

Innovation and capacity building to support Afghanistan's rural development

Input to the Afghanistan National Peace and Development Framework



Overview of the Government of Afghanistan-ICARDA partnership – 2002-2016

- Rural development and agricultural value chains
- Income and small enterprise opportunities for women
- Seed certification for agricultural development and export
- Building capacity of young professionals, Ministry staff, district officials, research and extension, NGOs and extension services
- Enhancing agricultural productivity, profitability and sustainability under changing climatic scenarios



Ministry of
Agriculture, Irrigation & Livestock
Islamic Republic of Afghanistan



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Government of Afghanistan-ICARDA partnership for rural development – 2002-2016

Afghanistan-ICARDA programs have field tested a range of rural development approaches and practices. Many of these are ripe for scaling-up at national level and can contribute to the EU-Afghanistan National Priority Programs (NPP) 2017-2021.

The rural development plans of the Islamic Republic of Afghanistan have been supported by ICARDA – the International Center for Agricultural Research in the Dry Areas – since 2002, in areas including: provision of seeds and new crop varieties, improving management of land and water, introducing new agricultural production technologies and farming practices, and enterprise building for rural communities, with a special focus on women’s empowerment.

These programs have helped develop the national agriculture sector – particularly in a number of remote areas – and the rebuilding of the agricultural genetic diversity that was lost during the country’s conflict years. Development and research programs over the past two decades were funded by the European Union, Australia, USAID, IFAD, OFID, JICA (Japan), UKAID, The Netherlands, IDRC (Canada) and FAO.

Today the partnership targets two high-level outcomes for Afghanistan:

- **Supporting the government in creating a ‘production and livelihoods system’ approach** to the national agricultural development plan – that integrates policies, crop varieties, livestock, land and water management and rural enterprise creation.
- **Strengthening national capacity to deliver high quality agricultural products**, through policy and skill development in the Ministry, and technical development and backstopping in provinces, districts, research and extension services at the community level.

Action areas: Afghanistan-ICARDA Partnership

- **Crop Improvement:** Food crops, legumes, forage and fodder crops, vegetables;
- **Natural Resource Management:** Watershed management, Conservation Agriculture, soil and water conservation technologies, supplemental irrigation, Geo-informatics: Long-term climatic data, hydrological data;
- **Small Ruminants:** ‘Pass on the Goat’ scheme, Restocking livestock, preventive animal health;
- **Capacity Development:** Youth and women, Farmer Field Schools, in-country and out-of-country training, mentoring, know-how transfer;
- **Entrepreneurship:** Village-based seed enterprises (women’s empowerment), public-private-partnership on seed certification, mint value addition, greenhouse cultivation (off-season vegetables).



ICARDA has 107 research, rural development experts and support staff working in Afghanistan. With links two Ministries, MAIL and DAIL, local NGOs this gives a strength of several hundred people. Program work is focused in nine provinces : Heirat, Balkh, Takhar, Baghlan, Bamyan, Parwan, Kabul, Logar and Nagahar.



Members of Afghanistan's first women-owned village based seed enterprises.



Facilities run by women produce herb oils (rose, thyme, mint). These are high value products that serve a big niche of national market demand, and have real potential to serve export markets.



Input to the EU initiative and Afghanistan National Peace and Development Framework

Links between EU-Afghanistan Framework & Afghan-ICARDA programs

	EU-Afghanistan National Priority Programs (NPP) 2017-2021	ICARDA-Afghanistan activities	Target outcome – input National Priority Programs
NPP 1	Private sector development	- Creation of village-based seed enterprises; - Market value chain; - Develop markets and rural services for agricultural mechanization (zero till drill, seeders, raised-bed planting equipment, weed cleaners, threshers); - Training Afghan private sector people in India for value chain/market development.	Support Ministry of Agriculture to scale-up in national program for seed enterprises, value chain, mechanization, private sector agricultural products.
NPP 2	Citizen's Charter (Community Based Governance Systems/ Community Development Committees)	Water User Associations piloted in several provinces.	Have extended pilot to develop Association business model and support the Ministry to replicate on national scale.
NPP 3	Effective Governance	Support to Ministry of Agriculture for policy mentoring (senior staff) & technical training. Know how exchange with Indian professionals.	Create broad program for long term training.
NPP 5	Comprehensive Agricultural Development Program	Developing system approach, governance, value chains, market development, mechanization, rural income generation.	Transfer know-how from current ICARDA-Afghan partnership into national investment and action plan for improved productivity and income generation.
NPP 7	Urban Development	Several projects on peri-urban agriculture value chains & market mechanisms; rural urban market links.	Expand activities in areas such as Village Based Seed Enterprises, fodder & livestock banks, veterinary services for improved animal health.
NPP 10	Capacity Development	Ongoing initiatives at policy and technical level (Ministry, district heads, research & extension, private sector, NGOs, farmers, rural women).	Support government to scale many pilot/project activities to sustained national program. Expanded capacity building programs for youth and women. Develop cadre of several hundred young professionals that will join Ministry, agencies, or Agriculture private sector.
NPP 11	Women's empowerment	ICARDA has cooperation agreement with Ministry of Women. Numerous project/pilot initiatives. 6000 women trained in farming, seed processing & rural income generating activities.	Support government to transfer project know-how into a national initiative to bring direct income to rural women: e.g. kitchen gardens, herb oils (fennel, mint, thyme...) value-added products (milk, cheese, livestock...), village based seed enterprises, greenhouse farming.

ICARDA-Afghanistan program highlights

Creating a new Afghani vegetable production sector

Afghanistan imports much of its national food supply. An initiative supported by ICARDA produces quality vegetables using greenhouse production, while improving national food and nutrition security and has the potential to provide export revenues as the sector develops. A study by the Ministry points to a potential of \$2 billion in revenue if vegetable export value chains are developed. The ICARDA pilot projects have encouraged the creation of nearly 1000, light structure greenhouses.



A new business model for Seed Certification in Afghanistan

Afghanistan does not have fully enabled and functional agricultural seed certification authority, policy and governance structure. With 70-80% of the country's agricultural seed being imported generates problems for seed quality and safety. In the future, the lack of certification will make it impossible to export agricultural products, and compromise the foreign trade opportunity where the country sees future potential. ICARDA is working with the Ministry of Agriculture to develop a seed certification authority, built around a business model for Public-Private-Producers-Partnership'. This initiative is supported by the European Union through a current project (2015-2018).

Pass on the Goat – direct income for rural Afghan women

The ICARDA-Afghanistan partnership has pilot-tested a number of family and community enterprise activities, many of them aimed at bringing income directly to women. The Pass on the Goat initiative has the potential to bring a better livelihood to women and children across the country and is ripe for scaling up.

This is the story of Ms Noor Khanum. She lost her husband during the war in 1987, remarried and was divorced in 2003, left with no house of relatives to help her. She lives with her 12 year-old son in the remote Baki Village of Dar-e-Noor district of Nangarhar, Afghanistan. She received two kid goats from a scheme called 'pass on the gift', where goats are given to families. ICARDA researchers interviewed Ms Noor and a number of others in evaluating the benefits of the scheme. Here are her comments:

"I passed one yearling goat to another household as the project asks. I received six more goats kids and sold two kids with one goat (9000 Afs). The funds allowed me to pay for a tonsillitis operation for my son. Now we produce 240kg of milk per season - 60kg for our consumption. I have started producing cheese, 180kg of milk makes 20 kg of cheese that we sell in market. With this profit I buy household items and school supplies for my son."



ICARDA-Afghanistan program highlights

ICARDA improved crop varieties released in Afghanistan

Crop	Name	Type	Farming	Yield potential	Average Yield
Wheat	Shisham Bagh-013	Facultative	Irrigated	5.3	4.8
Wheat	Dehdadi-013	Facultative	Irrigated	5.2	4.5
Wheat	Poz-e-ishan-013	Spring	Rain-fed	2.7	1.3
Wheat	Herat-013	Spring	Rain-fed	1.9	1.3
Wheat	Zarin	Spring	Rain-fed	2.67	1.46
Barely	Balkh-013	Spring	Irrigated	5.56	4.2
Barely	Shamal-013	Spring	Irrigated	5.94	4.04
Chickpea	Rabat-013	Winter	Irrigated	2.4	2.3
Chickpea	Baghlan-013	Spring	Irrigated	2.43	1.82
Chickpea	TBD	Spring	Irrigated	2.18	1.72
Lentil	TBD	Spring	Irrigated	1.56	1.33
Lentil	TBD	Spring	Irrigated	1.54	1.35

Production and livelihoods system approach

The current Afghan-ICARDA program is centered around thematic activities. If well integrated they can form a strong foundation for the future of Dryland farming and rural development in the country: A public-private partnership for national seed certification; improved food, vegetable and fodder crops; creation of dairy goat rural enterprises; watershed management; and improved forage crops.

Rural development and agricultural value chains

The partnership has pilot tested and put into action a number of agricultural value chains. These include greenhouse production of off season and high yielding vegetable crops, local production by women of herb oils for high-value domestic and export markets, livestock production for meat, dairy products – for household food security and sale in local markets. Agricultural mechanization is key to increasing production and income. But it will only succeed if supported by local markets and services that produce, market and repair machines and tools (seeders, threshers, plows, etc.). To support the government in creating an Afghan private sector for mechanization, ICARDA runs specialized technical training and encourages the exchange of know-how. Participants travel to India to learn first-hand from counterparts how these markets and services function.

Income and small enterprise opportunities for women

ICARDA, working with local partners has trained some 6500 women in the areas of small enterprise development, kitchen gardening, farming practices, sheep and goat production, and quality seed multiplication. The 'pass on the gift' scheme of goat rearing brings income directly to women, and has the unique potential to inject income in remote rural communities.

Seed certification for agricultural development and export

The creation of Village-Based Seed Enterprises (VBSEs) are an important achievement of the Afghan government over the past five years, a process that was supported by ICARDA and FAO, who provided mentoring, training and technical back-stopping for the creation of some 135 enterprises. Three of these have become viable commercial enterprises. Three are 100% women-owned and four others have women as partners. These informal local enterprises form a national network that provides 90% of Afghanistan's wheat seed supply.

Building capacity of young professionals, Ministry staff, district officials, NGOs and extension services

ICARDA supports the national rural development plan with capacity building and know-how transfer at several levels. Senior and mid-level Ministerial staff are mentored in study visits where they participate in dialogues on professional and policy development with their counterparts in India. Ministers, Provincial managers, technical staff, and the Director of Youth and Extension are involved in similar exchanges. A total of 7500 technical and operational staff in agricultural line agencies and farmers have been trained by ICARDA in farming policies and practices – 2500 of these have been government staff.

About ICARDA

Established in 1977, the International Center for Agricultural Research in the Dry Areas (ICARDA) is one of 15 centers supported by the CGIAR. ICARDA's mission is to improve the welfare of poor people through research and training in dry areas of the developing world, by increasing the production, productivity and nutritional quality of food, while preserving and enhancing the natural resource base.

ICARDA serves the entire developing world for the improvement of lentil, barley and faba bean; all dry-area developing countries for the improvement of on-farm water-use efficiency, rangeland and small-ruminant production; and the West and Central Asia and North Africa (CWANA) region for the improvement of bread and durum wheats, chickpea, pasture and forage legumes, and farming systems.

ICARDA's research provides global benefits of poverty alleviation through productivity improvements integrated with sustainable natural-resource management practices. ICARDA meets this challenge through research, training, and dissemination of information in partnership with the national, regional and international agricultural research and development systems.