

Newsletter of the ACIAR Pakistan profitable pulse project – CIM/2015/041

Issue 2 – January 2019

In this issue

- From the project leader
- <u>ACIAR Annual Planning and</u> <u>Review Meeting & ACIAR Pulses</u> <u>Value Chain Project Team Meeting</u>
- <u>Australian Visit Experiences</u>
- Mechanised Harvesting: A ray of hope for groundnut farmers in Pakistan

Upcoming events

Disease Workshop *Early Feb 2019* All project sites

Pulses Conference *Mid-March 2019* Multan

Australian team to visit sites for pulse harvest Mid-March 2019 Multan



From the project leader

I sincerely hope that you have enjoyed the first edition of our quarterly newsletter, the Pulse. I welcome you to its 2nd

edition. I am confident that through this newsletter we will continue to provide clear and reliable information about the status of lentil, chickpea and groundnut crops in Pakistan. Hopefully, this will encourage more and more farmers to take up these profitable crops full of nutritional, economic and environmental benefits. Our firsthand engagement with Pakistani farm families in the development and implementation of on-farm trials is quite impactful as they are learning fast about different varieties, agronomic innovations and post-harvest value addition. We strive to make them become managers of their cropping system, adopting new approaches to produce quality seed and grain and to become valuable contributors to the pulses supply chain.

Inside this newsletter you'll find a mixture of news, features and research team experience, including information about the Australian pulses landscape that may prompt policy makers, researchers and farmers alike to rethink their cropping strategies.

Dr Ata-ur Rehman, Charles Sturt University ACIAR Annual Planning and Review Meeting – Monday to Thursday, 10–13 September 2018, Faisalabad, Pakistan

ACIAR Pulses Value Chain Project Team Meeting – 6 September, 2018, Islamabad, Pakistan

By Dr Ata-ur Rehman, Project Leader, Charles Sturt University

Dr Ata-ur Rehman travelled to Islamabad in September 2018. The meeting was organised by the Australian Centre for International Agricultural Research (ACIAR) Pulses Value Chain Project team to discuss collaboration with the pulses production team and use of common project sites. The meeting was also attended by Dr Shahid Riaz (Project Leader, ACIAR pulses project in Pakistan). Dr Rehman later visited the groundnut varietal trial site in Chakwal before travelling to Faisalabad to attend the ACIAR Aik Saath Annual Planning and Meeting Workshop. The workshop provided the understanding and importance of collaboration between different projects. In this regard, PowerPoint slide presentations by each project team proved very useful for the interested project participants to interact and work together discussing in detail the availability of logistics, communication and human resources. Monitoring and evaluation, as well as gender mainstreaming to manage projects, were also discussed in separate sessions.

























Big Pond Pulses Farm in Temora. From left to right, Dr Shahid Riaz, Pulses Project coordinator in Pakistan, PARC: Dr. Khalid Hussain, Director, AZRI, Bhakkar: John Ferrier, owner of the farm: Saima Rani, Socio Economist, PARC: and John Ferrier's Daughter-in-law and son, who are managing the Farm.

Australian Visit Experiences

By Saima Rani, Scientific Officer, Social Sciences Research Institute, PARC National Agriculture Research Centre, Pakistan

l visited Australia with other project team members from Pakistan from 22 September – 6 October 2018. During the visit we travelled to the rain-fed pulse growing areas of New South Wales and Victoria, and met with the Australian project team, local researchers, farmers, agronomists, food technologists, plant breeders, seed experts, economists, pulses exporters and experts from nongovernment organisations. We spent 14 days and interacted with almost 30 scientists in Wagga Wagga, Temora, Melbourne, Horsham and Birchip. The local team arranged a very fruitful visit to research labs and field trials in the State-owned agriculture departments of New South Wales (Department of Primary Industries) and Victoria (Horsham Innovation Park). A series of research demonstrations including improved seed varieties, weed management, zero tillage techniques, improved harvesting, drought resistance techniques for pulses, canola and



CSU, Wagga wagga. From left to right (back row): Saima Rani, PARC, Dr. Asgar Farahnaky, CSU, Dr Gavin Ramsay, CSU, Australia, Dr. Shahid Riaz, PARC, Dr. Ata ur Rehman, CSU. Left to right (front row): Mr. Abdul Naeem Shaikh, QARI, Larkana, and Dr. Khalid Hussain, AZRI, Bhakkar. wheat were shown by different institutes and non-government organisations. Marketing of crops, especially pulses, is a challenge in Pakistan, and during our visit we got the opportunity to understand the efficient and successful storage, processing and marketing facilities which are provided by public and private organisations to farmers. The non-profit organisations like Farm Link and Birchip Cropping Group have strong networks with the farmers and a team of plant breeders, agronomists and extension workers.

Interaction with local farm families who run their farms as entrepreneurs was a highlight of the visit. The farms are well managed, and with mechanisation, farmers are aware of the latest research, techniques, and profitability of the crops, therefore getting optimum income and yield. Although there are a lot of similarities between Australian and Pakistani agriculture in terms of climate, cropping patterns and soil types, the farmers in Pakistan are way behind in the adoption of modern technology and awareness of new techniques. However, following the visit, I now have a good opportunity to introduce, demonstrate and adopt the Australian technology and systems to our farmers on a small scale under the pulses project to increase their profitability and livelihood.





Demonstration of improved groundnut harvester to the farmers of Viallage Mari, Chakwal, Pakistan under ACIAR Pulses Project-041.

Mechanised Harvesting: A ray of hope for Groundnut Farmers in Pakistan

By Israr Hussain, Project Coordinator, Islamabad

Groundnut is the most important cash crop of the Pothwar region of Pakistan. The area under groundnut crop is 81.5 thousand hectares with an annual production of 91.4 thousand tonnes and average per hectare dry pods yield of 1121 kg. Its cultivation is mostly concentrated in the Rawalpindi division (Chakwal, Attock and Rawalpindi districts). Groundnut is a very important source of oil and protein. Its kernel is rich in both oil (43–55 %) and protein (25–28 %). Presently, groundnuts are eaten as roasted nuts in the shell. A very small amount of the produce is used for confectionery purposes. Current production is not sufficient for oil production which is the main potential of this crop.

Over a period of time, the country faced decline in the area and production of groundnut crops, mainly due to a change in rainfall pattern, accompanied by unavailability of labour for weeding and manual harvesting. Farmers are adjusting the sowing time of the crop according to the rainfall pattern and with the availability of new herbicides, weeds are being controlled chemically. Harvesting is still a major bottle neck for groundnut production in Pakistan due to a shortage of farm labour. Farmers have tried different methods but 50 % of the groundnut stays in the field and to harvest it manually involves a huge labour cost which makes it less profitable for the farmers.

Through the ACIAR project, a farmer field day was organized at Mari village in the Chakwal district on 15 October 2018. The objective of the event was to demonstrate the improved and efficient groundnut harvester to the farmers for the first time. About 120 groundnut growers from the area participated in field day activities, interacting with project teams from PMAS-AAUR, BARI, Chakwal and PARC Coordination Unit. In the interactive session, the participants shared information about the modern techniques concerning groundnut harvesting, post-harvest management and options of value addition.

Farmers were very enthusiastic about seeing the performance of the groundnut harvester. According to Mr. Tariq (groundnut farmer of Mari village), "It will revolutionise the groundnut production in Pakistan as it not only takes maximum pods out of the soil but also cleans the pods of dust and inverts it so that the sun drying starts as soon as the groundnut is harvested." Other farmers shared that it will assist with timely harvesting of the groundnut crop following timely land preparation and sowing of the wheat crop, which is the primary crop in the area.



Contact us

aciar.gov.au/project/CIM/2015/041

Graham Centre for Agricultural Innovation

Phone: +61 2 6933 4400 Web: grahamcentre.net Email: grahamcentre@csu.edu.au

Copyright © 2019 Charles Sturt University. All rights reserved. F5945 Dr Ata-ur Rehman, Project Leader, CSU: arehman@csu.edu.au Prof. Chris Blanchard, Chief Investigator, CSU: cblanchard@csu.edu.au Dr Gavin Ramsay, Chief Investigator, CSU: gramsay@csu.edu.au Dr Asgar Farahnaky, Chief Investigator, CSU: afarahnaky@csu.edu.au Jenny Locker, Project Administrative Officer, CSU: jlocker@csu.edu.au Dr Shahid Riaz Malik, Project Leader In-Country, PARC: shahriz5@yahoo.com Dr Ataul Mohsin, PMAS UAAR: mohsin.malik61@gmail.com Dr Zulfiqar Ali, MNS: zulfiqar.ali@mnsuam.edu.pk Prof. Aijaz Soomro, SAU: professoraijazahmed@gmail.com



An alliance between: Charles Sturt University

Department of ISW Primary Industri