

Improving water productivity at on-farm level through organizing irrigation extension

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Introduction

Extension is vital to the development of irrigated agriculture. The extension service is responsible for simplifying research information and delivering it to farmers in an effective and easy to understand manner. The extension service is also a feedback mechanism to researchers on problems faced by farmers (Bhuiyan, 1978).

➤The World Bank (1985) states that bridging the gap between research and extension is the most serious institutional problem in developing research and extension programmes. Extension workers often see researchers as working in an ivory tower generating technologies not applicable to the farm, whereas researchers often question the ability of the extension agents to perform their jobs effectively (Quimsumbing, 1984).

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Introduction continued

➤Thornley (1990) suggests that farmer involvement in agricultural research has been limited by inadequate funding, institutional policies and hierarchies, specialization.

➢Agriculture is at the forefront of development objectives of Central Asian Republics – Kyrgyzstan, Tajikistan and Uzbekistan. Since independence these countries have undergone transition from centrally planned economies to market-oriented economy. The needs of three central Asian countries for improved agricultural extension are not yet similar.

➤There is a clear need for formal agricultural extension services to be revitalized (Kazbekov et.al.)

➤This presentation highlights how irrigation extension was successfully implemented in Fergana Valley.

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- Can we improve Water productivity through effective water management at plot level ?
- Can we deliver effectively water management knowledge through existing systems by promoting effective linkages in Central Asia context?

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WPI-PL PROJECT

Goal: Enhancing WP, crop yields and yield stability at plot level through improved on-farm water management

Objective: To strengthen the capacity (in terms of knowledge, extension material and methods) of the different actors in the agricultural innovation system through conveying solid and adapted extension messages relating to WP to farmers.

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Actors in innovation cycle





Key tasks and innovation cycle

- ER1: Establish partnerships
- ER2: Farmers' needs assessment
- ER3: Knowledge processing and ToTs
- ER4: Dissemination and farmers' satisfaction
- ER5: Adaptive research of proven technologies under different conditions
- ER6: Innovation cycles are continuous



National Partnerships Established







Map of demonstration fields within Ferghana Valley:

Tajikistan: 1 – Buri Kurmas, 2 – Shark, 3 – Navbahor, 4 – Amakjon, 5 – Khimoyatbonu; **Kyrgyzstan:** 6 – Tukhtarov, 7 – Tolobekov, 8 – Absattarov, 9 – Kyrgyzbaeva, 10 – Mamafaliev, 11 – Jusubaliev; **Uzbekistan:** 12 – Akiev, 13 – Abdurahmon ota, 14 – Mirzakhmad sahovati, 15 – Baht imkon rivozh, 16 – Dilshoda, 17 – Kahramon davlat, 18 – Ergash ota, 19 – Sobir ota, 20 – Botirjon, 21 – Ortikov, 22 – Kosimov, 23 – Nilu, 24 – Durdona Gayrat, 25 – Omonov, 26 – Nabijon ota

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Construction of hydroposts

Imploye of farmers awareness and understanding the value of water resource – to keep regulating the quantity of water flow, following the norms....

- Andijan 59
- Fergana 35
- Namangan 50Total: 144

agement for food, livelihoods and nature

Water Management Use of water saving technologies

- "Progress Shavkat" garden 5ha;
- "Akbarali fayz nihollari" garden 10ha; •
- "Dam guldastasi" garden 25ha;

Key achievements

- Partnerships established
- Delivered the knowledge and technologies to the farmers based on the identified needs
- Knowledge was delivered through the innovation system created.
- Water Use efficiency has improved and documented for wider dissemination in Fergana Valley

Next Steps

- Identify channels for financial sustainability of proposed institutions in innovation cycle;
- Study and review other similar projects in the region and test financial mechanisms;
- Conduct comprehensive and systematic research into the innovation process that has occurred and specifically conduct comparative analysis across three countries.

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