IMPROVING IRRIGATION SYSTEMS AND MANAGEMENT IN AFGHANISTAN

Agriculture is the backbone of Afghan economy. However, its agriculture sector is highly dependent on irrigation water management. Given that the productivity of rainfed cultivation is very low, most of the production comes from irrigated agriculture. The rehabilitation and modernization of irrigation systems and improvement of their efficiency was deemed crucial for sustainable development and the stability of the country. The Ministry of Agriculture, Irrigation and Livestock (MAIL), through its Irrigation Directorate (ID), plays a key role in this process. The project, which was part of a bigger project called Capacity Development and Institutional Strengthening (CDIS) funded by Japan International Cooperation Agency (JICA), aimed to increase the capacity of ID in formulating agricultural development projects and implementing them.

WHAT DID THE PROJECT DO?

The numerous training activities provided by the project contributed greatly to improving the knowledge and skills of ID staff, and consequently the capacity of ID itself in formulating, implementing, and monitoring and evaluating irrigated agriculture development projects. This was mainly achieved through the On-the-Job Training activities (OJTs) in the three pilot irrigation schemes, demonstrating different canal-lining technologies; field demonstrations illustrating different irrigation methods and techniques; and the training sessions in country and abroad carried out by the project, covering different aspects of irrigation. In addition, deliverables such as the establishment of a resource centre, the development of an irrigated agriculture database, and the preparation of training manuals contributed to empowering ID. All these outcomes are expected to contribute to better irrigation service delivery to farmers in the target areas.

IMPACT

The enhanced capacity of relevant staff, and improved procedures and working methods will contribute to enhancing irrigation services in the country, which, in turn, will result in increased agricultural production and productivity. Through the pilot irrigation schemes, water losses were reduced, and some non-irrigated areas are now under irrigation; and through the field demonstrations, farmers received training on applying suitable irrigation and agronomic practices. This is not only expected to contribute to a significant increase in agriculture production in the target areas, but also to disseminate the message of appropriate technology to a wider group.

KEY FACTS

- **Contribution**: USD 5,266,982
- **Duration**: December 2013 - December 2017
- **Resource Partner**: Japan International Cooperation Agency (JICA)
- **Partners**: Ministry of Agriculture, Irrigation and Livestock (MAIL)
- **Beneficiaries**: Staff from the Irrigation Directorate (ID); irrigation-related staff from the Directorate of Agriculture, Irrigation and Livestock (DAIL) in the provinces, related line agencies (e.g. other Directorates of MAIL, Ministry of Energy and Water [MEW] and Ministry of Rural Reconstruction and Development [MRRD]), irrigation projects; and farmers
ACTIVITIES

- Institutional Analysis and Capacity-Assessment Report prepared, which was continually updated to provide a road map defining the activities of the project.
- Establishment and functioning of Irrigation Working Group as one of the working groups under the Sector Wide Coordination (SWC) mechanism of MAIL and the Irrigation Thematic Group under the Supreme Council of Land and Water (SCoLW) was supported.
- Consultative workshops conducted with irrigation staff and external stakeholders to discuss and firm the mandate, working procedures and organizational structure of ID.
- The project contributed in various ways to drafting and refining the National Irrigation Policy and the National Irrigation Plan, including the organization of regional workshops on Irrigation Policy in all regions of Afghanistan.
- Three pilot schemes established in different districts of Kabul Province, in which different types of canal-lining technology were illustrated on a practical level, and the complete cycle of nine steps of irrigation subproject implementation was covered through On-the-Job-Training programmes, so that ID and Directorate of Agriculture, Irrigation and Livestock staff could gain hands on experience.
- Field demonstrations for five seasons successfully implemented with different crops (tomato, potato, vegetables, grapes and maize), to illustrate on a practical level appropriate water conservation and On-Farm Water Management (OFWM) techniques for common crops.
- 104 different capacity-development programmes related to irrigated agriculture organized.
- Twelve manuals on various topics related to irrigation published and distributed.
- Irrigation Database compiled in Geographic Information System (GIS) and Management Information System (MIS) formats to support decision-making.
- Irrigation resource centre established in ID, enriched with irrigation-related resources (both hardware and software).
- Documentation of key activities and achievements of the project through 133 different reports (progress, training and technical).

Project Code
FAO: GCP/AFG/078/JCA

Project Title
Capacity Development of the Irrigation Directorate of the Ministry of Agriculture, Irrigation and Livestock

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