



ASIAN PRODUCTIVITY ORGANIZATION

PROJECT IMPLEMENTATION PLAN

7 April 2014

1. **Project Code** 12-AG-28-GE-SEM-B-PAK
2. **Title** APO National Workshop on Innovations in Irrigation Water Management for Enhancing Productivity and Achieving Sustainable Food Security
3. **Reference** Project Notification 12-AG-28-GE-SEM-B, 24 September 2012
4. **Timing and Duration** 2–5 June 2014 (4 days)
5. **Venue:** Islamabad, Pakistan
6. **Implementing Organizations** National Productivity Organisation (NPO)
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7. **Number of Participants** 50 participants
8. **Objectives**
 - a. To share innovative technologies, approaches, and good practices for improving the performance of irrigation systems, especially the onfarm water management;
 - b. To formulate a framework and action plan for adopting best practices of irrigation water management;
 - c. To build the capacity of stakeholders from different relevant organizations on irrigation water management; and
 - d. To promote collaboration between government and private-sector organizations responsible for irrigation water management.

9. Background

Agriculture is central to the socioeconomic development of Pakistan. It contributes about 21% of GDP, employs 45% of the labor force, and constitutes 60% of earnings from national exports. Agriculture provides food and nutrition for more than 180 million people. It slows down immigration to urban centers through providing livelihoods for local communities. Agriculture is equally important for industrial development as 60% of industrial establishments in Pakistan are agro based. The country attaches great importance to agricultural development. For example, the Planning Commission's Approach Paper on "Sustained and Inclusive Higher Growth" for Vision-2025 emphasized that efficient, sustained growth in the agriculture sector was necessary to improve the income of small and medium-sized farms as well as to generate growth linkages for the rural nonfarm economy. However, agriculture faces a daunting challenge to meet increasing food demand driven by an expanding population in the foreseeable future.

Agricultural and irrigation expansion in Pakistan are, however, constrained by the shrinking arable land and limited water resources. Thus achieving national food security in the face of additional food demand could be possible by raising the productivity of existing irrigated farmland and upgrading rainfed farming. In view of the huge untapped food production potential of irrigated agriculture in Pakistan, which constitutes more than 70% of total agricultural land, raising the productivity of this sector must be the key consideration in producing the additional food needed.

Pakistan has the world's largest contiguous irrigation network, suitable for both diversified and intensive agricultural production systems. The performance of the national irrigation system in terms of water-use efficiency remains far from satisfactory. The system failed to adapt to evolving farming systems. Attempts to reform this irrigation system by sharing responsibility for its management with farming communities through participatory irrigation management could not meet expectations. As water resources shrink, and competition from other sectors grows, irrigated agriculture faces the challenge of producing more food with existing or even less water; preventing the deterioration of water quality through contamination by soil runoff, nutrients, and agrochemicals; and reusing poor-quality water for safe food production. Climate change could add further uncertainty to the water supply. There is a need to explore innovative ways to increase water-use efficiency, minimize externalities associated with traditional irrigation systems, harvest rainwater, reuse agricultural water, and harness nontraditional sources of water like wastewater and low-quality water. Situation-specific, knowledge-based, concerted efforts on the part of all stakeholders will be essential.

10. Scope and Methodology

The tentative topics to be covered are:

- a. Water supply and food security in Pakistan: an overview;
- b. Irrigated agriculture in Pakistan: issues, challenges, and opportunities;
- c. Policy and institutional settings for water resource management in Pakistan;
- d. Innovative approaches and technologies for water harvest and storage;
- e. Innovative approaches and technologies for increasing onfarm water-use efficiency;
- f. Public-private partnerships for better irrigation management;
- g. Innovative ways to reuse agricultural water, municipal wastewater, and low-quality water for agricultural purposes; and
- h. Innovations and best practices in irrigation water management.

The workshop will employ interactive learning methods using experts' presentations, discussions, case studies/best practices, group exercises, and field visits. International and national experts will share their knowledge and expertise to enhance the capacity building of stakeholders.

11. Qualifications of Participants

Participants should be 25–55 years old, university graduates or equivalent, with at least three years of relevant working experience. Irrigation managers, engineers, practitioners, or government officers working at relevant federal or provincial ministries/agencies/departments; academics; researchers; or representatives of irrigation water users' associations engaged in conserving available agricultural water resources and enhancing water-use efficiency and able to share local technological innovations. Participants should be physically and mentally fit to attend an intensive program.

12. Resource Persons

The APO will assign one overseas resource person. Local resource person(s) will be assigned by the implementing organization(s).

13. Financial Arrangements

To be borne by the host country (Pakistan)

- a. Implementation costs exceeding the APO share of USD10,000.
- b. Project management fees and personnel costs of the NPO, including transportation of the facilitator(s) and project team to and from the project venue, meeting package for the project team, facilitator(s), and local resource person(s) during the workshop, personnel service fees for the development of the program, honorarium for the local resource person(s) if applicable, and consultation meetings with key stakeholders.
- c. Any other local implementation costs.

To be borne by the APO

- a. All assignment costs of one overseas resource person.
- b. Implementation costs up to a maximum of USD10,000 for making local arrangements. An itemized breakdown of the implementation costs is attached (Appendix 1).

14. Roles and Responsibilities

The roles and responsibilities of the NPO and APO are:

NPO

- a. Making copies of the workshop materials;
- b. Organizing a four-day national workshop in Islamabad; and
- c. Bearing the balance of project implementation costs if the total amount exceeds USD10,000.

APO

- a. Providing financial support for organizing the national workshop as detailed in section 13;
- b. Assigning one overseas expert for the national workshop; and
- c. Coordinating with the overseas expert and implementing organization.

15. Procedures for Project Implementation

This project is to be implemented in close collaboration with the APO Secretariat, referred to as the APO in this document.

- a. A temporary advance of up to 50% of the total APO share will be remitted to the NPO, if necessary.
- b. The proposed project will be carried out by the implementing organization.
- c. The NPO will make the expenditures for the assigned items and settle the entire account by providing all necessary bills and receipts to the APO after completion of the national workshop.
- d. The NPO will submit a project completion report and a statement of expenses supported by receipts, etc., related to the project to the APO within one month of project completion. The report will provide details on how the project was carried out in the country; program of activities; benefits and advantages to local agriculture sector, implementing organizations, and host country; and follow-up action plans, among others.

16. Final Project Output

The project is expected to train 50 or more stakeholders in irrigation water management in Pakistan. Upon completion of the project, the NPO will undertake the following:

- a. Submit a “project completion report” on the national workshop to the APO and disseminate the report on the proceedings of the workshop including recommendations to relevant government bodies such as the Ministry of Agriculture of Pakistan within one month after completion of the workshop.
- b. Submit a statement of expenses supported by receipts/bills within one month after completion of the workshop.
- c. Submit documents and e-links relating to promotional material on the national program, e.g., newsletters, brochures, bulletins, news clippings, written in English or the local language with an English translation of the main points.
- d. Disseminate the knowledge and experience gained to the public and private sectors through publications, consulting and training services, etc.



Mari Amano
Secretary-General

Appendix 1

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Estimated APO share of costs for the
**APO National Workshop on Innovations in Irrigation Water Management
 for Enhancing Productivity and Achieving Sustainable Food Security**
 (Islamabad, Pakistan, 2–5 June 2014)

No.	Item	Cost (USD)
1	Meeting package for 4 days for 50 persons (including meals for participants and training venue)	6,000
2	Training kit (including supplies and materials, printing and copying, and documentation)	2,500
3	Miscellaneous expenses (including hiring audiovisual equipment, transportation for site visits, and other local costs not covered in items 1 and 2)	1,500
Total		10,000
Note: The NPO is required to submit to the APO receipts for all expenses incurred in implementing this national project.		