



Irshad bibi, FFS participant, Dhani Shahdara, Hattian Bala, PAK- 2008

FARMER FIELD SCHOOLS LEADS WOMAN FARMER TOWARDS A BETTER LIVELIHOOD

“In the past, I planted wheat and vegetables with the traditional broadcast method,” said Irshad Bibi, a farmer with a small land holding from Muzaffarabad. “After participating in a Farmer Field School (FFS) organized by Kissan Welfare Association (KWA), I cultivated my 0.2 hectares of land with line sowing techniques yielding a 50 percent increase in plant production.” She had previously never grown vegetables for commercial purposes but now cultivates vegetables such as spinach, coriander, garlic, tomato and chili on half of her land and earns a profit from sales. Yields from vegetable crops this year were plentiful, enabling her to save RS 6 500 by selling spinach. She recognized that pesticide-free vegetables have positively contributed towards a healthy lifestyle within the community. With the help of her family and

community, she plans to use the kitchen and bath water for growing vegetables in order to minimize the impact of scarce water resources on agricultural productivity.



Experiments on growing wheat and vegetables by FFS farmers at FFS Shahdara, Hattian Balla Tehsil, PAK- 2008



A model kitchen garden at FFS Dhani Bekalan, Hattian Bala, PAK-2008

She revealed that she is not alone in implementing the new learning approach and that six other women farmers who took part in the FFS are receiving equal benefits by applying the new technique. As a result, farmers are planning to cultivate maize and vegetable crops during the summer, thanks to the principles of the FFS Integrated Pest Management (IPM) approach. Increased women participation (19 women and 6 men) has achieved the FFS goal of restoring livelihoods, increasing household income and providing more nutritious meals.

The FFS training has paved the way for the emergence of an innovative cadre of farmers in the Shahdara community. Non-participating farmers have expressed heightened interest in the new cultivation methods and look forward to becoming part of this innovative approach in the near future.



Experiments on growing wheat with line sowing techniques, FFS Shahdara, Hattian Balla, PAK-2008

FAO has successfully implemented FFS in the earthquake-affected areas of North West Frontier Province (NWFP) and Pakistan Administered Kashmir (PAK) in collaboration with KWA, the Department of Agriculture, the National Rural Support Programme (NRSP) and the United Nations Development Programme (UNDP). Activities also benefited from the technical supervision of the National IPM programme and the National Agriculture Research Centre (NARC), based in Islamabad.

SAHIBA ARAIN'S STRUGGLE



*An overview of the flood in Jafarabad sub-merging all the crops- July 2007**

The impact of the 2007 floods devastated villages in the affected districts of Sindh and Balochistan. The livelihoods of the affected communities were ruined as the flood waters razed standing crops, damaged public and private infrastructure and submerged domestic animals. According to the World Bank / ADB Damage Assessment Report, more than 160 000 livestock units were lost or died from the onset of disease and malnutrition. At the same time, colossal damages were reported to standing Kharif crops further exacerbating the adverse food security situation in affected areas.

In Ahori at taluka K.N. Shah, Dadu district, a farmer named Fateh Ali Mohammad and his family endured total destruction at the hands of the floods. Prior to the floods, Fateh lived a comfortable life with his wife Sahiba Arain and four children. He earned sufficient income from his crops each season, owned three cows and enjoyed a stable rural life.

However, with the onset of floods, the entire Kharif crop was destroyed. Fateh Ali became severely depressed and couldn't cope with the loss of his crops and the dire condition of his family. With a deteriorating family predicament and the absence of external assistance, Fateh's distressed mind suffered a complete mental breakdown.

At this point, Fateh's wife, Sahiba Arain was forced to take on the responsibility of supporting her family. The only possibility was to start selling the milk from their three cows. However, owing to shortages of fodder, the cows health degenerated and their milk production decreased to 2 kg per day. As a result, Sahiba was unable to afford two meals a day for her little children.

FAO's project 'to support vulnerable, poor and food insecure households whose livelihoods had been affected by the floods' was beacon of light for Sahib and many others like her. Sahiba received livestock input packages consisting of quality compound animal feed and urea molasses.



*Many livestock became the victim of floods. FAO's provision of animal feed has greatly assisted in restoring lost productivity of animals in Sindh-2008**

Compound feed is a mixture of wheat straw, rice straw, sorghum and lentils. It is highly beneficial for increasing the milk productivity of animals. Urea / Molasses blocks improve the digestive abilities of the animals, making them healthier in a shorter period of time. The distributions were carried out by FAO's implementing partner, Indus Resource Centre (IRC) that was working in Dadu and Kambar-Shahdadt districts. The focus of FAO's project was to distribute quality compound animal feed and urea molasses to flood-affected farming households in Sindh.

After the selection of beneficiaries and subsequent distributions, IRC mobilisers further taught Sahiba and others how to properly feed her cows. Within two weeks, the cows had become healthier and more active. They were producing 3 – 4 kg of milk each day and Sahiba started selling milk and increasing her daily earning by RS 80. She can now afford three meals for her children and her husband Fateh is undergoing medical treatment for his mental problems. Sahiba together with her family optimistically look forward to a better life in future.

**The photographs have been contributed by Indus Resource Centre.*

Wheat Production in Union Council Komi Kot, Muzaffarabad

Union Council Komi Kot is located at a distance of 35 Km from Muzaffarabad of PAK. The UC is rainfed with 7 villages. FAO's input package for Rabi season has benefited 1000 farmers while 16 demonstration plots have been established in the union council. The Agriculture Department representative shared that maize is grown as major crop in Komi Kot while wheat has mostly been grown for fodder purposes, owing to farmers lack of access to threshers and tractors. Wheat production as cereal crop in the area started after earthquake under various relief programmes. Nevertheless, for many farmers it is their first experience to grow wheat as cereal crop with the input support from FAO, while department is making efforts to support farmers in tractors and threshers at the time of harvest from their own resources.

Mohammad Ehtisham is an orphan and disabled 18 years old boy. His father died three years ago and ever since, he and his mother are taking care of their 6 members' family. Their total landholding is 6 kanals; however due to shortage of family labor, they are only able to cultivate 2 kanals. Ehtisham's mother added that it is the first time in three years, after her husband's death, that they are cultivating their land for which she credited FAOs support. She further anticipated an increase in production from 280-320 Kgs from same piece of land to 400-600 Kgs. She identified quality of seed and use of fertilizers as main reason for the expected increase. She argued that they have always used fertilizers; but it only included urea which was also used in lesser quantity. It's the first time when they have used DAP which has shown positive results.



Ehtisham is standing proudly in front of his wheat crop

Mohammad Mursalin is one of the 22 family members. They have 7 kanals of land for which they have received inputs from FAO. Mursalin shared that their major source of income is through services and agriculture land. However, they have only cultivated fodder crops during winters and it is the first time when they are growing wheat as a cereal crop. Though he could not compare wheat production to previous years as it is his first experience with wheat as a cereal crop, he was very happy with the crop and is expecting high yield.



Progressive farmer is showing his wheat crop production in Komi Kot



Wheat crop through FAO assisted inputs in rainfed area

Wheat Production in Union Council Batkool, Battagram

Village Bhu Kanai is located in Union Council Batkool of Tehsil Allai in Battagram district of NWFP. The village comprises of 600 households with agriculture as main source of livelihood. The land is irrigated with average landholding of 02 hectares. Around 30 percent of the total population is tenants and only 5-6 people are big landowners with 5 hectares of land holding. The village received severe damages during earthquake where 80 people died, 40-45 persons got disabled and 80-90 houses were damaged. In addition, the already harvested maize crop was also destroyed in stores due to damages to houses and rains. Moreover, agriculture lands were damaged due to collapse of houses, land sliding and later tents camps were setup on agriculture lands. Under the situation, farmers in the village did not grow wheat crop in 2006. However, even after one and a half years, only around 70 percent of lands have been cleared up for agriculture while remaining is still under rocks. Earthquake damages compelled 120 families to migrate from the villages of which around 90 percent have returned. FAO inputs for the Rabi crop benefited 38 beneficiaries in the village, of which 4 are women and 4 are disabled.

Hayat Mohammad sharing experience argued that his house was damaged during the earthquake which also damaged their maize crop stored inside the house. Furthermore, his total landholding has reduced from 2 hectares to 1.6 hectare as it is still blocked by rocks from the earthquake. He added that agriculture forms main source of livelihood for the family of 60 members while some members also work as daily wagers. This year he grew wheat on 0.2 hectares of land with FAO assistance, and rice on remaining 28 Kanals from his own resources. Hayat Mohammad is happy with his wheat production which has increased from 240 kgs to 360 Kgs from 0.5 hectares with total production of 880 kgs from 0.2 hectares of land. He argued that the seed provided by FAO was well maintained in the store which is the main reason for improved production. He added that he has learnt the lesson from his current season production that he will protect seed in store by using proper insecticides. He also identified fertilizers as main reason for improved production. He added that he has always used urea in fields but it was never in enough quantity. Furthermore, DAP was a new thing which he used for the first time. He concluded that he is now able to purchase fertilizers in right quantity as increase in production will also increase his income and affordability should not be an issue for him in future.

Gul Shahzada and Nazir Ullah are tenants/share croppers and beneficiaries of FAO inputs for Rabi crop. They both argued that the average production per Kanal has increased which has also resulted in increase in their share from 120-160 Kgs to 280 Kgs. They both identified use of fertilizers as main reason for increase in production.

Pictorial Overview of wheat crop



Wheat crop at germination stages in district Mansehra



Wheat crop in district Mansehra



Wheat Crop at the at its maturity in district Muzaffarabad

Village Mera celebrates increased maize production

Village Mera is located on a mountain top at a distance of around 6 km from Union Council Boi of district Abbottabad. Mera is a small village with total number 75 hh with 15 women (widows) headed households. Agriculture is the main source of income however, being a mountainous area, agriculture fields are stony and distributed into small terraces with average landholding of around 8-10 Kanals. The village received severe damages from earthquake as around 30 houses were totally damaged while 45 were partially damaged. Two children and one woman died, 16 people received injuries and unable to cope with the damages, five families migrated out of the village after the earthquake. In addition, at least one livestock died in almost every household. However, the village did not receive any relief support from government or non government organizations.

FAO was the first one to reach the village with its relief package for Kharif crop that approached the village. The results of the inputs distributed for the Kharif crop are very encouraging in the rainfed village Mera where on average the production has increased by 40 percent, as per feed back provided by men and according to women it has increased by 100 percent. Following are experiences of some of the village members.

Parveen Akhter is a widow, heading a family of six members. She owns 0.2 hectares of cultivable land which forms main source of her income. She said that her maize production increased from 40 kg to 120 kg from the seed and fertilizers given to her by FAO. She was very pleased with the increased production of maize but also with the fact that the quality of maize tastes much sweeter than the local variety. In addition to quality of seed, she identified fertilizers as the main reason for increased production, which she argued was never used on lands in the village before by anyone.



An elderly female beneficiary heading her family

Nazma Ahmed, one of the 8 family members, shared that their maize production increased from 40 kg to 80 kg from their 0.25 hectares of land, which is partially under cultivation. She further confirmed that in addition to the quality of seeds, it was the fertilizer which has made all the difference to the crop production this year.

Zarina Jamil's family is poor comprising 8 members who own only 0.05 hectares of stony land. They did not have access to seed and therefore could not cultivate their land. This year, with FAO's assistance, Zarina's family had access to seed and fertilizers and therefore, were able to cultivate their land for the first time. She was very happy as their 0.05 hectares of land had production of 80 kg of maize. This has encouraged the family to cultivate their land next year again and plans to arrange for the seed in time.

Sosan Jan bibi, a widow and an elderly lady is another beneficiary for kharif crop input who added that their land production increased from 80 kg to 120 kg. **Haji Nazir** a male beneficiary of the village added that his maize production increased from 100 kg to 160 kg from 0.2 hectares of land, while **Faizul Rehman's** production increased from 90 to 140 Kgs from 0.15 hectares of land.

Mera is a resource poor village where average land production was very low. The inputs for kharif crop provided by FAO was not only the first relief intervention undertaken in the village, but it was also the first time when the local farmers experienced increased production with the use of fertilizers. FAO assistance ensured farmers access to fertilizers and after experiencing better results, farmers want to use the same quality of maize seed and arrange for the fertilizers in time for the next year

“Starting Over - Working Towards A Sustainable Future”

Mohammad Akram, aged 30 is trying hard to make ends meet and assure that his wife and three children have all the basic necessities. His home and farm is located in Charkapura Union Council Muzaffarabad District. Mohammad Akram, like many, lost more than half of his production during the 2005 *kharif* maize season. With his land damaged and his crop destroyed and not having enough money to buy food and agricultural inputs, a year later Mohammad describes how difficult it was to get through the 2005/2006 winter and spring, wondering if he would be farming again come spring. Smiling at the healthy maize crop towering over him in the background, Mohammad explained how FAO through its implementing partners helped to rehabilitate his maize field. Mohammad Akram, along with 4,063 vulnerable farmers in Charakpura Union Council received 12.5 kilogrammes of maize seed along with 50 kilogrammes of DAP and Urea fertilizers.

The maize, not only provides a source of income, but is also a vital part of the families' daily meal making it an important crop in these areas. As Mohammad explains, *“the seed given by FAO along with the proper fertilizers resulted in the crop growing much better than I had expected. With such a good crop I will be able to replant the seeds and hopefully expect the same results next year. It is good.”* With the help of FAO interventions and technical assistance, many like Mohammad Akram are able to return to farming and support their families. Twelve months ago few would have thought they would have a crop to harvest and food on the table. With the help of FAO seed and fertilizer many are “growing back better” and trying to establish a sustainable future for themselves and their children.



Akram showing off corn ready to harvest. FAO provided 12.5 kilogrammes of maize seed and 50 kilogrammes of DAP and Urea fertilizers to beneficiaries in Charkapura