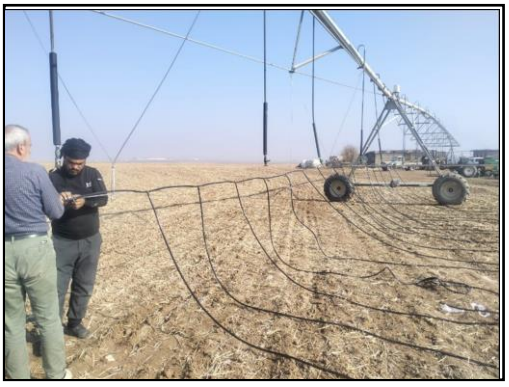
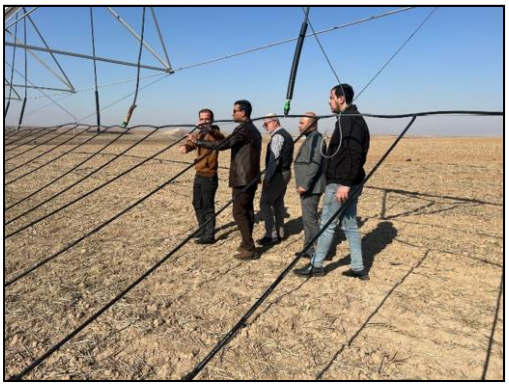
Sustainable Development Projects of the Center for Arid Farming and Conservation Agriculture Research (C.AFCAR)

Project Name: Dragon Irrigation System (DIS)



Highlights: This project combines sustainable water management, improved crop health, and operational efficiency, positioning it as a transformative solution for agriculture in water-limited environments.

Project Concept: Dragon Irrigation Project addresses agricultural challenges in arid and water-scarce regions by improving water-use efficiency while enhancing agricultural output both quantitatively and qualitatively. The Key advantages of this project include:

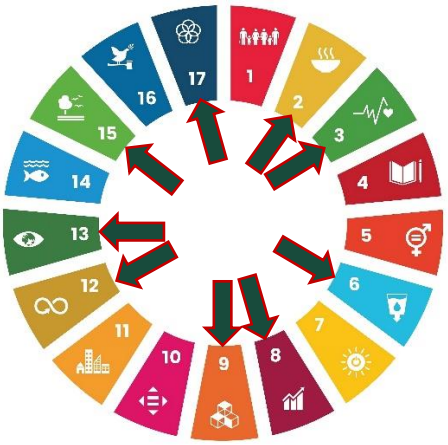


1. **Reduced Water Waste**: Cuts water loss by 40–60% compared to sprinkler irrigation system, making this system (first introduced in Iraq) one of the most water-efficient and conservation-focused irrigation approach.
2. **Disease Prevention**: Avoids plant foliage diseases caused by prolonged humidity from sprinkler irrigation.
3. **Minimized Fertilizer Waste**: Significantly reduces fertilizer loss, particularly liquid fertilizers mixed with water, when used with this irrigation technique.
4. **Lower Energy Consumption**: Requires less operational energy compared to sprinkler irrigation systems.
5. **Wind Resistance**: Eliminates wind-related interference, a common issue with sprinkler irrigation systems.

Center: Center for Arid Farming and Conservation Agriculture Research's

Sustainability Goals (17-1):

Goal 2: Zero Hunger
Goal 3: Good Health and well-being
Goal 6: Clean water and sanitation
Goal 8: Decent work and economic growth
Goal 9: Industry, Innovation and Infrastructure
Goal 12: Responsible consumbtion and production
Goal 13: Climate Action
Goal 15: Life on land
Goal 17: Partnerships for the goals



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