

# What is a possible way forward?

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## Conditions for a modern and well performing irrigation sector

**R**egulatory environment is well defined and adapted with clear laws governing the use of irrigation services: a stable set of principles and shared long term goals; a policy and legal arsenal that serves sustainable performance; a good information system on water and agriculture; a clear definition of key function for irrigation management, a clear leadership.



**SERVICE PROVIDER**  
able to perform  
a service:



**SUSTAINABLE:**  
with regular operation and maintenance. Infrastructures remains functional over time, adapted to different types of farming systems; climate risks, environmental and social issues are considered, impact on public finance remains reasonable.

**RELIABLE:**  
irrigation water service is delivered on a timely and reliable basis, water resources are adequate, infrastructures are adapted to the needs and in good state, water delivery service meets the demand; financial and human resources are sufficient.



**CAPACITY & WILLINGNESS**  
to pay the fee

**FARMERS**

- are competent to practice irrigation and develop irrigated agriculture
- participate to governance
- derive economic and social benefits



# CONSTRAINTS



**T**hese constraints make it difficult to achieve all objectives of the strategy, but broadly, they do not allow the conditions for efficient and resilient irrigated agriculture to be met. Specifically, the following gaps are contributing to these constraints:

- **Georgian amelioration (GA) has limited capacity to deliver irrigation services to water users in a timely and operationally efficient manner**, the reform of its governance structure is yet to be agreed by higher levels of government, and the regulation role by the Georgian National Energy and Water Supply Regulatory Commission (GNERC) for the irrigation sector, will only commence in 2023.
- **The WUO law is adopted, GA has successfully established a WUO support unit, but establishment of WUOs is delayed** resulting in low tariff collection rates, deteriorated tertiary irrigation systems, and limited irrigation water supply to farm fields.
- Limited willingness of water users to pay a higher irrigation tariff without significant improvement in the service quality, leading to a **vicious cycle of limited recovery of O&M costs by GA, increased reliance on state funds for GA operational activities, deterioration of irrigation schemes**, which were recently upgraded.
- Limited number of farmers willing to sign irrigation contracts with GA or willing to join Water User Organizations as there is **need to better take into account their requirements when providing irrigation services**.
- **Farmers face increasing production losses without more reliable irrigation services** due to climate risks such as increasing temperatures and variable rainfall levels.
- Without **sound irrigation planning** and allocation to manage **climate risks**, limited water supplies result in the inability of GA to irrigate agreed command areas according to the needs of farmers.
- **More emphasis on rehabilitation of the main systems as well as the secondary and tertiary systems is needed as without this, it results in limited irrigation water supply to farm fields** as secondary and tertiary systems are neglected without clear criteria for prioritization of irrigation rehabilitation and modernization.

# GAPS

# What is a possible way forward?

7 strategic themes



## WATER USERS ORGANISATION

**Water User Organizations can be established, in relevant irrigated command areas, once the necessary enabling conditions for their establishment are present.**

Where the technical, hydrological, economic, and social conditions are not met, other modalities for irrigation service delivery to farmers can be considered, including the possibility of individual contracts between water users and Georgian Amelioration or the involvement of Municipalities.

## DIALOGUE

**Intra and inter-sectoral dialogue needs to be improved** and the conditions for strong leadership to flourish at all scales need to be built.

## FINANCIAL RESOURCES

**Adequate financing for operation and maintenance, scheme specific and based on asset management, is necessary** to ensure the sustainability of the irrigation sector.

## HUMAN RESOURCES

The **human resources of the irrigation sector need to be strengthened** to allow for both a real implementation of the activities and a generational renewal with the skillsets to meet the demands of irrigation services of the future.

## HOLISTIC APPROACH

In any irrigation and drainage investment project, the needs of the surrounding environment, including economic, social, and ecological factors can be studied beforehand so that the effect of the planned investments can be anticipated and its design adjusted if necessary.

**Any project or intervention may aim to meet a clearly identified need, based on reliable and up-to-date data.**

## PILOT APPROACHES

Pilot approaches need to be implemented to **identify lessons, success and failure factors**, as well as externalities. This implies the need for relevant and effective monitoring and evaluation systems.

## CUSTOMER SERVICE APPROACH

Georgian Amelioration can be further modernized by focusing on **accountability, performance-driven** with a customer service approach equipped with **modern tools** for measuring, monitoring, and analyzing irrigation and drainage services, as well as managing climate risks to water availability.

WAY TO GO!

ACTIONS

# Roadmap

## SHORT TERM RECOMMENDATIONS (2 YEARS)

1. Carry out a service delivery performance assessment of Georgian Amelioration and formulate an action plan to make Georgian Amelioration more customer oriented, accountable, reliable, efficient, and financially sustainable.
2. Prioritize investments by means of an irrigation and drainage master planning.
3. Define a typology of water users and improve the understanding of farmers, on-farm practices and water use and cropping needs.
4. Design, calculate, begin introducing an appropriate local or regional binary bulk irrigation tariff.
5. Strengthen cooperation with higher education institutions and the Ministry of Education and Science of Georgia to increase specialist graduates for recruitment in key water sector agencies in the Georgian government.
6. Scale and sustain recent recruitments of regional WUO support staff to lead WUO establishment processes with annual budgetary support for long-term sustainability where schemes are going to be rehabilitated and where water users express the willingness to self-organize and contribute to WUO establishment.

## MEDIUM-TERM RECOMMENDATIONS (5+ YEARS)

1. Invest in a robust Hydro-Agro informatics program for integrated monitoring of water and agriculture and set up a Hydro-Agro Informatic Center.
2. Strengthen MEPA's capacities, through training and recruitment of skilled staff as a continuous process based on needs, to lead the implementation of the irrigation strategy.
3. Strengthen institutional mechanisms and find new ways to improve intra and inter sectoral dialogue.