm trainings is also being provided by PARC. However to find out suitability of intensive fish farming technology there is need to initiate intensive fish rearing programs locally to facilitate more and more farmers in the country.

The Chairman, PARC further added that in this regard, Aquaculture and Fisheries Program (AFP) in collaboration with PATCO, NARC working under PARC has started an activity which will be focusing on intensive rearing of Tilapia and Channel Catfish in

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A group photo of Dr. Muhammad Azeem Khan, Chairman PARC, Eng. Shamim-ul-Sibtain Shah, DG, NARC and Dr. Rehana Kausar, Program Leader (Fisheries) along with officers and scientists during launching of intensive Fish Farming ceremony NARC.

## Dr. Azeem meets progressive rice farmers

Dr. Muhammad Azeem Khan, Chairman PARC visited Gujranwala area along with a team of rice experts, agricultural engineers and social scientists from PARC/NARC and hold a formal meeting with private sector entrepreneurs and progressive farmers promoting mechanical sowing of the rice crop. He emphasized that mechanical sowing of the crop has clear advantage over other sowing methods in terms of timely sowing of the crop, saving of manual labour, keeping recommended level of plants per unit area, increase in productivity of the crop by at least 10-15% and saving of

precious resources for profitable farming. He expressed that farmers need skill to raise mat nursery and then mechanically transplant it. He suggested rice experts from PARC to demonstrate mechanical sowing of the crop along with direct sowing and conventional flat sowing/ manual transplanting in current Kharif season. He urged them to acquire knowledge about best practices of these sowing techniques and document practical knowledge after planting trials of these techniques at multiple sites with different replications about varieties, sowing well help Crop

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Dr. Muhammad Azeem Khan, Chairman, PARC with Dr. Reheel Safdar Chatta, Chairman, Sons Agri. Services and others during his visit at Verpal Chatta, Gujranwala on May. 16.

## MOA on Potato nucleus seed production signed

Islamabad Memorandum of agreement (MOA) for potato nucleus seed production through tissue culture was signed between three parties i.e National Institute for Genomics and Advanced Biotechnology (NIGAB) PARC-NARC, Economic Transformation Initiative (ETI) Gilgit Baltistan and Department of Agriculture (DoA) Gilgit Baltistan. Signing ceremony was held at NIGAB, NARC on July 3. Director General NARC Engr. Shamim ul Sibtain Shah was the chief guest at the occasion and representatives of ETI and DoA Gilgit Baltistan along with scientists of NARC and CEO, PATCO were present.

Under this agreement NIGAB will produce 50,000 nucleus tubers through tissue culture during 2020-21 and hand over to Department of Agriculture Gilgit-Baltistan for disease free potato seed production in Northern Areas of the country. These 50,000 tubers will be multiplied five times in the field and production of 18,000 tonnes of certified seed worth more than Rs. 1.0 billion will take place. This seed will be sufficient for 15000 acres of potato plantation. Economic Transformation Initiative (ETI, GB) will pay Rs. 35/- per tuber as tuber price through PATCO.



Eng. Shamim-ul-Sibtain Shah, DG NARC and Dr. Ehsanullah Mir, Program Coordinator, Economic Transformation Initiative (ETI) Gilgit Baltistan signing a Memorandum of Agreement

## Engr. Shamim-ul-Sibtain Shah assumes DG, NARC

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Chapter = 1, Occasional papers = 2, Appreciation certificates = 24 & shields = 5 from PARC and Ministry in recognition of vital contributions, Capacity building through in-service trainings: Local = 21 (Technical = 12 & Admn., Financial, Computer = 9), Foreign = 3 & other foreign certificates = 12 (Language = 4 & Technical = 8), Installed 50 acres Centre Pivot Irrigation System under ALP Project and kept working for seed production of elite varieties, Created complete harmony between all FO&S officers/staff and with all stakeholders and Improvement of education by getting MSc Agri, Engg, degree in 2003.

## Dr. Sania hails PARC efforts on food security

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quality, organic dairy products. The developments achieved in preservation of exotic, primitive herbal plants in National Herbarium, rearing of animals for improved dairy products at Animal Sciences Institute, tissue culture advancement for the acquisition of disease free banana and potato plants at National Institute for Genomic and Advanced Bio-Technology (NIGAB) and intensive fish farming were also highlighted before SAPM.

Furthermore, it was informed to Special Assistant to PM that PARC has made progress on value chain development of Angora wool and has successfully introduced different market products like Angora yarn, threads, Angora shawls, socks, etc. Dr. Sania Nishtar was particularly highlighted the importance of angora fur because of its high quality nature which can be profitable source of income to winter-lands. She also visited the PATCO Bakery where she appreciated the efforts of PARC in producing research based hygienic bakery items. At the occasion inauguration of Compost Processing Unit was also held by Dr. Sania Nishtar.

Giving details it was told that this plant will use locusts for developing bio compost and it will be a beginning of turning crisis into opportunity for Pakistan. Special Assistant to PM acknowledged the efforts of PARC / NARC scientist in achieving the targets to ensure food security in Pakistan.

## Intensive Fish Farming to serve as pilot project: Dr. Azeem

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earthen and concrete ponds. Chairman, PARC Dr. Muhammad Azeem Khan also shared on the occasion that this project will serve as pilot project in initiation of controlled fish farming which will be first of its kind at government level. Results of this pilot project will be shared through research paper and seminars among academia and farmers.

After inaugural of Intensive Fish Farming, Dr. Muhammad Azeem Khan, the Chairman, PARC also surveyed the progress of Mash and Moong fields. Meanwhile, Nazakat Nawaz, Program Leader, Oilseed, NARC briefed that cultivation of soybean crop is done at the area of 100 acres while further cultivation at 300 acres is yet to be done. Moreover, from Program Leader, Pulses Research, Dr. Riaz Malik's briefing it is found that cultivation of Mash and Mong Bean at the area of 40 and 130 acres respectively is successfully carried out. At this occasion, the Chairman also appreciated their efforts of successful delivering of projects.

## PARC develops highest yielding garlic variety

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and low yield potential of existing garlic varieties in the country. To cater the present demand and yield gap, garlic variety development program was started at vegetable Crop Research Program, HRI, NARC.

## Dr. Azeem meets progressive rice farmers

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Sciences Institute, PARC-NARC; National Coordinator Rice, PARC, and Rice Program Kala Shah Kaku to redesign their research plan and efforts to enhance productivity of the rice and wheat crops in the rice-wheat cropping zone in particular and other major crops in general. He stated that this will further help for crop diversification in the country, accelerate import substitution for oil seeds and pulses and result in saving of precious foreign exchange.

They charge Rs.8000 per acre for the services without nursery cost and Rs.9500 per acre including nursery cost. However, the charges do vary with farm location and availability of nursery with farmers. Dr. Raheel informed that generally refurbished rice on transplanting machines with eight rows are imported from Japan at price of Rs.1.25 million per machine. He told the participants that introduction of cheap poly-thene trays for nursery raising in place of hard plastic trays has resulted in substantial decrease in the cost. He said that machine sowing of nursery has clear advantage over manually sown nursery in trays.

Chairman PARC extended his corporation to Dr. Raheel and urged on up-scaling of the technology with special coverage of the services to small farmers. He also requested him to make an endeavour to obtain support of local support organizations like NRSP, provincial agricultural extension department and research/academic institutions including Rice Research Institute, Kala Shah Kaku and Faculty of Life Sciences Management, University of Veterinary and Animal Sciences, Lahore for large scale adoption of the technology. Chairman, PARC suggested Agricultural Engineers from PARC to visit manufactures of Direct Dry Seeding of Rice (DSR) Drills in Sialkot for calibration to adjust seed rate at optimum level i.e. from 8kg per acre to 4kg per acre. Mr. Safdar Chattha, a progressive grower and farmers' representative thanked Chairman PARC and researchers from PARC/NARC for visiting the area. He appreciated the efforts being made by the PARC for the development of the agriculture sector and well-being of farming community in the country.

## PARC introduces new Interventions in Agro-forestry: Dr. Azeem

Modern and innovative practices in agro-forestry-the use of trees in farming- can bring development in both agriculture and forestry.

Dr. Muhammad Azeem Khan, Chairman PARC viewed agro-forestry as a sustainable management system for land that will increase overall production, combines agricultural crops, tree crops and forest plants and animals. He also added that keeping in mind the utmost importance of trees for environment and economy of the country, Pakistan Agricultural Research Council has established Rangeland Research Institute at NARC.

Rangeland Research Institute (RRI) of NARC aims at conducting research studies on various agro-forestry systems involving multi-purpose tree species (MPTS) suited to various ecological zones. While development of shelter belts for deserts, ranching model for Pothwar tract, adaptation of Salt Agricultural Land technology (SALT) and establishment of high-tech low-cost nurseries is achieved in this field so far.

Furthermore, Chairman PARC, Dr. Azeem said that first time in Pakistan introduction and adaptation trials of two broad leaved plant species Salix and Robinia, were transported from Hungary. It is a highly valuable plant for timber, sports industries, and soil/water conservation. By introducing Silvo-pasture technology; which combines trees with forage and livestock production, the multipurpose trees species are managed for fuel wood, meanwhile it provides forage, shade and shelter for livestock.

While urging upon the importance of agro-forestry Dr. Azeem says that countering the challenges in agro-forestry is possible with sufficient financial resources allocation, latest research facilities and advanced practices. There is a great potential lie in agro-forestry to create social, economic, and environmental benefits.

## MoU on hygienic bakery items inked

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brands for revenue generation at also part of the Memorandum.

Mr. Waseem Abbas Aulakh, Chief Executive Officer, Solution and Services appreciated PARC efforts in agriculture sector and also thanked Dr. Muhammad Azeem Khan, Chairman PARC who has kindly consented to get an MoU signed between M/s Solution and Services and Pakistan Agricultural Research Council.

## Dr. Azeem inaugurates Rice Mechanical Transplanting

Chairman PARC Dr. Muhammad Azeem Khan inaugurated mechanical transplanting of rice during a visit at Varpal Chatha District Gujranwala on July 27. The Chairman, PARC observed the functioning of mechanical Rice transplanter and counted number of seedlings/fingers cut of the seedlings mat. On the occasion, Dr. Muhammad Azeem Khan, Chairman, PARC discussed the medium used in plastic trays for raising of rice seedlings. He emphasized on the

improvement of composition of seedlings medium for providing good start to the rice plant. He advised to use peat and organic material like farm compost in trays for raising sturdy seedlings. The Chairman also visited Galaxy Rice Mills and MESKAY & FEMTEE warehouse of Kubota mechanical transplanter. He also observed the functioning of Kubota machines and gave valuable suggestions for improvement of the technology.



Dr. Muhammad Azeem Khan Chairman, PARC in a group photo with Dr. Muhammad Yousuf, National Coordinator (Rice) PARC and others Scientists

## MoU on hygienic bakery items signed

A signing Ceremony of Memo-randum of Understanding was held at PARC on May 14 between Pakistan Agricultural Research Council (PARC), Islamabad and M/s PATCO (Pvt.) Ltd and Solution and Services to develop research based hygienic and healthy bakery items and juices to pro-mote at national and international level. A delegation from M/s Solution and Services (Pvt.) Ltd headed by Mr. Waseem Abbas Aulakh, Chief Executive Officer, Solution and Services visited PARC for the purpose. On the occasion, Dr. Muhammad Azeem Khan, Chairman, PARC was of the view that

access to sufficient amounts of safe and nutritious food is key to sustaining life and promoting good health. Unsafe food containing harmful bacteria, viruses, parasites or chemical substances can cause different diseases. The Chairman also expressed that the main objective of the signing MoU is to develop research based hygienic and healthy Bakery items and juices and to promote it at national and international level. Dr. Muhammad Amjad CEO, PATCO said that to develop nutritious healthy and cost effective recipes and to develop research based certified national

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Dr Muhammad Amjad, CEO, PATCO and Waseem Abbas Aulakh, CEO, Solution & Services are signing MoU. Dr. Muhammad Azeem Khan, Chairman, PARC also present on the occasion.

## PARC, TIKA ink LOI

Pakistan Agricultural Research Council (PARC) and Turkish Cooperation and Coordination Agency (TIKA), has signed a Letter of Intent (LoI) to establish an advanced Queen Bee Research Lab and domestication of modern Turkish bee hive in Pakistan. Program Coordinator (TIKA), Mr. Gokhan Umut, visited PARC for the purpose on July 3.

PARC is the apex national organization in Pakistan working in close collaboration with public and private sector institutions in the country to provide science based solutions for the development of agriculture in Pakistan whereas Turkish Cooperation and Coordination Agency (TIKA) is a government development and donor agency of the Republic of Turkey having its headquarter in Ankara.

Turkey has already entered into MoU with of Pakistan and has been working towards sustainable development projects in Pakistan.

TIKA involves sharing of Turkey's development experience and cooperation with other countries and its projects extend from technical infrastructure to corporate capacity increase.

Under this project PARC and Turkish Cooperation and Coordination Agency (TIKA) will ensure the implementation and collaboration of the TIKa-PARC advanced queen Research Labproject at Honeybee Research Institute (HBRI), NARC.

The parties will cooperate in joint research for establishing advance Honeybee Queen Research Lab with molecular level research facilities at Honeybee Research Institute (HBRI), NARC and domestication and adaptation of Turkish model beehive in Pakistan for higher honey production and colony productivity. TIKa will also assist in up gradation, renovation installation of research gadgets and will ensure the provision of 50 Turkish Model Bee hives for research purpose and demonstration to beekeepers.



Dr. Muhammad Azeem Khan, Chairman, PARC, and Country Head of Turkish Cooperation and Coordination Agency (TIKA) signing a Letter of Intent.