

## 2.4. Action plan for water reclamation and reuse technology

Application of water reclamation and reuse technology lines with the country's social, economic and environmental development priorities. With regard to the country's economic development priorities, it should be noted that lack of adequate water supply during drought and seasonal dry periods could halt economic development and hinder human health and well-being. Water reclamation and reuse can help to address local demands for technical water use, decrease travel time to remote water sources, increase agricultural productivity and reduce depletion of groundwater resources.

The water and nutrients that can be recovered from wastewater are simply too valuable to waste in areas where resources are limited. For this reason, it is very common for farmers in developing countries to supplement their crop irrigation supplies with wastewater. In fact, except for a handful of cases where applications such as natural filtration systems for water reclamation, sewage reclamation for industrial uses, or direct potable reuse have been implemented, almost all water reclamation and reuse in developing countries is dedicated to agricultural irrigation. Not only does this practice increase the volume of water available for crops and utilize the nutrients in wastewater in a beneficial way, it also contributes to greater quality of human life by increasing household water availability.

There are no specific programmes or strategies in Azerbaijan related to application of water reclamation and reuse technology.

Main barriers of technology diffusion could be listed as follows:

<b>Barriers</b>	<b>Application of water reclamation and reuse technology</b>
Economic/financial	- High capital costs - Inadequate financial initiatives
Policy/regulatory	- Weak regulatory and legislative framework - Non-existence of mechanism for customs regulations for stimulation of import of technology - Weak institutional basis - Lack of coordination among relevant institutions
Technological	- Weak access to high priority technology
Information/capacity	- Limited awareness and lack of capacity of local authorities, communal units and residents on advantages of the technology
Social	- Unfamiliarity with the technology

During the preparation of TAP, measures have been assessed taking into account their priorities, time scale, related stakeholders, key indicators for measuring implementation and funding resources.

TAP for the technology is provided in table 7.

Table 7: TAP for water reclamation and reuse technology

#	Measures	Priority	Why it is important	Time scale	Related stakeholders, implementers	Key indicators	Risks	Funding sources	Costs
<b>Policy/regulatory</b>									
1	Support policies for local deployment of the technology	High	- Promote application of technology in areas with water scarcity	0-3 years	MENR, SWA, Azersu JSC, Amelioration JSC, National Parliament, NGOs, local authorities	- Developed/implemented supportive policies	- State procedures may be slow to endorse proposed recommendations	State Funds	\$ 100,000
<b>Economic/financial</b>									
2	Develop mechanism for provision of long-term and low-interest loans, as well as grants through state, private and international funds	High	- Create access to financial sources	0-5 years	MED, MENR, SWA, Azersu JSC, Amelioration JSC, local authorities	- Easy access to funds created for farmers	- Low interest of financial institutions - Insufficient State funds	State, International	\$ 80,000
<b>Information/capacity building</b>									
3	Capacity building for waste water reclamation and reuse	High	- Increase capacities	0-10 years	MED, MENR, SWA, Azersu JSC, Amelioration JSC, local authorities	- Increased capacity	- No major risk	State, International	\$ 300,000
4	Develop and conduct information campaigns on the advantages of applied technology	High	- Raise awareness level	0-5 years	MED, MENR, SWA, Azersu JSC, Amelioration JSC, local authorities	- Awareness level on advantages of new technology increase by 50%	- No major risk	State, International	\$ 200,000
<b>Other measures</b>									
5	Develop mechanism for implementation of demonstrative pilot projects	High	- Demonstrate practical advantages	0-5 years	MENR, SWA, Azersu JSC, Amelioration JSC, local authorities	- Practical knowledge and skills of farmers increased	- Lack of funds	State, International	\$ 400,000