25th International Congress on Irrigation and Drainage & 74th International Executive Council meeting



Theme:

Pathways and Technologies for Modern Irrigation Services





COUNTRY REPORT ON PATHWAYS AND TECHNOLOGIES FOR MODERN IRRIGATION SERVICES IN NIGERIA



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Presentation made on behalf of the Nigerian National Committee on Irrigation and Drainage (NINCID)





Introduction

- The potential Irrigable area in Nigeria is estimated at 3.0-3.5 million ha. Presently, about 1.0 million ha is put to use in the dry season
- There are 323 irrigation schemes scattered across the country. 44 % are relatively completed; 40.6 % undergoing development; 12% abandon, and 3.0 % undefined, as at 2017.
- The schemes are predominantly surface irrigation system with water sources largely dams, and few other irrigated from river and groundwater.
- The need to modernize irrigation practice is inevitable in Nigeria





Challenges of Irrigation in Nigeria

The NIPS (2015) admitted the following challenges in Irrigation and also chatted a path for modernization

- Infrastructural deficit
- inadequate human resources capacity
- inadequate pricing of water charges, poor services delivery & lack of willingness to pay by the user.
- Insecurity
- Socio-cultural inhibitions





Goals and Objectives Set by the NIPS

- Rehabilitate and expand irrigation infrastructure to bring more land under irrigation
- Enhance access to water for irrigation to facilitate rural development and promote food security
- Improve water use efficiency by promoting irrigation techniques which reduces water wastage.
- Encouraging the adoption of environmentally friendly irrigation



Critical Strategies

- Road Map/Agenda for Irrigation
- Rehabilitation of infrastructures of large public schemes
- Human capacity development
- Technology and Innovations for improved water use efficiency
- Responsive funding mechanisms to stimulate effective stakeholders' participation and rapid irrigation growth





Road Map

- The Road map for irrigation and drainage development tagged "National Irrigation Programme (2016 2030)".
- Plans have been made to develop about 500,000 ha,
- Create an enabling environment for private sector and State governments to develop an additional 1,000,000 ha of irrigation land and associated infrastructure by 2030.





Infrastructure Rehabilitation

- Between 2016 and 2022, the FMWR has developed and rehabilitated a total of 6,784 ha irrigation projects in Sabke, Shagari, Sepeteri, and Ejule-Ojebe, Middle Rima and Gari Irrigation Projects;
- Drained and reclaimed a total of 480 ha of land in Manu Akwa and Obinda communities,
- Supplied and installed 1000 tube wells in selected RBDAs,
- Supply and installed Centre Pivot Irrigation
 System over 2880 ha in selected RBDAs.

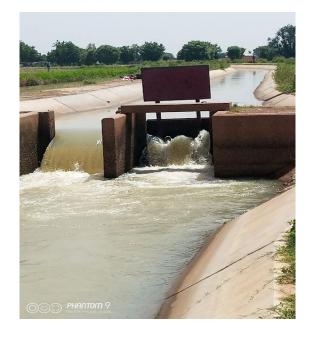




Infrastructure Rehabilitation

TRIMING) Project (2014-2022+2) has rehabilitated:Irrigation canals in:

- 7105 ha of Bakolori Irrigation Scheme (BIS),
- 14,444 ha of Kano River Irrigation Scheme (KRIS), and
- 5,759 ha of Hadejia Valley Irrigation Scheme (HVIS)
- Dam safety remedial works,
- River training
- Procure and installed 40 Hydrological equipment and 23 Meteorological stations in some hydrological Area towards modernizing irrigation practices









Human Capacity Development

The Irrigation and Drainage Department of the FMWR&S in collaboration with NINCID and TRIMING Project are:

- Developing and strengthening Water Users
 Associations through training workshops across the country
- Developing technical expertise and empowering farmers to enhance the efficient operation, maintenance, and management of irrigation systems.
- Technical workshops facilitated by NINCID for irrigation practitioners and stakeholders













Technologies and Innovations

- Adoption of efficient (water saving) irrigation tools: 20 ha Drip irrigation System in Benin-Owen RDBA
- I&DD is collaborating with FAO to develop 20 ha drip irrigation system in Gari Irrigation Scheme
- CPS for a total of 2880 ha are being installed in some RBDA
- Energy-saving means of lifting water for irrigation
- Farmers are being trained on climate smart agricultural practices.





- Identify the present capacity gaps in the different irrigation schemes and develop activities to address them;
- developing service-oriented public institutions to respond more efficiently to the needs of irrigation sub-sector
- Promote closer collaboration among all stakeholders
- Provide capacity for cost-effective, demand-driven irrigation support services.
- Develop the required human resource capacities especially of vulnerable groups (Women, aged and youths, physically challenged).





- Develop incentive mechanisms that would encourage stakeholders and interest groups to invest host and participate in their effective management.
- Lease projects with only dams and headwords in place to private investors with a clear win-win financial and economic plan to complete the irrigation infrastructure and put the scheme into use.
- Promote greater and harmonious engagement among the diverse MDAs with mandate on irrigation and drainage to pool resources, eliminate duplication and wastage.





- Promote in-field water management tools and techniques that minimize water application losses and increase irrigation efficiency using farmers participatory field demonstrations.
- Conduct on-farm training events for water users on techniques and tools for effective water management at secondary and tertiary levels in irrigation schemes.
- Develop training manuals on improved water management techniques and train irrigation supervisors as trainers of farmers.





- Mobilize and train cadres of young farmers on modern irrigation techniques to serve as vanguard of effective water management in irrigation schemes.
- Convene, annually, national stakeholder consultation with research institutions, and donor agencies to review progress in modernization and to chart ways forward in sustainable agricultural water management in the country.





Thank You

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