



# Participatory Utilization and Resource Efficiency of Water (PURE Water)



## FINAL REPORT

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<b>Sub: Country Water Partnership scientific, ecological NGO (CWP), and Environmental Law Resource Center (ELRC) at Yerevan State University (YSU).</b>
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## TABLE OF CONTENTS

LIST OF ACRONYMS.....	4
I. EXECUTIVE SUMMARY.....	5
II. NARRATIVE ANALYTICAL REPORT OF THE PROJECT.....	7
PREPARATION PHASE: SELECTION OF PARTNER COMMUNITIES AND THE PROJECT LAUNCH.....	7
RESULT AREA 1: POLICY AND REGULATORY IMPROVEMENTS TO FOSTER PARTICIPATORY USE OF WATER ARE IN PLACE.....	8
RESULT AREA 2: PARTICIPATION IN AND OVERSIGHT OF WATER RESOURCES ENSURED TO IMPROVE EFFICIENCY.....	16
RESULT AREA 3: PUBLIC AWARENESS RAISED AND BEHAVIORAL CHANGE FOSTERED AMONG WATER USERS.....	31
RESULT AREA 4: SMALL-SCALE WATER INFRASTRUCTURE PILOTS IDENTIFIED AND IMPLEMENTED.....	43
III. CONCLUSION.....	47
IV. RECOMMENDATIONS.....	48
V. PURE WATER PROJECT PARTNERS.....	50
VI. ANNEXES.....	51

## LIST OF ACRONYMS

<b>AOR</b>	Agreement Officer's Representative
<b>ASPIRED</b>	Advanced Science & Partnerships for Integrated Resource Development
<b>ATP</b>	Armenia Tree Project
<b>AUA</b>	American University of Armenia
<b>BCC</b>	Behavioral change communication
<b>BMO</b>	Basin Management Organization
<b>CCF</b>	Coca-Cola Foundation
<b>CCHBCA</b>	Coca-Cola Hellenic Bottling Company Armenia
<b>CSO</b>	Civil Society Organization
<b>CWG</b>	Community Working Group
<b>CWP</b>	Country Water Partnership NGO
<b>EMMP</b>	Environmental monitoring and mitigation plan
<b>FB</b>	Facebook
<b>FG</b>	Focus group
<b>GOAM</b>	Government of Armenia
<b>ICT</b>	Information and Communication Technologies
<b>Legal Assessment</b>	Assessment of Policy and Regulatory Framework of Water Resources Management and Elaboration of Ways for Improvement
<b>MEINR</b>	Ministry of Energy Infrastructures and Natural Resources
<b>MNP</b>	Ministry of Nature Protection
<b>MOU</b>	Memorandum of understanding
<b>MTAI</b>	Ministry of Territorial Administration and Infrastructure
<b>M&amp;E</b>	Monitoring and Evaluation
<b>NGO</b>	Non-Governmental Organization
<b>OTI</b>	Office of Transition Initiatives
<b>PEER</b>	Partnerships for Enhanced Engagement in Research
<b>PIU</b>	Project Implementation Unit
<b>PURE Water</b>	Participatory Utilization and Resource Efficiency of Water
<b>Q&amp;A</b>	Questions and Answers
<b>RA</b>	Result Area
<b>RoA</b>	Republic of Armenia
<b>Strategy</b>	Strategy for Improved Legislation on Participatory, Transparent and Accountable Water Resources Management
<b>TALSGAE</b>	Territorial Administration, Local Self-Government, Agriculture and Environment
<b>ToT</b>	Training for trainers
<b>UFSD</b>	Urban Foundation for Sustainable Development
<b>USAID</b>	United States Agency for International Development
<b>WRMA</b>	Water Resource Management Agency
<b>WPAN</b>	Water Sector Public Advocacy Network
<b>WUA</b>	Water Users Association
<b>WUP</b>	Water Use Permit
<b>YSU ELRC</b>	Yerevan State University Environmental Law Resource Centre

## I. EXECUTIVE SUMMARY

The Ararat Valley is the largest depository of high-quality natural groundwater which is vital not only for Armenia but also for the region. All stakeholders, including the government and civil society organizations (CSOs), recognize the dreadful situation of water resource management in the Ararat Valley. Due to poor management, a lot of communities in the Ararat valley have



Ararat Valley, Armenia

extremely limited access to drinking and irrigation water. Demand to irrigation water increases due to the climate change and overissuance of water user permits leading to sharp depletion of groundwater resources. There is poor public participation and awareness in the water resource management process while involving residents of the Ararat Valley in the decision-making process will lead to quality and informed decisions thus ensuring public acceptance of adopted decisions.

The **goal** of the project is to contribute to the increase of water productivity, efficiency, and quality, as well as foster behavioral change to reduce the rate of groundwater extraction in the Ararat Valley.

### **Result Area (RA) 1: Policy and Regulatory Improvements to Foster Citizen Participation**

- Identify gaps in the policy-regulatory environment in the water sector, impeding citizen participation in Ararat Valley, develop a Strategy for Improved Legislation on Participatory, Transparent and Accountable Water Resources Management (Strategy), and a Road Map for improvements agreed upon amongst stakeholders.
- Improve the capacity of citizen groups and water users' associations to effectively advocate for transparent decision making in water management with constructive input of CSOs.
- Introduce public consultation mechanisms in support to Basin Management Organizations (BMOs) of the Ararat Valley and for promoting participatory basin planning.

### **RA 2: Participation in and oversight of water resources management**

- Develop public oversight mechanisms:
  - *Introduce consumer feedback tools using information communications technologies*
  - *Introduce community monitoring schemes for water quality and efficient use*
- Build capacities of community stakeholders through targeted capacity-building activities in the use of public oversight mechanisms to monitor water resource management.
- Awarding community collaboration and watchdog small sub-grants for monitoring activities.
- Assist local governments in affected communities to ensure compliance of the local users with the regulatory framework, ensure public access to water-related information.

### **RA 3: Public Awareness Education and Behavioral Change**

- Undertake public awareness and education campaigns
  - *Baseline and follow-up consumer and stakeholder surveys*
  - *Common messaging regarding water resource quality and use*
  - *Public awareness campaigns using a mix of integrated marketing communication tools*
- Implement tailored stakeholder behavioral change interventions
  - *Stakeholder mapping, assessment, and analysis for tailored outreach and strategic communication campaign*

### **RA 4: Small-Scale Water Infrastructure Pilots Projects**

- Identify and develop pilot small-scale infrastructure projects designed and developed by capacitated community-based organizations and residents leading to increased and sustained community water access.

## Key Milestones Achieved

The Participatory Utilization and Resource Efficiency of Water (PURE Water) project reached the following milestones:

Milestones reached*	Baseline	Target	Achieved	Notes
People educated	0	700	2243/5.6% (59%-women, 25%-youth)	Schoolchildren, youth and community residents trained in water and health, citizen participation, monitoring, advocacy, phone survey, journalism, integrated water management, participatory budgeting
Residents participating in community meetings	0	1,200	1,738/4.4% (17%-women, 3.4%- youth)	Public hearings, town halls, community meetings - strategy development, small infrastructure projects, water meters, social audit
People voicing the necessity for water management improvements	0	3,000	8,304/20.7%	Fish-farms, citizen scientists, citizen journalists through media articles, social audit, advocacy, awareness events, town-halls, study tours, changes in legislation
People engaged in advocacy interventions at the local level	0	-	2,114/5.3%	Vedi, Pokr Vedi, Aygavan, Yeraskhahun (Lukashin, Armash, Aratashen) Drinking water, irrigation water (supply, contracts)
People reached out by awareness campaigns in the target community	0	-	6260/15.6%	Events and festivals; educational workshops; peer to peer exchange among communities; educational tours to fisheries, artesian wells
Public information materials delivered	0	-	2000/5%	Overview: Ararat Valley Water Resources; Questions and Answers (Q&A) drinking and irrigation water; Citizen participation; Water Users Rights and Responsibilities; Best practices of fish farms, desktop calendar, bookmarks for children
Total people reached out in Ararat Valley and nationwide	0	50,000	2,000,000	Yerkir Media, H1 TVs, Hetq, Websites, Facebook (FB) pages, Events and festivals; educational workshops; peer to peer exchange among communities; educational tours to fisheries, artesian wells
Legal support	<b>Week legislation to promote participation</b>	2	5	Assessment, Strategy, Road map, legal drafting
Infrastructure projects	<b>Deteriorated infrastructure</b>	5	5	Aratashen, Yeghegnut , Vedi, Pokr Vedi, and Khachpar
People benefited from infrastructure projects	<b>Interrupted or scheduled water supply</b>	24,000	24,000	Drinking water: 5,000 people(Aratashen and Yeghegnurt, Armavir region), 24-hour water supply Irrigation water: 19,000 (Vedi, Pokr Vedi, and Khachpar, Ararat region)
CSOs involved		30	27	The taskforce, Water Sector Public Advocacy Network (WPAN), small grants

\* Percentage for each figure under the column "Milestones reached" stands for a share of affected people in total population (40,000) of 12 communities

## II. NARRATIVE ANALYTICAL REPORT OF THE PROJECT

### PREPARATION PHASE: SELECTION OF PARTNER COMMUNITIES AND THE PROJECT LAUNCH

#### Selection of partner communities

**Pre-selection:** In the initial phase of selection, 61 communities were pre-selected from the 166 communities in Ararat valley. Out of the 61 selected communities, 11 were recommended by the Armavir regional governor's office. The main selection criteria of the pre-selection phase were discussed and agreed upon among USAID, UFSD, CWP, and ELRC.

#### Main criteria for the pre-selection phase were:

- The 32 water-stressed communities in Ararat Valley
- Communities recommended by national and regional authorities

#### Additional criteria for the pre-selection phase were:

- Communities with fish farms within their jurisdiction
- Ararat valley communities with opportunities for clustering and inter-municipal cooperation
- Ararat valley communities with water systems managed by local governments or the state
- Ararat valley communities which currently are, or in the past were, involved in USAID supported projects.

After community meetings and interviews, the project team selected the following 12 partner communities (**Annex General 15**).

Table 1: Selected Communities

Ararat Marz		Armavir Marz	
Main list		Main list	
1.	Berkanush	1.	Aknalitch
2.	Burastan	2.	Aratashen
3.	Aygavan	3.	Yeghegnut
4.	Vedi city	4.	Yeraskhahun
5.	Pokr Vedi	5.	Griboyedov
6.	Khachpar	6.	Guy



12 partner communities, Mr. Richard M. Mills, U.S. Ambassador to Armenia, Ms. Deborah Grieser, USAID/Armenia Mission Director

#### Project Official Launch

The PURE Water project launching event presented the participants the goals and expected outcomes of the project. Mr. Richard M. Mills, U.S. Ambassador to Armenia, Ms. Deborah Grieser, USAID/Armenia Mission, Mr. Artsvik Minasyan,

RA Minister of Environment, around 100 stakeholders from central, local, governments, local and international organizations, experts as well as representatives from the private sector and media attended the launch. A ceremony to sign memorandums of cooperation between partner communities and the PURE Water project concluded the event (**Annexes General: 2-13**).



The Project Launch and Signing Memoranda of Cooperation between Partner Communities and the Project

## RESULT AREA 1: POLICY AND REGULATORY IMPROVEMENTS TO FOSTER PARTICIPATORY USE OF WATER ARE IN PLACE

### 1.1. Gaps in the policy-regulatory environment identified, a strategy for policy regulatory improvements and a road map for improved water resource management developed and agreed upon amongst stakeholders

**Pre-project situation:** Despite ongoing improvement of legislation in the water sector, (a National Water Policy, National Water Program, RA Water Code, etc.), before the start of the project, all stakeholders recognized the need for further improvement of a legal and regulatory framework. It included the legislative gaps to foster participatory management and use of water resources which was the main focus of the project. The absence of well-developed culture by decision-makers to initiate a multi-stakeholder discussion, the lack of strategic approach, and a clear roadmap hindered the development of comprehensive legislation to facilitate actions towards efficient management and use of groundwater resources in Ararat Valley.

The USAID PURE Water project assisted the Armenian Government by contributing to a participatory and strategic approach to legislative changes to facilitate the participatory management of groundwater resources.

### Achievements

- **A sound basis for the GOAM is in place for comprehensive policy and regulatory improvement to foster participatory use and efficient management of water**

#### 5 legal documents have been drafted:

- Assessment of Policy and Regulatory Framework of Water Resources Management and Elaboration of Ways for Improvement” (Legal Assessment) (**Annex RA 1-10**)
- Water Resources Participatory, Transparent and Accountable Strategy and Road Map (Strategy and Road Map)
- RA draft law on Water Users Associations (**Annex RA 1-5**)
- RA draft law on Environmental Information (**Annex RA 1-1**)
- RA draft law on Environmental Policy (**Annex RA 1-4**)



The policy and regulatory improvement process were based on a **participatory approach** involving all stakeholders at local and national levels. The Legal Assessment drafted by the project team has been widely discussed with target community mayors, municipal staff, CWGs, and CSOs WPAN and finalized based on the received input.



Meeting with communities, CSOs, and experts on Legislation Gap Assessment

A Taskforce (a Strategy Taskforce) was created representing relevant ministries agencies, local governments, fish-farms, international organizations, CSOs, and experts (**Annex RA 1-12**). The Strategy Taskforce aimed to discuss and develop a Strategy on participatory, transparent, and accountable water resource management with its implementation of Road Map in the course of a series of sessions. The draft Strategy and Road Map has broadly discussed with target communities, within WPAN, and with the colleagues of another USAID project - Advanced Science & Partnerships for Integrated Resource Development (ASPIRED). After receiving all inputs as a stakeholder consensus-based document, the Strategy (with its Roadmap) was submitted to the Ministry of Environment and the Water Committee of the Ministry of Territorial Administration and Infrastructure.

### **■ a Strategy Taskforce: 25 members representing 22 institutions**

- RA Government Office
- RA Ministry of Nature Protection (MoNP)<sup>1</sup>
- RA Ministry of Territorial Administration and Development (MTAD)<sup>2</sup>
- RA Ministry of Agriculture (MoA)<sup>3</sup>
- RA Ministry of Health (MoH)
- RA Ministry of Justice (MoJ)
- RA State Committee of Water Economy (SCWE)<sup>4</sup>
- National Assembly Standing Committee on Territorial Administration, Local Self-Government, Agriculture and Nature Protection (NA Standing Committee)
- World Bank, Armenia
- UNDP
- EU Water initiative plus project
- OXFAM
- FAO
- PURE Water WPAN
- American University of Armenia (Master of Laws graduate program (LLM))
- AUA Acopian Center for the Environment
- Vedi community
- Yeghegnut community
- USAID ASPIRED project
- UFSD
- CWP
- ELRC, YSU
- Ecoteam NGO

### **■ 185 citizens - 146 women, 39 men, and 15 youth participating in Strategy development process**

<sup>1</sup> Renamed into RA Ministry of Environment since 2019

<sup>2</sup> Renamed into RA Ministry of Territorial Administration and Infrastructures since 2019 Government restructuring

<sup>3</sup> Included in the RA Ministry of Economy

<sup>4</sup> Now, Water Committee under MTAI

The Strategy and Road Map were the main documents the project committed to deliver. However, in the course of the project, after reassessing the decision-makers' needs the project helped to draft three additional legal documents: draft laws on Water User Associations<sup>5</sup>; Environmental Information<sup>6</sup>; and Environmental Policy<sup>7</sup>. For the last two drafts, funds were leveraged from UNDP- GEF "Generate global environmental benefits through environmental education and raising awareness of stakeholders" project. The draft laws have been developed in close cooperation and coordination with the RA Ministry of Territorial Administration and Development (MTAI Water Committee and RA NA Standing Committee on TALSGAE).



Strategy Taskforce Meeting



Working discussion at the RA NA Standing Committee

For the purpose of working on the Law on Environmental Policy the NA Standing Committee on TALSGAE established a working group. During the discussions of the structure and the first chapters of the Draft RA Law on Environmental Policy the working group members agreed on the need to involve a more resources for receiving a comprehensive input: local and international experts, policymakers, as well as other relevant public and non-governmental organizations. Mary Galstyan, Deputy Chairperson of the NA Standing Committee, officially requested the USAID PURE Water project Chief of Party (CoP) to help in the involvement of an international expert on environmental policy. The PURE Water project, through USAID Armenia assistance, linked them with the USAID Office of Transition Initiatives (OTI) project which normally provides rapid assistance to the urgent needs of the Government.

## 1.2. Improve the capacity of citizen groups to effectively advocate for transparent decision making in water resource management and solicit constructive civil society input for improved policy-regulatory environment

**Pre-project situation:** Base-line study conducted in Ararat Valley at the beginning of the project showed that 55 percent of households were not familiar with their rights and responsibilities as indicated in their agreement for irrigation/drinking water use. During the town hall meetings, conducted in the inception phase of the project half of the problems identified by the target community residents were about better water management and ensuring the rights of water users, which required advocacy efforts.

The process of initiating the development of an Advocacy Strategy by PURE Water revealed that even local activists, local civil society, national CSO on water and environmental issues did not have relevant advocacy skills to voice and pursue handling the water management and rights enforcement issues. PURE Water project base-line study and stakeholder, mapping also demonstrated according to experts the fish-farms and water user associations were among influential stakeholders in water management and use and as big water users were interested in keeping a status-quo in

<sup>5</sup> Regulates participatory, transparent, accountable, and efficient water management by WUAs

<sup>6</sup> Specifies types of environmental information subject to mandatory publication. This relates also to water sector

<sup>7</sup> An umbrella law defining the main principles of environmental policy and relates also to water sector

Ararat Valley. Every 7 respondents thought that the state should enhance control over the use of groundwater resources by fish-farms and only every 4 respondent considered the work of Water User Associations (WUAs) effective.

PURE Water worked in all the aforementioned areas aiming to mitigate the problems and created models to replicate for achieving holistic solutions to the problems.

## Achievements

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- **Residents in target communities and civil society are more vigilant and demanding due to intensive advocacy at local and national levels**

**8,304 water users and other residents (20.7% of the population of target communities) voiced the necessity for water management improvements:**

Among them, farmers, community active groups, fish-farms, young citizen journalists through petitions, social media and media articles, advocacy actions, awareness events, changes in legislation.

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### Advocacy at National Level for Transparent Decision Making in Water Resource Management

At the beginning of the PURE Water project, around 30 representatives of CSOs, CWP, local governments, farmers, created a non-formal **Water Sector Public Advocacy Network (WPAN)** to promote the advocacy for addressing groundwater issues in Ararat Valley. The main target of WPAN was the operation of WUAs, monitoring and control of water usage, irrigation, and drinking water tariffs, and water users' rights. The PURE Water helped the network to develop a Public Advocacy Campaign Strategy (**Annex RA 1-3**), Advocacy Toolkit (**Annex RA 1-14**), and Manual on Public Advocacy Campaign, Planning, and Implementation.

A training-of-trainers session on advocacy campaign planning and implementation were conducted for PURE Water project beneficiaries, particularly the members of the WPAN, community working groups (CWPs), and various active residents from the project target communities to gain skills for planning and carrying out advocacy campaigns in their communities.



Advocacy Strategy Brainstorming Meetings and Advocacy ToT for CSOs and CWGs members

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### WPAN was instrumental to solicit a constructive CSO input at the national level:

- Input on the development of Legal Assessment, Strategy, and Road Map.
  - Advocacy of the draft program of improvement of the legal framework for the efficient functioning of WUAs.
  - Input on the development and promotion of the draft law on Water User Associations.
  - Development and promotion of the draft template of the contract between water users and WUAs.
  - Input on the development of draft law on environmental policy.
  - Advocacy for the water rights, participatory environmental assessment, transparent permitting process.
  - Input on the discussions of legislative changes regarding “secondary water use” and “free water use.”
-

**Legal Assessment, Strategy sections, and Road Map:** At the inception stage of the project, the Legal Assessment, Strategy sections, and Road Map have been discussed in the WPAN sessions. The WPAN members continued their input on the aforementioned documents as Strategy Taskforce members. Besides, a WPAN member, Armavir Development Center shared the document and evolved a discussion at the Open Government Partnership (OGP) Armenia Working Group meeting.

**A draft contract between water users and water user associations:** Based on the Advocacy Strategy action plan (**Annex RA 1-13**), the WPAN initiated the process of making amendments in the draft contract between water users and water user associations. The main concerns were about the terms of the contract and its appendices related to the debts formed and accumulated due to the amounts paid, and the payment options of actual water used by the water user. WPAN drafted the problematic clauses of the contract and organized discussions with the project target communities, council members, active youth, and WUA's representatives of Ararat and Armavir regions. Based on the input of stakeholders, a new model structure of the contract with WUAs was prepared. The full version of the draft contract was circulated among all stakeholders including Water Committee and RoA NA Standing Committee for comments and suggestions (**Annex RA 1-7**).

**RA Law on Water User Associations:** Under the PURE Water project WPAN coordinated the process of drafting a new edition of the RA Law on Water User Associations. The conceptual basis for the new draft law was a document titled "Draft Program of Improvement of Legal Framework for Efficient Functioning of WUAs" developed by the PURE Water project expert. The document suggested key legal and institutional principles for participatory, transparent, accountable, and efficient water management by WUAs. The draft program was discussed and suggestions were provided by WPAN members.

Discussions on the draft law continued with the World Bank, which was included in the Strategy taskforce formed within the PURE Water project. It had a sound contribution to the establishment and sustainability of WUAs in Armenia. Other international stakeholders Eurasian Fund, French Development Agency, and KfW also joined to discuss several problematic issues and many new approaches on the subject and provided their inputs. Suggestions made were considered in the draft law.

Then WPAN brought the deliberation to a higher-level by inviting all key stakeholders - NA Standing Committee, Water Committee, target local governments, CWP members, CSOs, international organizations, and experts-to the discussion of the draft Program. During the two-day workshop, the issues such as the election of WUA management/governing bodies, management issues, dispute resolution mechanisms, supervision, public monitoring and oversight issues, irrigation water prices and tariffs, as well as the formation and the role of regulatory council of WUAs were discussed.



WPAN-initiated Advocacy Workshop on the Draft Law of WUAs

The workshop participants unanimously agreed that the water sector reform must be implemented. Alternative options for irrigation water management can be used for certain areas, where the integrity of the hydro-unit is allowed and technical and economic feasibility is justified. This should be done together with the Water User Associations' recovery

process in order to select the final model/models of irrigation water distribution/supply. Also, there was an agreement on the need for adopting a Concept and a “Law on Irrigation Water,” Law “on Water User Association,” as well as on introducing different pilot models of irrigation water management and supply: by WUAs, commercial organizations, municipalities/inter-municipal unions, state and through public-private partnerships. The event was covered by Yerkir Media TV Company: [Advocacy workshop on policy and regulatory improvements covered by Yerkir Media \(1\)](#)

[Advocacy workshop on policy and regulatory improvements covered by Yerkir Media \(2\)](#)

7 members of WPAN, as members of the RA NA Standing Committee Environmental Working Group members, regularly participated in the discussions of RA draft laws on Environmental Information and Environmental Policy.

**Reuse and free use of water:** Another advocacy action initiated under the PURE Water project related to the legal gap in the reuse of groundwater. Details are in the success story described in the box (See also under the Result Area 3):

#### **SUCCESS STORY: Secondary water use in Political agenda**

A legal gap was identified during PURE's work with fish farms. A fish farm had re-used the disposed water of another fish farm, yet had been penalized by relevant authorities for using water without having a water use permit. The issue of regulation of reuse and free use of water has been discussed with the representatives of the RA Ministry of Nature Protection, the RA Ministry of Agriculture, RA Mining and Environmental Inspectorate, academic institutions, USAID ASPIRED Project and ICARE Foundation as well as with fish farms. All stakeholders agree that there is a need to make amendments to the RA Water Code and relevant Government decisions to fill the legal gap.

The discussion was continued in the fish farms event where the fish farmers shared their best practices on efficient water use. During the event, there was a constructive debate on the topic between fish farmers and the Head of WRMA, RA MNP.

After series of discussions, the Head of WRMA applied to the USAID PURE Water project and asked for a support in joint development of a package of legislative amendments to the RA Water Code (Article 25.1) and RA Government Decision # 128 which marks a good example of behavior change by a decision-maker due to the efforts of PURE Water project. The Project provided a concept and recommendations regarding the amendments, which particularly related to the procedures of provision of water-use permits, secondary (multiple) and free water uses, as well as to the development forms of relevant requests and certificates.

**Advocacy through small grants:** Under the PURE Water project small advocacy grants scheme, WPAN member-CSOs and experts voiced and promoted the solution to several problems prioritized by the Advocacy Campaign Strategy to contribute to more efficient groundwater management and use (**Annex RA 1-9**).

Particularly, cases of water rights infringement in Ararat Valley were identified and applications submitted to the Government for the restoration of violated rights; forms to ensure effective public notification was drafted to access to information on the expected water use permits issuance; water users contract clauses were discussed with legal entity water users to come-up with rights and responsibilities which will be equally fair for water users and water user associations; amendments to the Charter of WUAs was drafted to enhance water users participation in decision making process: consultation with water users before decision-making, representation of farmers and local governments in WUAs management bodies, accountability and reporting to water users; an amendment to the procedure on public notice and consultations were drafted and submitted to the RA Ministry of Nature Protection to increase public participation in the process of environmental assessment (**Annex RA 1-6**).

#### **Local advocacy for efficient water management due to increased capacity of citizen groups**

The PURE Water initiated a series of advocacy trainings and seminars for project target communities to improve the capacity of citizen groups to effectively advocate for transparent decision making in water resource management. As a result of trainings, the representatives of advocacy groups gained general knowledge about the concept of advocacy, advocacy, implementation mechanisms, and tools (how to distinguish between "decision-makers" and their influencers, message development, skills for developing petitions, letters), negotiations and lobbying, monitoring and evaluation.

## “The Might of the Community”: Local capacity and activism contributed to voicing the groundwater problems and achievement of tangible results

- Knowledge on water rights: regaining copies of water user contracts for WUAs (Yeghegnut and Yeraskhahun)
- Petitions to GOAM and NA: The right to drinking water - 1,000 signatures by Aygavan; having a Groundwater preservation day in the national calendar - 2,525 signatures from 7 target communities
- Self-mobilization on ad-hoc issues: ensuring uninterrupted water supply, water quality, customer rights (Aratashen, Vedi, Pokr Vedi, Khachpar)

Seven target communities of Ararat Valley (Ararat region – Aygavan, Khachpar, Vedi and Pokr Vedi; Armavir region – Aratashen, Yeghegnut, Yeraskhahun,) developed **action plans (Annex RA 1-3)** and implemented advocacy initiatives under the umbrella title “The Might of the Community. The issues in the aforementioned communities have been advocated with active citizen engagement.

**Ararat Valley Groundwater Preservation Day:** 7 target community mayors initiated and submitted a Call to the Government and National Assembly of Armenia, inviting their attention to the acuteness of the groundwater problem in Ararat Valley proposing to add September 30 as the Ararat Valley Groundwater Preservation Day to the calendar of key environmental events. The Call reached out to more than 25,000 people online. 2,525 residents of target communities joined the call with their signatures. A roundtable widely covered by media highlighted the need for the protection of groundwater resources in Ararat Valley.

**Regaining copies of irrigation contracts in Yeghegnut, Armavir region:** Water users of Yeghegnut community did not have their copies of irrigation contracts signed with the Water User Association. After knowing their water rights, with the help of the local advocacy group they decided to demand copies of contracts. The issue was resolved by negotiations with the WUA, without official communication. The WUA representative handed the copies of the irrigation contracts with attachments to the village residents in presence of the advocacy group members.

### **Addressing the drinking water problem of Pokr Vedi community:**

The broken drinking water pipe of Pokr Vedi, Ararat Region, affected the quality of drinking water. The local advocacy group capacitated under the project mobilized residents to voice the issue and seek a solution. Drinking water samples were taken and sent to the Veolia Jur, the service provided along with the signatures of the community residents. The service provider responded with a promise to put into operation a daily regulation reservoir in the neighboring community that would feed also Pokr Vedi and renovate 2.5 km of a water pipeline to channel water to the community. To date, the water network remains in bad shape. Especially, in summertime emergencies in the drinking

### SUCCESS STORY- **Aratashen:** MIGHT of the Community

#### “We demanded, followed up, and succeeded”: addressing unstable electricity supply ensured stable water supply

The problem of the poor condition of electricity supply in the community of Aratashen became critical. The solution of the issue became even more urgent as the irrigation season started (the whole community’s land is irrigated by the water pumped from boreholes). Emergency electricity cuts and interrupted supply caused dissatisfaction among the residents.

After several earlier attempts to draw attention of relevant authorities to the issue, the local advocacy group members asked the Mayor of Aratashen to send again a letter this time to General Manager of “Electric Network of Armenia” Company. The response was not delayed: they informed that with the aim to upgrade, Company ordered the draft design documents which have been already completed and delivered to the Contractor organization for the implementation of the relevant works by the 2019 investment project.

Construction works were not delayed either. The work on upgrading the poles and replacing cables started soon in the community: “The problem was finally resolved,” said the members of the local advocacy group Zhora, Nonna and Ruzanna. “We demanded, followed up, and succeeded,” they stated.



Replacing electricity poles in Aratashen

water were becoming more frequent. The local advocacy group helped the residents to call the Veolia Jur 1-85 hotline and receive solutions on ad hoc emergencies.

**Drinking water quality issue in Khachpar community, Ararat region:** The drinking water in Khachpar community of Ararat region had an unpleasant taste and smell for days. The Khachpar community Advocacy group members alerted “Veolia Jur” company, by calling continuously on the company’s “1-85” hotline. Two days later, “Veolia Jur” employees arrived in the village and took drinking water samples from different parts of the village. A considerable amount of residual chlorine was found in sampled water, which was the cause of the unpleasant taste and smell. The problem has been resolved.

**Drinking water issue of Aygavan community:** Access to drinking water is the key problem of Aygavan. Every day residents wait in a long line to collect water in buckets from the only tap available in the community. The issue was debated on TV by Ayagavan municipality, government, and water supplier representatives. An article was published in a reputable investigative electronic media Hetq. The local advocacy group mobilized the community residents to sign a petition. The package of 1,000 signatures from residents of Aygavan community was sent to the RA Prime Minister of RA. The Prime Minister assigned the MTAI, Ararat Regional Governor Office to find solutions. Based on the inquiry of the MTAI Water Committee the service provider, Veolia Jur responded that the drinking water system was obsolete with a large amount of water losses. The conclusive letter of the Water Committee to Aygavan Municipality stated that the issue will be discussed in the framework of upcoming investment programs.

To date, the problem remains unresolved.



Aygavan: this is how the residents usually start their day for many years now. Petition to Prime Minister

### 1.3. Contribute to the improvement of participatory practices of the state-run Basin Management Organization of the Ararat Valley, promote the involvement of BMOs in raising public awareness of basin management in Ararat Valley

**Pre-project situation:** Basin Management organizations (BMOs) are acting at the local level and are responsible for water basin management according to the management plans. BMOs as institutions had been supported by USAID earlier, however, they still need to improve their transparency and outreach capacities. In reality, they still remain largely dependent on the RA Ministry of Nature Protection (MNP) whereas conceptually, they meant to be decentralized local bodies for basin management.

As part of the policy dialogue and advocacy, the PURE Water project, within the limits of available project resources, worked with the RA MNP and its WRMA to improve consultation and participation practices at the local level to facilitate civic engagement in decision making with basin management in Ararat Valley. The Ministry reiterated that strengthening BMOs and decentralization of water resource management remained its priority. It also committed to increase public participation and role in water resources management.

The PURE Water project had planned to address the following issues:

- Awareness-raising of target local governments of the BMO activities
- BMO capacity building through public participation and information provision and exchange
- Making BMOs more active and fostering cooperation with the basin communities' residents through presentation of BMO daily activities, WUP issuance processes, and the measures implemented on the basin level.
- ToT for BMOs to train and assist water users in using the water use permitting online platform developed and provided by the project to the RA MNP.

The project target communities were located in Ararat, Akhuryan or Hrazdan basin management areas. To promote cooperation between BMOs and project target communities, PURE Water project organized a series of introductory meetings between Ararat, Akhuryan and Hrazdan BMOs representatives (**Annex RA 1-8**). BMOs shared with local stakeholders the information on their day-to-day responsibilities and functions as regards each BMOs service areas, including rivers and natural lakes, and communities served as well as about the process of issuance of WUPs.

Based on the agreement with MNP, USAID-funded PURE Water and ASPIRED projects, within their mandates, committed to support MNP in improving e-governance and transparency, particularly, improve and upgrade water resource cadaster and create an opportunity for simplified on-line water-permitting.

PURE Water project particularly developed the simplified on-line water-permitting platform. The role of BMOs during operation of this system is important. They would be able to coordinate the process of WUP requests directly from their offices. Within the PURE Water project, BMO representatives' capacities were strengthened to assist the water users in the online application process. Water Use Permitting Platform User Manual has been developed to facilitate the practical use of the on-line platform.

## Challenges and Recommendations

### Challenges

- Compared to the situation at the beginning of the project the level of activism and capacity of many residents in the target communities considerably increased, which can be attributed to PURE Water interventions. In spite of this, the majority of residents remain passive and not engaged. Overall, the level of civic engagement, voicing the problems and pursuing final solutions remain low due to prevailing traditional/cultural constraints, especially in rural communities, where it may not be "honorable" for men to publicly speak about the problem and criticize somebody and for women to participate in community discussions.
- As it was already mentioned, the Government Cabinet before the Velvet Revolution was not quite enthusiastic to follow-up on the implementation of the jointly developed Strategy and Road Map, although USAID has designed the project based on the Government priorities.
- The previous issue was resolved after the Velvet Revolution by the new Cabinet which was open and cooperative. However, high turnover of the leadership in partner ministries and agencies slowed down the relevant activities foreseen by the project work-plan.
- Good partnership with the RA NA Standing Committee and RA MTAI Water Committee resulted in the drafting of three legal documents. These units of executive and legislative bodies were ready to initiate the submission/circulation of the draft laws to the NA for approval, however, the constitutional amendments foreseen for March had shifted the Government priorities and resources to preparation and holding of the Referendum.
- The outbreak of COVID-19 pandemic and announcement of the state of emergency in the country halted the finalization of the legislative process under the project.
- BMOs were not quite enthusiastic and motivated to provide input for and learn from the project. According to the project observations, these were mainly because of the following reasons:
  - BMOs are understaffed to implement assigned responsibilities. Each of them has only 2-3 staff members each responsible for the water basin covering dozens of communities and large geographic areas.



- BMOs still are under the pretty strong control of MNP. The discussions of PURE Water with MNP indicated that the WRMA mostly directly implements some functions of BMOs because they lack resources and capacity. In fact, the functions prescribed by the Water Code for BMOs actually were not fully granted to them and their role are limited to presenting the WRMA their observation on WUP applications and sending information about the situation.
- Communities within the BMOs service areas almost are not engaged in the decision-making process regarding water use permitting process and in basin management planning, in general.

## Recommendations

- The Government needs to further promote decentralization of water resource management, create conditions, and provide resources for BMOs to fully implement their functions as prescribed by the Water Code.
- BMOs capacities need to be improved to implement efficient basin management in their respective service areas.
- Civic engagement should be promoted in the course of the basin management process - starting from the development of basin management plans to the issuance of water use permits. The cooperation and coordination should be established between BMOs and communities located in their service areas to ensure wider transparency and participation in basin management of the service area.
- Follow-up the adoption of the Laws on Water Users Association, Ecological Policy, and Ecological Information by the RA National Assembly
- Assist WRMA in drafting amendments to RA Water Code and RA Government Decisions that regulate re-use and free use of water.
- Community activists, CBOs and CSOs, as well as development organizations need to make continuous efforts to entrench ownership and responsibility of citizens for the decisions taken in their communities through their direct participation. Continuous actions will mature over time civic activism and engagement and will turn them to habitual practices, behavior and culture.

## RESULT AREA 2: PARTICIPATION IN AND OVERSIGHT OF WATER RESOURCES ENSURED TO IMPROVE EFFICIENCY

**Pre-project situation:** The Water Code recognizes the importance of public participation and awareness in the water resource management process, particularly, as regards to basin management planning, water permits, tariff strategy and water standards. The Code defines roles for civil society organizations and citizens in the protection of water resources and provides an opportunity to appeal decisions on water permits. Transparency and public participation are necessary especially during the process of issuing water use permits. Reports by USAID (2014) and World Bank (2015) stated that the permitting process was not quite streamlined and transparent. The application process took unjustifiably long due to huge bureaucracy. Potentially affected stakeholders did not have an opportunity to study any reports on the impact of the proposed application and the proposed permit conditions before the final decision. The Baseline Study conducted at the beginning of the PURE Water Project revealed that, only **4 percent** of respondents participated in a training or discussion related to water resource management, water use, water quality/ access, or basin planning. Over **60 percent** of water users in Ararat Valley did not trust WUAs, for the vast majority of them, the main sources of information were their co-citizens and local authorities. Community residents, including youth, local governments and CSOs were not motivated and skilled to initiate public monitoring of management and use of water resources.

The PURE Water project helped water users to acquire and apply creative public monitoring skills and tools with the engagement of youth, make the activities of WUAs as well as water use permitting process more transparent and streamlined.

## 2.1. Develop public oversight mechanisms

### Achievements

- **Increased transparency and accountability are in place due to introduction of consumer feedback tools using information communications technologies**
  - A simplified online water-use permitting platform for RoA Ministry of Environment is in place.
  - A website/portal for Armavir WUA to increase awareness and simplify irrigation water requests is in place.
  - A model upgraded MMIS for water problem raising and complaints is in place for Vedi municipality.
  - A phone survey instrument is in place as an oversight and feedback tool for target communities.

*A simplified online water-use permitting platform for RA MoE:* The Government showed an exceptional willingness to simplify the water user permitting process and make it more transparent for water users and other stakeholders. During a meeting with USAID Mission Director, the Minister raised the need for online water use permitting platform.

Valuing the importance of addressing the problem the USAID asked PURE Water and ASPIRED projects to assist the Ministry in developing and operationalizing of the platform. For that purpose, the PURE Water, ASPIRED and the



Simplified water permitting platform for the RA ME



Training- Online water permitting platform

Ministry signed a tripartite agreement on cooperation. The platform has already been developed by PURE Water experts. It has been officially tested and presented to the Ministry and other stakeholders. Now the Ministry is working on technical details to make it operational.

Once operated, not only Ararat Valley but also water users throughout Armenia will be able to apply for a water use permits or renew the existing ones directly from their computers without visiting the Ministry.

The project helped to conduct trainings for farmers, fish-farms, WUAs, local governments and BMOs. The online user manual was prepared which clearly states the steps of applying and

receiving the water use permit and hints water users how to submit their applications (**Annex RA 2-13**).

*A website/portal for Armavir WUA to increase awareness and simplify irrigation water requests:* WUAs are the irrigation water managers. They have been perceived by farmers as one of key stakeholders which takes responsibility for inefficient water management and use in Ararat Valley.



The website for Armavir WUAs

Their activities have not been considered transparent and participatory, whereas by their mandate they meant to express interests of water users and engage them in water governance.

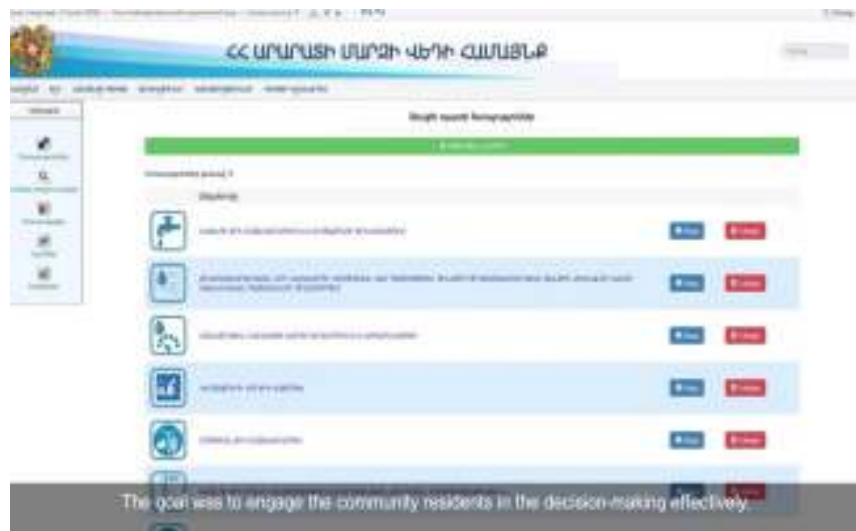
The PURE Water project initiated a dialogue with WUAs engaging them in decision-making process at policy level (“Draft Law on WUAs”) and facilitating WUAs transparent practices in relation to their members – water users. Such an approach turned out to be fruitful. One of WUAs, Armavir WUA took a bold decision asking the project to help to develop a website for the organization. Following consultations and discussions with the Armavir WUA and the Water Committee, the young group of project experts developed the website: <http://armavirwua.am/>. The website included all decisions by WUA management bodies, the budget and expenditures of the WUA, the water sector legislation, the sector news, and other useful information for water users. The site also is an online platform for water users.

It provides an opportunity to submit an online request for irrigation water after calculating with a special calculator on the website the amount of the water needed for irrigation.

The Water Committee, as a state coordinator for a decent irrigation water supply for water users, was quite supportive in understanding the importance of having a website.

Based on the project advice, the Water Committee intends to further develop the Armavir WUA platform to connect it with the Committee database on expenditures and arrears of water users, so that each individual water user with its own personal account could enter and check his/her financial status. Such transparent practice will really increase the trust of water users toward the WUA. After the successful pilot, it officially requested the project to help to develop a similar website for all WUAs in Armenia.

*A model upgraded MMIS for water problem raising and complaints for Vedi municipality:* The Municipal Management Information System (MMIS) is an online platform established and developed by the GOAM with support from multiple donors including GIZ, USAID and others. MMIS serves the local governments across the country for their day-to-day administrative management as an intranet and as a municipal website. The Vedi Mayor



Upgraded MMIS of Vedi with a sub-section for water services

received regular applications and complaints from community residents as regards different problems and emergencies in the drinking and irrigation water. As in other communities of Armenia, the residents used to come with all problems they face to the municipality, whereas in Vedi the addressing problem with drinking and irrigation water is not a municipal responsibility. Despite that fact, the Vedi Mayor always has tried to do his best to raise residents’ cases with relevant authorities and service providers, which was not quite efficient in terms of using the Mayors busy time and solving the issue. The PURE Water helped the Vedi Municipality to upgrade the MMIS by developing a [Water resources management subsystem](#) and integrating it into the MMIS.

It made possible to register a variety of documents, service delivery procedures, the complaints by water users, etc. The system is linked to websites and information resources of sectorial organizations and agencies (Veolia Jur LLC, Public Services Regulatory Committee, MTA/ Water Committee and MoH).

The municipal staff was trained to operate the system. The system has an opportunity for organizing online surveys, presenting media coverage (videos, pictures). Visitors of the site may disseminate the posted materials via social networks, leave comments. Water Portal User's Manual was developed and provided to all the respective parties (**Annex RA 2-21**).



Installation of the phone survey instrument

*A phone survey instrument as an oversight and feedback tool for target municipalities.* Another electronic instrument provided by the PURE Water project to target municipalities as an oversight and feedback tool was a computerized phone survey instrument. An introductory meeting was organized with the municipalities to present the electronic surveying tool to them. As a result, the phone survey instrument was installed in 10 municipalities: Vedi, Pokr Vedi, Burastan, Berkanush, Aygavan, Khachpar, Yeghegnut, Yeraskhahun, Aratashen and Guy.

The phone survey instrument allowed the municipalities to input 8-10 questions on different aspects of drinking and irrigation water management and used. Then after the command, the computer randomly selects up to 400 phone numbers from the municipal database and makes calls. The call operator asks the questions to each respondent and ticks the bullets relevant to the answers. The system allows to prepare tables and charts and tables for reporting. After installation, PURE Water developed training modules and user manual and trained the municipal staff in 10 communities to use the phone survey instrument. All 10 municipalities conducted surveys to assess drinking and irrigation water supply services and also receive residents' feedback.

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- **Residents in target communities are more vigilant and demanding due to community monitoring schemes for water quality and water efficiency**

- Local Government/Civil Society collaboration small grants.
- Citizen Scientists monitoring.
- A social audit by residents.
- Citizen Journalists' investigations.

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**Community/CSO small grants:** Civil society in cooperation with local governments conducted monitoring of efficient management and use, as well as quality of water resources in Ararat and Armavir regions (**Annex RA 2-9**).

*Monitoring to find out if drainage water is usable for irrigation (Yeraskhahun, Armavir marz):* Huysi Metsamor CSO in cooperation with "Melioration" CJSC implemented monitoring of drainage water in Yeraskhahun community from September to December 2018 to identify if drainage water in Ararat Valley could be used for irrigation. Findings of the monitoring indicated that the drainage water in terms of quality and quantity could be used for irrigation purposes. Another success of the initiative was that the target municipalities, residents, as well as relevant state authorities were interested in the successful implementation of the monitoring and provided their assistance.

*Monitoring the quality of drinking water in Pokr Vedi by residents and civil society:* Khor Virap NGO studied the materials of which the households' wells in Pokr Vedi community were made of to figure out to what extent the stored water meets the standards of drinking water quality. At the very beginning during their observations the NGO identified that part of water coming from the neighboring community to the village is passing through the broken pipes. Rapid public awareness activities were initiated and pipes were reconstructed. Khor Virap NGO also capacitated households

(including women and youth) on how to take drinking water samples from their wells. Youth volunteered to take drinking water samples from the households' wells. A survey was conducted with 100 residents of Pokr Vedi: 45 agreed to take water samples from their private wells.

*Monitoring to identify gaps for becoming a new subscriber of Veolia Jur:* Vedi community decided to monitor to what extent the water supply schedule complies with the one specified in the subscribers' contracts and also what kind of price quotes have been offered by Veolia Jur to different citizens for becoming a new subscriber. 10 case studies were conducted on the challenges faced by the residents while applying to Veolia Jur for becoming a new subscriber. The studies identified there are not clear pricing policies for becoming a new drinking water subscriber. The findings have been summarized in a brochure and discussed in a meeting between Vedi municipality, Veolia Jur and PURE Water held in the Infotun at Armavir Development Center.

**“Citizen Scientists” Actions:** Young people from Ararat Valley and from other regions of Armenia were actively involved in the monitoring activities aiming at efficient management and use of ground water resources in Ararat Valley. Over 80 young people responded to the announcement of the PURE Water and submitted applications to participate in the Idea Harvest, an idea contest (**Annex RA 2-2**). Young applicants received trainings in integrated water resource management, got familiar with the basics of drinking and irrigation water quality and its link to human health and the need for water saving. 40 young people were selected to participate in the Idea Harvest as **“citizen scientists”** (**Annex RA 2-1**). They formed small teams and through pitching exercise presented innovative solutions to the jury consisting of decision makers, donor representatives, and specialists. 4 teams received awards and implemented the following initiatives (**Annex RA 2-3**). USAID support was leveraged by the Global Coca-Cola Foundation:

*Let's drink efficiently:* Cold drinking fountains are one of Armenia's visiting cards and are an integral part of the urban landscape. However, today there are two problems: careless flooding of water from the fountains and decreasing water loss. A group of

resourceful “citizen scientists” representing ByoorAkn youth NGO proposed the “ByoorAkn” mobile application, which would allow a thirsty person to identify the nearest drinking fountain and show the direction to reach it. In order to use the water of the fountain more efficiently, as a pilot, in Vedi valves were placed on 3 drinking fountains allowing to make

## SUCCESS STORY:

### Cooperation between investigative journalists and communities

#### Partnership for quality drinking water and better irrigation services

Combining media coverage with monitoring activities increased the impact of the project the project.

*Legal Progress Union CSO* monitored the compliance of the drinking water quality supplied through pipes and sold from tanks with the Armenia standards in 3 communities of Armavir marz – Yeghegnut, Miasnikyan and Noravan. The monitoring results of the Legal Progress Union project was provided to ALT telecasting, LLC. The [Article](#) was published covering the results provided by “Standard Dialogue” expertise laboratory, which indicated that the quality of the water sold from the tanks does not correspond to the RA standards. At the same time the article presented risks caused to human health due to the incompliance of water quality with the established standards.

*Hetq investigative journalists CSO* monitored the water users' satisfaction of both drinking and irrigation water supply services in Yeghegnut and Aratashen communities. The investigative journalists studied the water users' complaints on water user associations (WUAs) services, identified and voiced about the water users' rights violations as well as recommended solution which relevant authorities never dealt with. Articles published in the course of the monitoring are available here:

<https://hetq.am/hy/article/98712>,

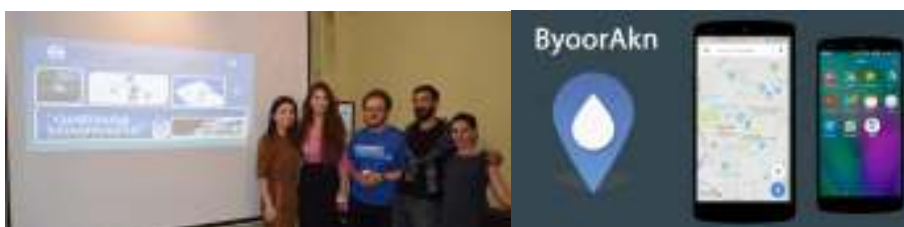
<https://hetq.am/hy/article/98648>;

<https://hetq.am/hy/article/91631>;

<https://hetq.am/hy/article/90526>;

<https://hetq.am/hy/article/90410>;

<https://hetq.am/hy/article/90128>.



Mobile Application Presentation

fountaining stronger when drinking and weaker when getting away from it. This would save water 3-4 times without switching it off.

*Trash Net: Cleaning irrigation water from waste:* Innovation does not necessarily depend on high technological support. The project implemented in Pokr Vedi by a group of “citizen scientists” aimed to supply irrigation water to the community without any domestic, plastic or agricultural waste. The idea was to design and prepare “trash nets” which would be placed in irrigation canals and catch garbage thrown in the canals. The group closely cooperated with the active community members, engineers, waste management company, and Artashat WUA. The engineers supported to design the trash net, help in waste collection and removal. The innovative idea was piloted in one of the sections of Artashat canal which supplies irrigation water to Pokr Vedi and neighboring communities.



“Trap for Trash” in irrigation canals



Online water calculator

*Water Self-Governance:* Concerned with the problem of efficient irrigation water management in Ararat Valley, the young people from Gyumri proposed to develop a website for Armavir WUA ( [www.wuarmavir.am](http://www.wuarmavir.am) ) that would allow water users to independently calculate the amount of needed and factually spent water (details are available at the beginning of the section 2.1.).

*“Smart” Water-Metering System:* The inefficient use of water resources, incomplete databases, lack of monitoring of the irrigation system, and the water-metering technical problems provoked this group of “citizen scientists” to think of making the whole system “smart.” To this end, they propose to install a water meter on the head of the land plot, the data of which will be inserted into a database through “smart” technology and become

available on the mobile phone of the water user. As a result, the water user will pay for the actually spent volume of water. The water user will have to make a one-off payment for the water meter and equipment and become its owner. Alternatively, communities may become the owners and maintain the equipment. This equipment is mobile and may be easily operated even by non-professionals. The first trial of the pilot version took place in Yeraskhahun community with participation of Water Committee and community representatives (**Annex RA 2-10**).



Test trial in Yeraskhahun community

**Monitoring by “Citizen Journalists”:** “Citizen Journalists” had several roles in the PURE Water project: on one hand they had monitoring function – to identify, investigate groundwater related problems, collect information, on the other hand, they voiced these problems through different communication channels thus increasing awareness of groundwater problems in Ararat Valley.

They received a 3-day training by the Media Initiative Center which ran the USAID-funded “Media for Informed Civic Engagement” (MICE) project and cooperated with PURE Water project for this activity. The training was followed by on-site coaching and ongoing consultancy by a media professional. During the project, “citizen journalists” identified a number of problems in their communities. For instance, they identified, raised and investigated the problem of ambiguous procedures related to becoming a customer of the drinking water service provider. Some of their articles have been published in reputable newspapers (for instance, “Aravot” daily) and were posted in social media. The journalists covered the PURE Water key events, and interviewed relevant local and central authorities on different problems in water sector.

Below are some of the articles published by “citizen journalists” within the PURE Water project (**Annex RA 2-1**):

- *A tiny stream is offended*
- *Orchards are watered with sewage water*
- *An interview: the Ararat Regional Governor*
- *An interview: the Pokr Vedi Community head*
- *For Decades We Have Used More Water than Allowed – an interview with the head of Water Committee*
- *An article about the drinking water problem in Aygavan community Investigation: how to become a drinking water customer? Ambiguous procedures.*

**A “Social Audit”:** *public monitoring of water managers/service providers budgets:* Under PURE Water project, the community active groups, youth, local CSOs initiated “social audits” to raise transparency of local governments and WUAs in using public resources in water sector. Main targets for the “social audit” during the project life were expenditure, technical recordings, reports related to the community cost-share committed for small-scale infrastructure projects within the project, and expenditure of WUAs for the management and maintenance of irrigation system. The PURE Water project encouraged and created an enabling cooperative environment where community residents, CSOs as well as entities subject to “social audit” would feel comfortable to share information, experiences and ideas

## SUCCESS STORY:

### Citizen Journalists: Shining a Light on Water Management in Armenia (<http://globalwater.org/>)

“Mane Minasyan lives in Vedi, a small town in the heart of the Ararat Valley in the west of Armenia. At 19, she is raising awareness of groundwater depletion and prompting behavior change in her community. Mane received her investigative journalism training from USAID’s Participatory Utilization and Resources Efficiency of Water (PURE Water) project, which is working to increase water productivity, efficiency, and quality in the Ararat Valley by enhancing citizen participation in water resources management. PURE Water-trained citizen journalists are empowered to investigate groundwater-related issues and voice these problems through various communication channels. To date, the project has trained 51 citizen journalists in four communities who have published more than 50 articles, reaching nearly 1,700 Armenians. Mane’s work is an example of how this training has directly contributed to improving water management in one such community (<http://globalwater.org/>)

“Mane explains that thanks to support from PURE Water, the people of Vedi “know there’s a journalist in their community,” which has contributed to improved water management on the part of the town’s municipal leadership. She has also inspired action among town residents. “Before, people might see an issue and just complain about it,” Mane says. “Now, they see an issue, take a picture, and send it to me. I post it on the municipality’s webpage, and there’s a response in 15 minutes or less.” (<http://globalwater.org/>)



Mane Minasyan (left) in “citizen journalists” training

Due to the success in identifying and covering the water sector problems in Ararat Valley under the PURE Water project, Mane was given an opportunity have an internship in Hetq a famous online investigative journalism media in Armenia. She has already established an NGO to promote addressing different community issues.

with each other.

5 target communities - Aratashen, Yeraskhahun, Yeghegnut, Vedi and Pokr Vedi and Armavir WUA were included in the process of social audit. After the “Participatory Monitoring and Social Audit” training attended by the representatives of target communities residents local governments, the WUA and local CSOs, the social auditor teams identified the subject and scope of the social audit. The list included journals of water distributors, spending of collected revenues for irrigation by Armavir WUA, reports of the WUA about the maintenance of the networks, cost-share documents for small-scale infrastructure projects by target communities.

The social auditors came up with the 2 methods to conduct “social audit:” 1) conduct it in the offices of local governments and the WUA and 2) preparation and presentation of a report to public by local governments and WUA based on the scope of the request submitted by the social auditors’ teams.

After conducting the social audit in 5 communities and in Armavir WUAs Social Audit Reports (**Annex RA 2-16**) have been prepared and presented to the residents of target communities.

The PURE Water Project team conducted a *number of water monitoring activities in the partner communities*.

The water monitoring activities aimed at enhancing the level of public awareness and participation (particularly by the youth and women) in the preservation of water resources and in the base monitoring of water resources in their communities.

The monitoring activities consisted of two stages: educational seminars/community meetings and field works.

#### SUCCESS STORY:

##### Transparent Water Governance: Armavir WUA opens-up its financial and technical records for social auditing by water users

Armavir WUA, providing irrigation water services for many communities in Armavir region and particularly some of the project target communities, demonstrated a unique commitment to be more open and transparent to its main constituents – irrigation water users, with the support of the PURE Water project.

The WUA willingly accepted the suggestion by the PURE Water project to be included in the process of social audit arranged by the active water users of target communities. The cooperative approach of social audit adopted by the project further encouraged the WUAs to put a confidence in the auditing process.

The WUA was invited to trainings for active water users - “social auditors.” The “social auditors” were provided with knowledge on WUA’s financial flows, budget monitoring and audit implementation mechanisms, as well as got skills on budget auditing tools, such as analyzing the budgets and mapping the projects criteria. After the training, the “social audit” team requested the budget of the “Armavir” WUA, conducted the audit and prepared a Social Audit Report. The report was shared with the WUAs and jointly presented to communities’ residents during the public hearings. The participants shared their perspectives on further use of social audit tools in their communities.



Social Audit training

Such open governance practice served as a stimulus for “Armavir” WUA to ask for another support from PURE Water project in developing a website (the first ever for any WUA in Armenia) where all financial and technical information of the WUA would be available. Currently, this request and commitment also became to reality: [www.armavirwua.am](http://www.armavirwua.am) .





LAMOTTE water monitoring educational tool kits

For field works, the project team procured Water Test Education Kits offered by the American LAMOTTE company, and were widely used during water monitoring trainings with schoolchildren, teachers, and young activists. Water Test Education Kit allows to immediately assess the content of pH, dissolved oxygen, nitrates, and phosphates coliform bacteria in the water, water turbidity and temperature. The teachers and

schoolchildren tested the presence and content of chlorine in the drinking water using the Test Kit as well as quality of outgoing water of fish-farms (**Annex RA 2-11**).

## 2.2. Build capacities of community stakeholder through target capacity building activities in the use of public oversight mechanisms to monitor water quality and quantity, usage and basin planning and management.

Capacity building was one of the key components of the PURE Water project. The baseline study revealed that before the project only 4% of the residents in Ararat Valley participated in training or discussion related to water resource management, water use, water quality/access, or basin planning. The training and seminar participants' age-group varied from 46-75 years. Surprisingly and sadly, youth didn't participate at all. As mentioned before, the baseline in Ararat Valley also showed a very low citizen participation (around 5%) in decision-making regarding water problems. Poor capacity was one of the key reasons for low civic engagement.

Therefore, the project had a challenging task to build capacities of all community stakeholders, especially youth, to promote their involvement in advocacy, monitoring, efficient management and use of water resources. Capacity building activities included environmental trainings, seminars with a focus on water resources for youth and schoolchildren, community residents, and target local governments as well as special trainings to capacitate stakeholders in using different advocacy, oversight and feedback tools provided under the project.

### Achievements

- **Stakeholders of target communities, including schoolchildren, youth, and women, are better educated and aware of water issues, as well as of their water rights, and protection mechanisms**
  - Environmental education for the teachers and schoolchildren of target communities.
  - Eco camp and Eco clubs for schoolchildren.
  - Environmental seminars for community residents.
  - Educational and public information materials.

#### 2000 Public information materials delivered

Overview: Ararat Valley Water Resources; Q&A drinking and irrigation water; Citizen participation; Water Users Rights and Responsibilities; Water Directory, Best practices of fish farms, desktop calendar, bookmarks for children

**Environmental education for the teachers and schoolchildren of target communities:** The PURE Water partnered with Armenia Tree Project (ATP) to carry out educational activities for schoolchildren in partner communities as a part of public education and awareness campaign. The goal was to change the schoolchildren behavior and increase understanding with regard to efficient water management and use.

Training of trainers (ToT) was conducted by ATP for Ararat and Armavir regions 22 teachers of environment, biology and chemistry to increase their knowledge on environmental and health issues related to the management and use of the Ararat Valley water resources. The teachers were provided with "educational tools" and were introduced to techniques that would make the presentation process of the problem more interesting and effective for their schools. Experts from USAID-funded Partnership for Enhanced Engagement in Research/Sustainable Fisheries for Enhanced Water Resources in Armenia (PEER / SFEWRA) and the ASPIRED

projects contributed to the training with presentations on "Ararat Artesian Basin and Groundwater" and "Water Saving Technologies (**Annex RA 2-15**).

Equipped with additional knowledge and skills the teachers conducted environmental classes for the schoolchildren of all 12 schools in project target communities using a Handbook for School teachers developed and provided by the project.

In-school classes were combined with practical exercises and educational tours to fisheries, artesian water basin in Aknalitch community, and Karin nursery (**Annex RA 2-18**).

- In fisheries the schoolchildren learned how fisheries were functioning, got familiar with the best practices of some fish farms in applying groundwater saving technologies. Concerned with the issue of depletion of groundwater resources they jointly put together a letter to the large fisheries calling them to save the scarce groundwater resource and apply water-saving technologies. The letter was published and further disseminated by a reputable Hetq online media (A Letter to Large Fisheries by the Schoolchildren from Ararat Valley).
- The teachers capacitated by the PURE Water project experts tested the quality of the water incoming to and outgoing from the fishery pond by using the water monitoring toolkits acquired by the project and donated to the school laboratories.
- During the visit to the Aknalitch Lake schoolchildren learned how it is fed as an ecosystem, they learned about the Ararat Valley groundwater problems and practiced out water tests using the tools provided by the project.
- In Karin tree nursery the students learned about drip irrigation and saw how it worked in reality.

**Eco camp and eco clubs for target community schoolchildren:** A two-day **Eco Camp** was organized at "Machanents" House in Vagharshapat for schoolchildren of the project partner communities from Ararat and Armavir

#### SUCCESS STORY:

##### Vedi School Student Narek Ohanyan Voiced the Ararat Valley Groundwater Problem during the Environmental Education Network meeting at UN

Following the series of events mentioned above, Narek Ohanyan from Vedi #2 Basic School, who had performed very well and made an impressive presentation during the study tours on the topic of water, got an opportunity to make a presentation at Environmental Education Network meeting at UN Conference hall in Yerevan. His presentation covered a wide range of issues related to water and included topics such as Ararat Valley artesian basin, groundwater resources, inefficient use and management of water, water footprint, and tips on saving water. He also presented what activities have been implemented so far in the framework of PURE Water project.



Narek's Presentation, UN.

marzes. The schoolchildren were selected based on active participation in specialized courses and study tours organized in their schools in recent months and excellent academic performance. The campers combined learning with active games and performances, preparing to set up eco-clubs in their schools. After the camp, the schools participated in creation of messages to be included on the posters as 10 commandments for efficient water management and use. **(Annex RA 2-14)**. The best and most relevant messages were selected and the poster and leaflets have been printed for distribution among the schools. Three schools were selected to host **eco-clubs** at their schools. Vedi, Yeraskhahun, and Baghramyán schools where the schoolchildren of Berkanush and Burastan target communities attend. The eco-clubs should develop their annual action plans and implement them to participate in an annual performance award nomination by ATP.

**Thematic environmental seminars for community residents:** PURE Water conducted series of environmental seminars and training for the target communities' residents, including youth and women, as well as for local governments. The training seminar topics included:

- *Integrated Water Resource Management (Annexes RA 2-27; 2-26; 2-19; 2-20; 2-24)*
- *Water Quantity and Quality Monitoring (Annex RA 2-23)*
- *Water and Health (Annex RA 2-22)*
- *Drinking Water disinfection (Annex RA 2-6)*
- *Citizen Participation (Annex RA 2-25):*

#### **Special trainings for efficient water management and monitoring skills**

- *Water Monitoring training: testing groundwater quality*
- *Water Monitoring training: "citizen scientists" to have basic knowledge to propose innovative water monitoring ideas*
- *Water Monitoring training: citizen journalists" to identify and voice groundwater problems in the target communities*
- *Participatory budgeting*
- *Social Audit*
- *Phone survey instrument: how to conduct survey and analyse results using the tool installed in target communities*
- *Project design and management*

In the course of the aforementioned capacity building activities the target community stakeholders acquired knowledge and skills on the principles of integrated water resource management and protection mechanisms, the concept of a watershed, the economic value of water, the role of public advisory councils adjacent to territorial water-basin management bodies, mechanisms of implementation of water monitoring and monitoring bodies, water-born diseases and their prevention, water quality, drinking water disinfection methods, importance and tools of civic engagement in decision-making process related to water issues, etc.

Apart from general knowledge on water resources, water management and monitoring special trainings were conducted for community stakeholders to provide them hands-on skills in practical monitoring water quality and service provision. The stakeholders gained the skills on how to identify and prioritize water sector problems, how to put together a project proposal for small-scale water infrastructure project, how to launch participatory budgeting process and organize public hearings, conduct social audit of the budgets of local governments and water user associations, how to conduct water tests on drinking, irrigation and fish-farm ponds water quality, the quantity of the residual chlorine in water as compared with the standard, , how to use phone survey instrument to get citizen feedback on water services, how young "citizen journalists" could identify, voice and disseminate information about the problems in water sector in their communities, etc.

**Educational materials:** Capacity building activities were accompanied with provision of additional thematic reading – educational materials, handouts, relevant information for increasing the community residents and citizens' awareness and knowledge on a wide range of water issues and best practices. Some of the provided educational materials were:

- *The Climate Change hand-out (Annex RA 2-5):* describes the threats and challenges related to climate change, as well as the main man-made causes of climate change, differences between climate and weather, the overall

principles of global warming, occurrence and accumulation of greenhouse gases, and their effect on climate change, etc.

- *Water Monitoring information leaflet*: describes the mechanisms for drinking and irrigation water, as well as the contacts of the organizations responsible for monitoring in the RA (**Annex RA 2-23**).
- *A Vision of Gender. What is this?* and *Gender, Water, Sanitation and Health thematic booklets* (**Annex RA 2-7**): (Armenian version) by Armenian Ziraldo Cartoon, the Gender and Water Alliance.
- *Water and Health information leaflet* (**Annex RA 2-8**) describes the importance of drinking water for life, pollution sources of drinking water, water-borne diseases and their prevention (Armenian version).
- *Drinking water disinfection methods information leaflet* (**Annex RA 2-6**).

### 2.3. Assist local governments in affected communities to ensure compliance of the local users with the updated regulatory framework and transparency, ensure community members engagement in water-related decision-making public access to water-related information

#### Achievements

- **Residents in target communities are mobilized and actively participate in community life**
  - Residents of target communities were engaged and identified problems in water sector in their communities
  - Target local governments were involved and provided input forging the strategic policy and regulatory approaches toward participatory management and use of groundwater resources.
  - Target local governments and community working groups mastered the methodology of prioritizing the identified problems.
  - Target local governments are able to design and monitor water infrastructure projects.
  - Target community budgets are formed and expenditures reported through participatory budgeting and annual budget hearings.
  - Target local governments are more open to the process of social auditing of community expenditures.

The PURE Water has closely cooperated with local governments in target communities. Technical assistance has been provided to help them mobilize community residents for learning about and prioritization of the issues in water resource management. Local governments were engaged in developing strategic approaches towards participatory water management, local staff mastered using several tools to mobilize and engage community residents: phone survey instrument, participatory budgeting process, regular public hearing, designing and developing project proposals. Below is a brief description about how each of those tools has been practically applied in the project (**Annex RA 2-12**):

- *Town-hall meetings*: Regular town-hall meetings have been conducted by 12 target communities.

- *Identifying and prioritizing small scale water infrastructure projects*: The residents have selected community working groups (CWG), which were acting on their behalf to prioritize the problems in drinking and irrigation water sectors identified by the residents. CWGs were trained to use a special Delphi methodology to prioritise the water sector problems. Weighting and scoring approaches have been used for each criterion (financial, environmental, beneficiary coverage, social support) to make the prioritization more balanced. Guidelines and tools for participatory strategic planning was developed and



Town-hall meeting in Vedi

provided for target communities.

- *Monitoring of implementation of small scale infrastructure projects:* town hall meetings (midterm and final) were conducted to by target local government to report to the residents of Yeghegnut, Yeraskhahun, Vedi, P.Vedi and Khachpar about the process and the findings identified during the public monitoring of the water infrastructure projects.
- *Designing and monitoring small-scale infrastructure projects:* a special training has been conducted for the municipal staff of the target local governments to design, develop and monitor small-scale water infrastructure projects. Also, mentoring and coaching was conducted by the project staff to help communities finalize and submit the proposals.
- *Engagement in developing the Strategy and Road map:* target local governments were directly engaged in the process of discussion of key strategic approaches of the Strategy and the Road map aiming to improve policy and regulatory framework to promote civic engagement in water sector. Such direct involvement generated a sense of ownership to raise community residents' awareness on improved policies and regulations and to apply them at local level.



Public hearing

- *Participatory budgeting:* Practicing participatory budgeting was a new culture for PURE Water target community residents. For the first time, the residents of all 12 communities have direct input in development of the community budgets. During the community meetings, priority water projects identified by the residents were presented by local governments with corresponding estimated costs for implementation and commitments were made to the residents to include the amount of community cost-share for water infrastructure projects, as well as costs of citizen participation in the community budgets. The important outcome of this process was that during the development of the next year's

budget, seven target local governments independently initiated the participatory budgeting process without the support of the PURE Water project.

- *Public hearings:* target local governments also organized a series of public hearings to report to the public on the anticipated expenditures and revenues (including property tax, land tax, rent and wastewater collection) planned under the budget as to introduce the expenditures for water sector improvement in the communities. The PURE Water project helped the Aratashen community to organize a public hearing on water meter installation in the scope of the infrastructure project. The community head and staff reported to the residents about the costs needed to purchase and install water meters, why it is necessary to install them, and for what purposes the collected revenues from the used drinking water by the residents will be spent by the community.
- *Social Audit:* 5 target local governments - Aratashen, Yeraskhahun, Yeghegnut, Vedi and Pokr Vedi - opened-up their budgets to the review of community social auditing groups. Findings of the reports have been presented to the community residents by the social audit teams and municipal administration.
- *Phone Survey instrument:* this tool provided by the project was mastered and used regularly by the municipal staff to identify from the residents on water problems and learn their feedback about the improvements made by the municipality.

## Challenges and Recommendations

### Challenges

- Low participation culture: Although the PURE Water project considerably promoted civic engagement in water sector decision-making civic participation in general remains weak, sometimes alien to many residents and some local governments. Only half of target local governments demonstrated commitment to go through the complete participatory process proposed by the PURE Water project. 3 target local governments became less interested in the project already in the first project year. The projects “participatory mandate” seemed to be too heavy for them. They did not apply event for small-scale water infrastructure projects. 2 local governments gradually decreased their involvement since their applications for infrastructure projects were not successful. So, it turned out that they were involved in the project mostly for getting an infrastructure projects. However, the cooperation has been continued with schools and community activists. 5 communities with infrastructure projects as well as 2 communities without infrastructure projects were actively involved in the project from the beginning till the end.
- The baseline study showed no earlier participation by youth. The PURE Water project improved the situation. Young generation from target communities actively participated in the project activities. However, youth participation still remained low as compared with the age group from 45-75.
- Simplified water use permitting platform is one of the achievements of the PURE Water project and is a result of the exceptional commitment of the RA Minister of Environment to make the permitting process open and transparent and the result of effective partnership between the project and the government which turned that commitment into reality. At the closure of the project, there were some remaining technical/administrative difficulties to make the platform operational. These challenges were outside the PURE Water control and only partially under the control of the ME. The issue is within the Government and is believed to be addressed soon.
- COVID-19: the installation of smart meters by “citizen scientists” was put on hold because of the pandemic, but all stakeholders are committed to install them as soon as possible.

### Recommendations

- Transparent, open, participatory, and accountable governance in water sector should be a continuous process and needs to be pursued after the project by all stakeholder to become a habitual behavior and culture:
  - RA Ministry of Environment needs to deal with the technical problems with regard to the online water use permitting platform and operationalize it to ensure a transparent, streamlined and simplified permitting process.
  - Relevant authorities need take over and replicate the models piloted under the PURE Water project to ensure open and transparent water management, efficient irrigation and drinking water supply, better water quality, fair water distribution, particularly: trash-net (Water Committee, WUAs, communities), WUAs websites (Water Committee, WUAs), smart meters (Water Committee, WUAs, communities), improved infrastructure with water saving technologies (Water Committee, WUAs, communities), water sector sub-system added to MMIS (RA MTAI, communities).
  - Target local governments need to continue practicing management, oversight and feedback mechanisms provided under the PURE Water project: participatory budgeting, phone surveying, public hearings, problem identification methodology, etc.
  - Community-based NGOs, water sector and environmental NGOs need to continue working with local community activists and together with them continue to voice and advocate water sector related problems using different tools mastered within the PURE Water project: town-halls, social audit, “citizen scientists”/idea contest, citizen journalists, etc.
  - Schools need to continue environmental education combined with practicum in the field using relevant devices provided to them by the project. They need to share their knowledge and skills with other schools in and outside Ararat Valley. Three schools with eco-clubs need to make some efforts to make them sustainable centers of environmental education by keeping the partnership with the Urban Foundation, ATP and other environmental CSOs.

## RESULT AREA 3: PUBLIC AWARENESS RAISED AND BEHAVIORAL CHANGE FOSTERED AMONG WATER USERS

**Pre-project situation:** Baseline survey, expert interviews, stakeholder analysis conducted at the beginning of the project and the meetings with the residents, local authorities of target communities as well as with other stakeholders indicated that the main cause of the depletion of groundwater resources in Ararat Valley is poor performance of all stakeholders – water users (farmers, fish-farms, local governments), water managers (water user associations, local governments), decision-makers (MTAI and ME with their relevant structures). The study revealed that only 30% of residents know their water rights and responsibilities and this refers predominantly (75%) to the senior residents (from 45 years old and above), whereas only 7% of youth (18-25 years old) knew their rights and responsibilities. In terms of receiving information on groundwater issues, the residents of Ararat Valley trusted more their neighbors and local governments. The trust in the media, central government and water user associations was significantly low - both as sources of information and as problem-solvers. So, the trust plays a key role in receiving information about water issues, even if there is higher possibility that the information provided by relevant state authorities, service providers and media might be more accurate and evidence-based than the information disseminated through the word of mouth and by local governments.

The USAID PURE Water project implemented a vigorous strategic communication campaign tailored to each stakeholder group and aimed at making a positive behavior change of stakeholders with regard to efficient management and use of groundwater resources in Ararat Valley.

### Achievements

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- **Increased public awareness and behavioural change of stakeholders due to tailored outreach, public awareness and strategic communication campaigns using a mix of integrated marketing communication tools**

#### **Main affected stakeholders:**

- Community residents and local governments
- Schoolchildren and youth
- Government water sector decision makers and National Assembly relevant standing committee
- Water User Associations
- Fish-farms

#### **6,260 People reached out by awareness campaigns in the target community**

Events and festivals; educational workshops; peer to peer exchange among communities; educational tours to fisheries, artesian wells

#### **Over 2,000,000 Total people reached out in Ararat Valley and nationwide**

Yerkir Media and H1 TVs, Hetq online newspaper, stakeholder Websites and FB pages

#### **Main instruments used:**

- Community events and festivals on national and international water and environmental days.
  - Educational tours: fish-farms, artesian wells, farms with drip irrigation, wetland.
  - TV programs on drinking and irrigation water issues with participation of stakeholders.
  - Best Practice exchange: fish-farms
  - Public Service Announcements targeting different stakeholder groups in water sector.
  - Project Documentary: summary of the project achievements and lessons learned.
  - News articles: voicing and raising awareness of water users
  - Project Facebook page: <https://www.facebook.com/PUREWaterProject/>
  - Project Newsletters
-

### 3.1.1. Develop common messaging regarding water resource quality and use in collaboration with the government and other public stakeholders.

The behavior change communication campaign has been implemented under the two umbrella messages:

- Communication messages were identified on a participatory basis by the stakeholders and experts in two messaging workshops. The stakeholders' workshop was attended by the representatives of relevant ministries and governmental agencies, local governments, CSOs, fish-farms, USAID and other



international organizations. The USAID Global Development Lab experts supported in facilitation and summarizing of the workshop. The expert workshop was initiated and supported by the Coca-Cola Hellenic Bottling Company (CCHBC), Armenia and was attended by the communication experts from non-profit and private organizations. Then the messages were checked and finalized in the multi-stakeholder focus groups (**Annex RA 3-30**). As a result, umbrella messages for strategic communication campaign and stakeholder-specific messages were developed (**Annex RA 3-3**).

- The USAID global development lab experts held a special training session on behavioural change communication (BCC) techniques for the PURE Water project staff.
- Based on the outline developed with the Global Development Lab experts, the PURE Water project communication team drafted a BCC strategic plan for the PURE Water project (**Annex RA 3-19**). Once the plan was finalized, the PURE Water project team in cooperation with CCHBCA experts designed a detailed communication campaign action plan.

**PURE Water project MESSAGES**

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**Umbrella Messages**

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- **Water is precious, every drop is special**  
Ջուրը կայնք է, ամեն կաթիլը՝ թանկ է
- **Find your way to save water**  
Գտի՛ր ջուրը խնայելու քո ձևը

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**Some messages of the awareness campaign**

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- The future of Armenia's water resources depends on each and every one.
- Recycle industrial waste and prevent pollution of water bodies
- Know your rights. Demand access to clean, affordable, quality drinking water and regularly scheduled irrigation water.

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A table calendar with messages  
(Annex RA 3-11).

BCC strategy and the campaign action plan guided the PURE Water awareness and outreach campaign throughout the life of the project.



### 3.1.2. Develop and implement public awareness campaigns using a mix of integrated marketing communication tools

PURE Water BCC Strategy designed diverse interventions for the implement public awareness campaign.

**Community events and festivals:** Various events and festivities in Ararat Valley were good forums for PURE Water project outreach campaigns, for raising awareness of residents, children and youth, local authorities, and other stakeholders on the groundwater problems in Ararat Valley, to encourage them to be more engaged and be part of the solution. The events and festivals have been conducted on national and international water and environmental days. Groundwater topic has been voiced in different ways including performances, dances, painting, photo and knowledge contests, cleaning up the canals, and testing water qualities in artesian wells and fish-farm ponds, etc. It is important to note that the local communities and the active civic groups were engaged from the very beginning in the development of the campaign, and coined their own event programs, readily voicing the water related



problems. Their interest and readiness to join the campaign, their contribution to the organization and implementation phase of the campaign is a bold step leading to behavior change.

The following community events related to the groundwater issues in Ararat Valley has been conducted during the implementation of the project (**Annexes: RA 3-24; RA 3-33**):

- World Water Day
- Earth Day
- World Climate Day
- World Environment Day
- World Water Monitoring Day
- Water festivity-Vardavar
- World Clean-up day
- Ararat Valley Groundwater Preservation Day

High-rank officials joined the community stakeholders during the public awareness campaign: Deputy Chief of US Mission in Armenia, USAID Armenia Mission Director, USAID Armenia Sustainable Development Office Director, the Head of Water Committee, and Mayors.

#### Water Festivity- VARDAVAR

Vardavar is a traditional Armenian festivity implemented after the harvest of wheat (grain) and devoted to the water worshipping. On 26 July, 2019, the schoolchildren from the partner communities of Ararat and Armavir marzes gathered in the Lovers' Park in Yerevan to participate in the event "Towards Vardavar Holiday: the symbol of water at the roots of Vardavar". The aim of the event was to increase the awareness about the efficient management of groundwater resources in Ararat Valley and highlight the importance of water in our life.

The event commenced with a quiz on the topic of water resources. The pupils from Ararat and Armavir presented their knowledge obtained as a result of the classes and study tours organized in the framework of the PURE Water project. A specially tailored play by "Epsidon" theatrical group combined with the performance of "Akunk" Traditional Song Ensemble on the topic of water and Vardavar added a special flavor to the event.

Schoolchildren and teachers from Aknalich, Aratashen, Yeraskhahun, Yeghegnut communities of Armavir Marz and Poqr Vedi, Vedi, Khachpar, Masis, Baghranyan, Burastan and Berqanush of Ararat Marz participated in the event, which was open for everyone, so the morning visitors of the Park happily joined in.

At the wrap-up of the event, the children had an opportunity to splash small amount of water on each other. More than 250 people participated in the event.. The event was covered by the online media and TV:

- [Vardavar event coverage by Aravot daily](#)
- [Vardavar event coverage by CCHBC](#)



VARDAVAR

The overarching message of the public awareness and outreach campaign was “*Water is precious, every drop is special.*” USAID support was leveraged by the Global Coca-Cola Foundation which provided a grant to the Urban Foundation, the implementing partner. CCHBCA also cooperated with PURE Water based on the MoU signed between USAID Armenia and CCHBCA (**Annex RA 3-21**).

**Awareness-raising through hands-on publications, information dissemination and visibility:** Water sector-related information has been prepared for and shared with different stakeholder groups. Information was made accessible through published materials, public information materials, and online means of communication. Below is the list of public information and dissemination channels:

- **Project Documentary:** Covers the project implementation and summarizes the results. The documentary has been widely disseminated to the stakeholders and general public:.
- **Publications and public information materials:**
  - Water User Directory (**Annex RA 3-5**). This is a Directory of Water Authorities and Managers. It briefly explains who is doing what in water sector and provides contact information for key decision-makers and service providers.
  - Water is a guarantee for life (**Annex RA 3-9**).
  - Public participation in water resource management (**Annex RA 3-8**).
  - The right to receive information (**Annex RA 3-1**).
  - Water and human health (**Annex RA 3-4**).
  - Q&A: Drinking water (**Annex RA 3-10**).
  - Q&A: Irrigation water (**Annex RA 3-15**).
  - Best practice for water efficiency: small and medium fisheries of Ararat Valley (**Annex RA 3-7**).
  - Bookmarks for schoolchildren (**Annex RA 3-6**).
  - The project one-pager
- **Newsletters:** covered and updated the stakeholders and general public about the project progress on semi-annual basis increasing public awareness on subject matter and the project visibility (**Annexes RA 3-26 - RA 3-27**).
- **Websites and Facebook pages:** covered and disseminated the project activities ensuring awareness raising on groundwater issues and visibility of the project:
  - [PURE Water project Website](#) and [PURE Water Facebook Page](#).
  - [Armavir WUA website](#).
  - [Vedi Municipality website](#).
  - Other target communities websites and Facebook pages.
- **Signs:** for target communities as partners of the project, for small-scale water infrastructure projects to ensure visibility (**Annexes: (Annex RA 3-20; RA 4-16)**).



**Educational tours:** Study visits and exchanges among different stakeholders for awareness raising, learning, and exchanging best practices were one of the campaign’s tools (See also the section 2.2.). Young generation was intensively involved in this activity. Study tours allowed participants, apart from what they learned in the classrooms and read in the information materials, have an actual exchange with the field practitioners, witness the real situation in Ararat on spot with, be part of solutions by doing and experimental water tests and analysis. Such practical learning process, communication, exchange of experiences and knowledge transfer among stakeholders promoted forging mindful behavior especially for future generation to the groundwater resources. The following study tours were organized within the project:

- **Khor Virap Wetland:** It is located in the ancient Arax riverbed and included in Ramsar list of wetlands of international importance. Participants learned why the wetland was vital for entire ecosystem. The marsh plays a significant role in flood mitigation downstream and in sediment trapping and local irrigation.
- **Fisheries:**
  - To learn about best practices of using groundwater saving technologies and mechanisms by fish-farms.
  - To test and compare the quality of incoming and outgoing water in the fish-farm ponds.
- **Karin tree nursery:** young participants saw and learned how drip irrigation works and why it is important for irrigation.

- **Aknalitch Lake:** young participants learned how the lake is connected with the ecosystem and tested the water quality.
- **Eco-camp:** young participants exchanged useful practices of groundwater protection in neighbouring communities and designed action plans for eco clubs to be established in Ararat Valley to promote environmental education.
- **World Clean-up Day - Tour to Pokr Vedi:** young participants got familiar with the piloting of a “trash net” technology designed by their peers to catch the garbage in the irrigation canals, thus preventing water pollution and promoting irrigation water quality. They also presented to their peers the results of clean-up activities they initiated to clean the water basins existing in their communities.
- **VARDAVAR Tour:** A tour to Yerevan to celebrate VARDAVAR water festivity (See also: “Community events and festivals” in the section 3.1.2): This was a learning experience for target communities youth: They learned how and why their ancestors worshiped water resources. They also shared knowledge about water resources with peers.

### 3.1.3. Conduct baseline and follow-up consumer and stakeholder surveys on water quality, use, and responsibilities.

At the inception phase of the project, a baseline household survey was conducted in six towns (Artashat, Ararat, Armavir, Masis, Vagharshap, Vedi) and 16 villages randomly selected in the Ararat Valley (8 in Ararat marz, and 8 in Armavir marz).

The survey instrument was developed by a contractor in consultation with the relevant experts from CWP, an NGO focused on scientific and ecological issues, ELRC at YSU, as well as the staff of UFSD and USAID ASPIRED project.

The structure of questionnaire included the following sections/questions (**Annexes: RA 3-17; RA 3-29**):

1. Availability, quality and access to drinking and irrigation water
2. Awareness about issues related to drinking and irrigation water in the community
3. Civil activity, participation in decision making and monitoring activities related to water resources
4. Socioeconomic status and demographic profile of households, education levels; ICT skills, etc.

**The survey revealed** problems with regard to drinking and irrigation water quality, poor infrastructure, low trust in drinking and irrigation water suppliers and national decision-makers, and media as problem solving institutions and sources of information, extremely low civic engagement rate in decision-making process related to water issues, almost lack of awareness and knowledge regarding water issues and predominantly, among young generation (**Annex RA 3-2**).

**The final evaluation conducted** at the end of the project aimed at learning about the outcomes of the project by understanding the factors that contributed to or challenged the achievement of set targets and by identifying key lessons that would help to develop improved future actions in efficient and productive management and use of groundwater resources and in the water resources as a whole (**Annex RA 3-28**).

The evaluation included desk research, in-depth interviews with experts, policymakers, various partners and stakeholders, as well as with the practitioners in the water sector at the national and local levels, and focus group (FG) sessions among stakeholders and community active residents that participated in the relevant project events and water users from selected communities. The experts and policymakers include those who were interviewed within the baseline assessment and those who have been involved during the implementation of this project.

The desk research is based on the analyses of project reports, baseline assessment and mid-term evaluation of the project, as well as semi-annual monitoring reports of UFSD. The project relevance, effectiveness, efficiency, impact, and sustainability are also analyzed as separate chapters.

The evaluation showed that the PURE Water project is relevant to the needs and priorities of the beneficiaries. It helped to increase awareness of water users in Ararat Valley related to water issues and helped to contribute to changing their behavior valuing the importance of every drop of water and saving water resources.

School children, youth, local government (LG) staff and other active residents from 12 target communities were educated and capacitated to advocate for solving drinking and irrigation water issues (through transparent decision making in water management) in their communities.

QUOTE

“We (the teacher with schoolchildren) had a study tour to fisheries in Hovtashat village ... Children understood that the overuse of groundwater resources by fisheries can affect the quantity of water for irrigation and that local residents will not have enough water to irrigate their land plots. We have also sent letters to fisheries asking them to conserve groundwater resources. In fisheries that we visited with children, water-saving technologies were used” (School teacher, Vedi, Ararat region)

QUOTE

“Our cooperation related to the analysis was very broad, including legal and policy related aspects; several joint meetings were conducted in cooperation with the project both in Yerevan and the regions with the targeted population, I went to Yerkir Media to make a presentation in the framework of the project” (Head of Water Committee).

Furthermore, community residents, together with the key experts (water sector public advocacy network (WPAN) members) and policymakers were involved in constructive discussions to identify gaps in water-related legislation hindering participatory management and the use of water resources.

These discussions led to the development of Strategy and a Road Map, as well as a package of recommendations (submitted to the GOAM and the National Assembly), to amend existing laws related to water.

Transparency and accountability are in place, residents in target communities are more vigilant and demanding regarding water issues, target communities are mobilized and actively participate in community life, target communities, including schoolchildren and youth, are better educated and aware of water issues, as well as of their water rights, and protection mechanisms.

QUOTE

“Participatory budgeting helped a lot our people; the members of the community council did not know anything about budgeting prior to the participatory budgeting support by the project, now they do a public hearing following all the regulations learned during the project trainings before deciding on the budget.” (Mayor of one of the target communities).

QUOTE

“We used phone survey to find out if our residents would like to install water meter, what is the quality and access of water, if the people will pay for the installation of water meters.” (A male respondent from the target communities).

Introduction of public oversight mechanisms (phone survey tools, participatory budgeting, social audit, town hall meetings, etc.) and community monitoring schemes for water quality and efficient use increased participation of residents in decision making processes, increased their awareness on water resources management issues, and contributed to more efficient use of water resources.

QUOTE

“Our community residents have prioritized our city greening plan for many years. During public hearings our residents have always agreed that having green spaces is a priority for our city, thus, they voted for this project (irrigation of city green zone) within the PURE Water project. Our drinking water pipes had been recently replaced and there were no issues with drinking water. Our irrigation system was also in a satisfactory shape as many investments were made there in the past.” (Mayor of one of the target communities)

The Project was effective as it reached the key milestones and all targets of indicators in an efficient manner, within a relatively short period of time (3 years) and within a reasonable budget of USD 1,042,634.84. The variety of activities and interventions implemented within the PURE Water are also indicators of efficiency, and the successful mechanisms and tools implemented within this project (such a Citizen Journalists, Citizen Scientists, Phone survey tool, traps for garbage installed in irrigation networks, etc.), especially through the small grant projects, can be models of interventions to be replicated by the State and by other donors in the water sector.

Thanks to this project thousands of households in the target communities gained access to an uninterrupted supply of drinking water, while others benefitted from irrigation systems constructed/renovated in their communities.

### 3.2.1. Stakeholder mapping, assessment, and analysis conducted to gain an explicit understanding of the behaviors and motivations and capabilities of different stakeholders involved.

#### Stakeholder behaviour change analysis

Within the framework of PURE Water project, stakeholder analyses were carried out related to water usage in Ararat Valley, Armenia. The first analysis was conducted within the baseline survey at the beginning of the project (**Annex RA 3-32**) and the second one – at the end of the project (**Annex RA 3-25**) to see if any changes occurred in the interests and attitudes of stakeholders in this period of time.

There are a large number of stakeholders in Armenia's water sector (**Annex RA 3-18**). While the governmental structures are responsible for developing policies and overseeing the implementation of various projects in the water sector, there are a number of international/bilateral donor organizations that are funding drinking water supply, irrigation and other relevant projects as the State does not have adequate financial resources and capacities to fully satisfy the needs of the country in this sector. In addition to funding, those organizations also bring the best international practices to the country, showing how effectively water resources and systems can be managed, implementing pilot projects, and recommending the country to follow certain policies/procedures that are broadly implemented in the developing world.

Research and consulting companies/institutions in the water sector have a valuable role in research, planning, technology development/promotion, and the state and donor organizations rely on the data and recommendations received from those institutions while developing policies or projects in the water sector.

The role of NGOs, civil society and media is important in raising environmental issues, including water related issues (access, quality). Some NGOs have been able to obtain funding and implement small scale projects related to drinking water supply in communities that have faced such issues.

During the study the stakeholders were interviewed on their interests, attitudes, and the level of influence on the Program as of February 2020. The capacities and mandates of all major stakeholders in the water sector have been analyzed and their influence on the viability of the program has been assessed to learn if the level of influence is high, medium or low.

The general conclusion was that with the help of various awareness raising activities, trainings and consultations, small water infrastructure projects, and legislative assistance PURE Water project increased the interests and attitudes of water sector stakeholders in the project. The consistent work of the project together with the Velvet Revolution brought changes in the attitudes of WRMA, National Assembly, Water Committee, WUAs, and fish-farms. The project also empowered citizens, CSOs, media and fisheries involving them in advocacy actions, so that their voices could be heard by policy makers. So, their power increase as compared with what they had at the beginning of the project. (**Annex RA 3-16**).

### 3.2.2. Develop and implement tailored outreach and strategic communication campaigns targeting different stakeholder groups based on the stakeholder analysis

The Stakeholder mapping and analysis developed at the beginning of the project indicated that in all stakeholder groups in Ararat Valley there were many stakeholders (ministries and agencies, water user associations, local governments, and fish-farms) which had a considerable influence on the functioning of the system, but were not quite interested in making the system work better. How the PURE Water project contributed to the addressing of this challenge?

**Continued dialogue:** The project set an ambitious task to launch and deepen a dialogue with all influential stakeholders to bring them all together to inventory and discuss problems in groundwater management and use, to find common grounds where their interests could match to lead to the mitigation of the groundwater problem in Ararat Valley with technical support and expert facilitation of the PURE Water project. Often it was cumbersome and took quite a time

to even commence such dialogue, then when started, run it with intermittent success, and later on gradually convert it to more meaningful and constructive dialogue. Among examples, are:

- *Dialogue on improvement of legislation*: the passive “resistance” of decision-makers during the development of the Strategy and its Road map for policy and regulatory improvement, gradually turned to the cooperative behaviour (especially after the Velvet Revolution) with the project and other stakeholders during the legislative drafting. WUAs and fish-farms were not quite open. Communications with them were not productive. However, the project identified common interests and proposed diverse approaches to involve them in the discussions on the secondary water use, on drafting a new law on water users associations.
- *Cooperative approach to social audit*: open and honest discussions among the project team, community residents and water user associations about the advantages of transparent governance and mutual trust, encouraged local governments and Armavir water user association to open-up its financial records for social auditing and report to the public on its revenues and expenditures.
- *Looking into fish-farms from a different angle*: fish-farms are perceived by public as businesses which activity also caused depletion of groundwater resources in Armenia. Such pressure made fish-farms defensive to any dialogue, which was the case at the beginning of the project. The PURE Water developed an alternative approach: started a dialogue with small and medium businesses to help them identify best practices in using groundwater resources, and share them with peers.

**TV programs**: Although the exchange of information by the residents of Ararat Valley through word of mouth was prevailing, the baseline survey identified that 15% of population of Ararat Valley receive information about water issues from TV reporting. Therefore, PURE Water project supported airing of TV programs to cover also that segment of beneficiaries, which eventually would be disseminating the information to their co-citizens through word of mouth. TV programs were aired in different formats to deliver specific-audience-targeted project messages to the water sector stakeholders: water users – farmers, industries, water managers and decision makers.



PURE Water Project coverage by Yerkir Media

Taking into account that the residents of Ararat Valley residence preferences regarding TV companies, TV programs were aired by Yerkir Media TV company and Armenian Public Television, which also allowed to ensure nationwide coverage (**Annex RA 3-31**). TV programs were broadly disseminated through the social media of the project and target communities.



PURE Water Project coverage by Yerkir Media

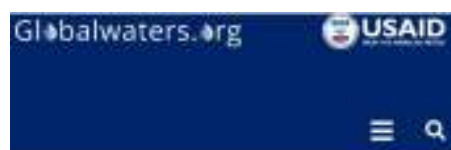
The formats of TV programs were interviews and debates. The programs covered the following topics: irrigation issues, drinking water issues, water users association and their relations with water users, water users’ rights and responsibilities. A special program was devoted to the children’s role to become main drivers of change in addressing groundwater problems in Ararat Valley. There was also a wrap-up TV program aired on public television and Yerkir media, where the project team summarized the results and the lessons learned during the implementation of the project.

The guests of the TV programs were officials from relevant ministries, agencies, local governments, representatives from water user associations, CSOs, as well as experts and journalists.

Apart from the TV programs, the project activities were regularly covered by TV News reports, which in turn, raised awareness of residents of different groundwater issues and ensured the project visibility.

**News Articles:** Expert interviews and focus groups conducted at the beginning of the project, as well as baseline study showed that Hetq (<https://hetq.am>) investigative journalists' online media are among those few online new media which was read by most of the residents, representatives of local governments, ministries, agencies and water user associations. The PURE Water project cooperated with Hetq to identify, investigate and cover key drinking and irrigation water problems, as well as water users' rights violation cases. They targeted decision makers, water user associations, fisheries and local governments. Hetq's articles have been further disseminated through its and the project's Facebook pages. Some of the Articles are (**Annexes: RA 3-13-RA 3-14**):

- [WUAs hide water-users contracts in desk-shelves](#)
- [WUAs doesn't encourage bank transactions](#)
- [Villages Yeraskhahun and Artashar fight for sewerage water](#)
- [Residents of Pokr Vedi wish to get rid of groundwater boreholes, while the government adds their number](#)
- [Khachpar has the most fertile landplots but they are not cultivated because of water stress](#)
- [Drinking water suppliers are transferring delapidated water system from one to another: no investments](#)
- [E-governance tools for water use permitting and water use control](#)
- [World clean-up and world water monitoring days in Pokr Vedi](#)
- [WUAs continue to clean and transport litter from irrigation canals](#)



### Citizen Journalists: Shining a Light on Water Management in Armenia



Two more articles were published in Global Water (<http://globalwater.org/>), an American website for sharing knowledge and ideas to solve global water challenges. One was entitled "Raising Voices to Save Water: Reducing Groundwater Loss in Armenia's Ararat Valley", and the other article entitled "Citizen Journalists: Shining a Light on Water Management in Armenia" told the story of PURE Water Citizen Journalist Mane Minasyan from Vedi community who developed her journalistic and citizen skills immensely throughout the process of the project.

- [Raising Voices to Save Water: Reducing Groundwater Loss in Armenia's Ararat Valley](#)
- [Citizen Journalists: Shining a Light on Water Management in Armenia](#)

**PSAs:** According to BCC strategy and campaign plan, public service announcements (PSA) were developed with the PURE Water project partners Media Initiative Center. The underlying concept of all PSAs was the idea that each of stakeholders can contribute to the efficient management and use of water resources if they demonstrate responsible behavior. The goal is same for all, but there is no single formula to this end, there are numerous ways, sometimes very unique and individual, to achieve that goal. Therefore, PSAs called to each individual and corporate stakeholder: *Find your way to save water!*

PSAs targeted different stakeholders and different issues of groundwater management: water contracts, drinking and irrigation water issues, payments for used water, drip irrigation, efficient use of groundwater resources by fisheries. Below are links to the



PSAs developed within the PURE Water project (**Annexes: RA 3-22; RA 3-23**):

Sign irrigation contracts: Find your way to save water  
Save while using: Find your way to save water  
Make payments timely: Find your way to save water  
Water Users: Find your way to save water  
Drip Irrigation: Find your way to save water  
Fish farms: Find your way to save water

PSAs were broadcast on TV channels with nation-wide coverage, they were disseminated further through social media, municipal websites, websites of water committee and water user associations, were demonstrated during many public events of the project.

The PURE Water project BCC campaign proved to be quite effective and targeted all project components from policy level to community and citizen mobilization using various tools specified for each stakeholder: water users, water manager, and decision-makers. The dynamics of change in stakeholders' behavior was visible at the end of the project:

**DECISION MAKERS:  
 FROM PASSIVE RESISTANCE TO COOPERATION IN  
 IMPROVING LEGISLATION**

When drafting the legal documents, the project worked with two Government Cabinets. Before the velvet revolution of April 23 2018, the Cabinet having representatives in the Strategy Taskforce was not quite enthusiastic about adopting the Strategy. After the velvet revolution, the PURE Water project continued to work hard with the Government and resubmitted the Strategy (with its Roadmap) to the new Cabinet. The new Government demonstrated commitment to cooperate with the project. It singled out the priority areas from the Strategy and asked the PURE Water project to help in drafting the legislation for the priority areas.



Discussing amendments with NA Standing Committee

The cooperation extended to the RA NA Standing Committee, which formed a special working group on water issues to discuss the contents of legislative changes. Such a positive shift in the decision makers' behavior enabled to draft three laws/amendments to the laws with the assistance of the PURE Water: "Law on ecological information," "RA Law on Environmental Policy" and "RA Law on Water User Associations."

**DYNAMICS OF CHANGE IN THE ATTITUDE OF WATER COMMITTEE TO MORE  
 EFFICIENT WATER MANAGEMENT**

During the first year of the project the contacts with the Water Committee were quite passive: rare meetings were on official level. After changing the leadership, PURE Water continued to find ways to involve the Water Committee as one of key players. There were long by constructive discussions with the new leadership including the head of Committee, on the scope of cooperation. The discussions led to signing of MoU. The PURE Water assistance was in the areas which the Water Committee prioritized from the Strategy: drafting a new law on WUAs and provide technical assistance for them. However, the leadership of the Water Committee changed again, and the PURE Water had to start the process anew. While the Water Committee was cooperative in supporting WUAs to have a website, it was not that enthusiastic in terms of promoting the draft law on WUAs. The PURE Water continued the discussion with the RA NA Standing Committee, but managed to keep the Water Committee involved the discussion. Cooperation was intensified when the leadership of the Water Committee participated in multi-stakeholder workshop, provided its input and agreed with the other stakeholders on the principles of the draft law on WUAs.



Discussing of draft law on WUAs with the Water Committee

The Water Committee asked the PURE Water to help in developing websites also for other WUAs, connect them with the Committee GIS, and study of international best practices of irrigation water management by local governments and private sector. When the project already had been completed, the Water Committee asked the Urban Foundation, the USAID implementing partner, to continue the work on the draft law on WUAs.



## FISH-FARMS:

### FROM ADVERSARIES TO ADVOCATES

Fish-farms were among key audience whom the PURE Water BCC campaign targeted. They have been always perceived and listed among the stakeholders whose malperformance caused the current situation in Ararat Valley. Such public and expert pressures provoked some resistance by fisheries to cooperate and even communicate on addressing groundwater issues in Ararat Valley. That was exactly the case during the PURE Water project first contacts, then meetings with fisheries: there was a feeling of some tension in communication and defensive behavior. However, in the course of the project implementation, such behavior underwent to positive transformation.

PURE Water in cooperation with the International Center for Agribusiness, Research and Education (ICARE), came up with the "Best Practice" initiative to encourage fish farms through idea contest to identify and share best practices or innovative ideas in efficient water resource management. Out of 40 fish-farms 9 presented their best practices to their peers, water users, local governments, decision makers and donors during the award ceremony and received some equipment and appliances to be used in fish-farming. A bi-lingual publication with best practices of partner fish-farms was issued and disseminated to their peers and other stakeholders locally and internationally.

#### **Best Practice Case: A Successful Business Based on Saving and Reuse of Groundwater**

*Arsen from Sipanaik, Armavir, identified that the groundwater used and discharged by the neighboring fishery is flowing into the drainage canal and further into the rivers, out of Armenia's boarder. He decided to reuse outflow water from the neighboring fishery. He installed a basic infrastructure channeling the discharged water to his fish-ponds. Moreover, he re-reused the same outflow water from his fish-ponds to irrigate crops in his greenhouse.*

Three fish-farms shared their best practices in efficient management and use of Ararat Valley groundwater resources with the schoolchildren of PURE Water project target communities. This learning process encouraged the schoolchildren to put together an open letter to the big fish-farms calling them for saving groundwater resources following the best practices of peers. The letter was published and disseminated by the Hetq online media:



Best practice guide. Arsen shares his approach with young people

Ararat Valley fish-farms, especially small and medium ones, were involved in policy dialogue to regulate secondary water use and to legally differentiate volume of permitted groundwater extraction and tariffs to protect the rights of small and medium fisheries from the monopoly of large fish-farms. On-going discussions persuaded WRMA to initiate process of legal regulation of secondary water use.

## MAYORS TAKE THE LEAD TO DECLARE GROUNDWATER PRESERVATION DAY IN ARARAT VALLEY

Partner local governments were one of the main targets of the PURE Water BCC campaign. According to the baseline survey they were more trusted by local residents to address their water related issues even though they did not have decision-making power, and in many cases, also knowledge to do so. The PURE Water empowered them with relevant knowledge and skills. Mayors were forefront or had important roles from the beginning to the end of the project, at all stages of BCC campaign: improvement in policies and regulations, advocacy, social audit, public awareness and education events, infrastructure projects which promoted positive transformation in their behavior.

In May 2019, heads of the 7 partner communities got together to discuss the situation of groundwater resources in Ararat Valley, and initiated a Call to the Government and National Assembly of Armenia to invite their attention to the acuteness of the issue and proposed to **add September 30** as the **Ararat Valley Groundwater Preservation Day** to the calendar of key environmental events. After the Call being signed by the mayors of the project partner communities, it was widely disseminated among the population of Ararat and Armavir regions, reaching out to more than 25, 000 people online, 2,525 residents joined the call with their signatures.

On September 30, 2019, a roundtable was organized to highlight the need for the protection of groundwater resources in Ararat Valley. With participation of the representatives from the Water Committee, Ministry of Environment, WUA representatives, SPIRED project, academia, community heads, WPAN members. During the event, the letter with the petition and signatures was sent to the RA Prime Minister and the NA.



Aratashen Mayor to announce September 30 as Groundwater Preservation Day in Ararat Valley

Coverage by Yerkir Media: [Declaring Ararat Valley Groundwater Preservation Day - Coverage by Yerkir Media TV](#)

Water User Associations (WUAs) are supplying irrigation water for most of the communities in Ararat Valley. They have power as water distributors and are known as organizations with lack of transparent governance, accountability to their constituents - water users, instead are perceived as "local offices" of the Water Committee.

The baseline study showed that the majority of water users did not trust WUAs. Therefore, WUAs were one of the main targets of the PURE Water BCC campaign. Through various campaign tools – advocacy, discussions on policy improvement, monitoring and technical assistance, the PURE Water tried to engage WUAs in the dialogue to reclaim their original trust and to contribute to the efficient management and use of ground water resources in Ararat Valley.

At the beginning of the project, for a long time, the PURE Water was failing to approach WUAs: public phones and rare email addresses did not respond, no any website to get information. The project contacted the Water Committee and realized that can meet with WUAs only after informing the Water Committee and having an official letter from them, which the project received. However, the first few introductory meetings did not give any hope for constructive dialogue.

The PURE Water adopted a bottom-up strategy to approach WUAs. Within the advocacy campaign in target communities, empowered local advocacy teams of Armavir region demanded their own copies of irrigation contracts, which were strangely kept with WUAs: once Armavir WUA comprehended that water users knew their rights, it gave-up and provided the water-user contracts, which was a unique case. Gradually, WUAs community employees were participating in different community events under the project.

Change of the leadership of Water Committee also promoted the Armavir WUA to become more cooperative and proactive. The WUAs has made a bold step toward transparent and accountable governance. On Armavir WUA request, the PURE Water young "citizen scientists" developed a WUA website ([www.armavirwua.am](http://www.armavirwua.am)), the first WUA website in Armenia. All financial and progress reports of the WUAs, as well as information about relevant policies and regulations are available on the website. It allows the water-users to submit an online request for irrigation water and calculate the amount of water the need for irrigation. So, the website ensures transparent governance by WUA and increased awareness of water users.



Armavir WUA leadership is discussing e-governance tools

Armavir WUAs opened-up its financial records for the review of the community "social auditors." The results were reported to the water-users during public hearings. This was another unique case of transparency and accountability of Armavir WUA to its constituents.

## Challenges and Recommendations

### Challenges

- Although PURE Water project promoted more transparent and accountable governance of Armavir WUA, other WUAs in Ararat Valley did not show willingness for cooperation and management in transparent way. They did not participate in the meetings and did not give feedback to the emails or emailed documents.
- Within PURE Water project some fish-farms demonstrated willingness to cooperate, share their best practices of water use and provide input for improvement of legislation. However, the big fish-farms are still controlling large amount of water resources and it is not quite clear if they use those resources efficiently, because they were not open to the dialogue during the project implementation.

### Recommendations

- The Water Committee needs to replicate the best practice of Armavir WUA to other WUAs.
- All WUAs need to have websites to ensure transparent governance and awareness of their constituents; upgrade its GIS system, connect it to the websites so that water users could access their personal information.
- The Government needs to encourage big fish-farms to reuse groundwater and apply other water saving technologies,
- The Government needs to improve policies and regulations to ensure that the predominant role of big fish-farms does not infringe the rights of small and medium fish-farms.
- The Government needs to develop an awareness plan regarding water resources management and use and ensure its implementation through its relevant national and local institutions.
- CSOs, media need to continue to identify gaps in water resource management and follow-up the process of continuous behaviour change.

## RESULT AREA 4: SMALL-SCALE WATER INFRASTRUCTURE PILOTS IDENTIFIED AND IMPLEMENTED

### 4.1. Identify and submit to ASPIRED at least five pilot projects, leading to increased and sustained community water access designated and developed by capacitated community-based organizations and residents (including women and youth)

**Pre-project situation:** The baseline survey identified that in almost all communities of Ararat Valley the water stress was also caused due to obsolete, dilapidated and damaged drinking and irrigation water infrastructure. More than 60% of the households of Ararat Valley did not have regular drinking water-supply: it was either a scheduled supply or supply with unscheduled interruptions. Over 45% were dissatisfied with the quality of drinking water. Many respondents mentioned that they do not consider/use water received in their house tap as “drinking water” and they get drinking water from other places or buy it. Regarding the irrigation water supply, the water users in Ararat Valley mentioned that they were getting irrigation water predominantly either from the community irrigation canals or artesian boreholes. Half of the water users have agricultural land plots, apart from their backyard plot. Around 45% do not receive regular irrigation water to irrigate agricultural land pots. Among frequently brought reasons were lack of irrigation water supply system or decrease of the amount of water resources in artesian boreholes.

### Achievements

- **Increased and sustained drinking and irrigation water access is in place designed and developed with direct input of water users**

**5 improved water infrastructures are in place:**

**2 drinking water infrastructure**

**3 irrigation water infrastructure**

- Aratashen Community, Armavir Region: improved drinking water infrastructure
- Yeghegnut Community, Armavir Region: improved drinking water infrastructure
- Vedi Community, Ararat Region: improved irrigation infrastructure
- Pokr Vedi Community, Ararat Region: improved irrigation infrastructure
- Khachpar Community, Ararat Region: improved irrigation infrastructure

**19,000 people benefit with improved irrigation system**

**5,000 people have uninterrupted drinking water supply**

The PURE Water planned to improve drinking and/or irrigation water systems and supply in 5 target communities. All 12 target communities of the project had the aforementioned problems. Under this component, the PURE Water closely cooperated with another USAID-funded project for Ararat Valley, ASPIRED project. With support of the PURE Water the target communities reveal their problems regarding drinking water and irrigation, put together and submitted the proposals to the PURE Water for small-scale. The proposals were reviewed by PURE Water and ASPIRED. After the review, ASPIRED provided engineering design and ensured implementation of construction activities. The PURE Water ensured public/environmental monitoring during the construction activities.

**Participatory approach** was also at the core of identifying and implementing small-scale water infrastructure projects (SSWIP). Below are the steps of participatory development of infrastructure projects with support of the PURE Water:

- Town-hall meetings were convened in target communities
- The residents of the communities identified problems regarding drinking and irrigation water infrastructure



Town-hall in Vedi

- 7-10 co-citizens were selected by participants of the town-hall meeting to form Community working groups (CWG). There were supposed to represent the community residents at all stages: design, implementation and monitoring of infrastructure projects
- CWGs prioritized water sector problems identified during the town-hall meeting by the residents using Delphi methodology.



CWG prioritizes water problems

- CWGs received a special training by the project to apply Delphi methodology. It is based on weighting and scoring approach coming up with a total score considering of the weighted scores of each evaluation criteria: cost, positive environmental impact, beneficiary coverage, and public support.
- A professional committee was created (members: the project engineer, the mayor, municipality water specialists, GWG representative) to make onsite observations to figure out how the prioritized ideas were realistic, make corresponding professional adjustments and report back to the CWG for their final approval.
- Special trainings for target municipalities on project design and management, proposal writing. Mentoring and on site coaching was provided during the proposal writing process.



Site visits by specialized Committee



Committee reports to CWP on findings

- Submission of the project proposals by target communities (**Annexes RA 4-10 - RA 4-14**).
- Review of the proposals by the PURE Water and ASPIRED projects: engineers and USAID representatives also participated in the review process as consultants and observers without the right to vote.
- 5 projects were approved based on criteria and scoring system required by RFA. Below are main selection criteria:
  - Relevance to the prioritized needs
  - Feasibility
  - Replicability and sustainability
  - Innovative elements
  - Community contribution, etc.

- Technical/engineering concepts and cost estimations of the selected projects were prepared by ASPIRED. ASPIRED also announced a tender for design and construction activities and modified the implementation of the construction works.
- The PURE Water developed the environmental monitoring and mitigation plans for each infrastructure project in compliance with the USAID environmental requirements (**Annexes RA 4-1 - RA 4-5**). Environmental training was conducted with the community residents and active group members for monitoring construction activities and for providing basic knowledge about the rights and responsibilities of residents during the construction activities.
- 5 infrastructure projects have been completed with total 24,000 beneficiaries: 2 projects in drinking water sector (Aratashen, Yghegnut, Armavir region) with 5,000 beneficiaries and 24-hour water supply and 3 in irrigation water sector (Vedi, Pokr Vedi, Kachpar, Ararat region) with 19,000 beneficiaries.

- **Infrastructure projects in brief:**

*Improvement of drinking water supply in Araratshen and Yeghegnut community, Armavir region:* Assistance included design of drinking water systems and installation of corrosion-resistant polyethylene pipes, a new pump (Aratashen), chlorination stations, and water metering devices. Individual water meters were installed for each household. The municipality signed contracts with the future drinking water users. Improvements ensured uninterrupted drinking water supply in both communities, as well as water and energy savings which has been evidenced by the residents as a result of follow-up household survey (**Annexes RA 4-7 - RA 4-9**). The survey instrument was installed and the municipal staff trained to use it due to the PURE Water project. The official water analysis in both communities showed that after the construction activities the quality of drinking water met required standards (**Annexes RA 4-16 – RA 4-17**). 5,000 residents benefited in two communities.

*Municipal Irrigation Project in Vedi, Ararat region:* The project provides a new irrigation system for the municipal park and the soccer field for the town of Vedi. The existing irrigation system is fully renovated to reduce water loss, groundwater saving and ensure more efficient and affordable irrigation for the Municipality (**Annexes RA 4-6**).

**3,000 RESEIDENTS OF ARATASHEN, ARMAVIR REGIONS HAVE 24-HOUR DRINKING WATER SUPPLY**

For decades, Aratashen's old and inefficient water system caused excessive water loss and posed high contamination risks for the locals. With no capital investment in the system since the Soviet era, nearly 80% of the water leaked out through corroded pipes. Lack of water metering system, in its turn, resulted in unreasonably high waste of water. Mayor Vahram Harutyunyan admits they would operate three pumps, yet round-the-clock water supply remained unattainable for the village. Some parts of Aratashen, particularly its remote areas, didn't get any water during the summer season when the water demand was especially high.

In response, USAID's Advanced Science and Partnerships for Integrated Resource Development (ASPIRED) and Participatory Utilization and Resource Efficiency of Water (PURE Water) projects, together with the community of Aratashen, joined their efforts to rehabilitate Aratashen's water supply network. Assistance included installation of 10 km of corrosion-resistant polyethylene piping, new pump, chlorination station, and water metering devices, as well as introduction of new billing software for water supply services. These vital improvements will now allow the community to save 557,000 cubic meters of water and 204 megawatt-hour of energy each year.



Opening ceremony: Aratashen has uninterrupted drinking water supply

**Aratashen's water supply challenges are common for more than 30 communities in the Ararat Valley, currently experiencing critical shortages of drinking and irrigation water due to the depleting groundwater resources in the valley.**

*Irrigation Improvement Project in Pokr Vedi Community, Ararat region:* The project has been successfully completed during the reporting period. The Project is implemented jointly by the USAID (ASPIRED and PURE Water Projects), Hayastan All-Armenian Fund (AAF) and Artashat Water User Association. The existing corroded pipes were replaced with more durable plastic pipes. Plastic pipes also were installed instead of existing earth ditches; existing pipes have been replaced or repaired to ensure operational efficiency. As a result of the project the irrigation efficiency for 160 hectares of land was improved, including 40 hectares of arid community farmlands was returned to cultivation. The project enables income generation opportunities for 400 land-owners who will directly benefit from improved irrigation network.



Hayastan All-Armenian Fund joins PURE Water and ASPIRED to improve P. Vedi irrigation

*Improving Efficiency of Irrigation in Khachpar Community, Ararat region:* The project improved the availability of irrigation water for



Khachpar village.

As a result the community will

receive about 250 l/s of water which will meet its irrigation water needs. The earth canal was replaced with a plastic pipeline. Inlet and outlet chambers and related infrastructure were built. This will help to prevent the solid waste particles from getting into the water stream and to manage the water flow: The project also repaired existing roadside canals inside the village and increased their flow capacity to 250 l/second. The results of water quality testing in Khachpar community were satisfactory meeting the accepted standards.

## Challenges and Recommendations

### Challenges

- Poor capacity in project design and development.
- Poor participation culture: some target communities were more interested in infrastructure projects than introducing the culture of participation in their communities. They participated more when they anticipated receiving an award to improve community infrastructure. Once they did not receive award, they became less cooperative.
- Political situation in Yeghegnut with the mayor's dismissal and in Pokr Vedi with tensions between the Mayor and Council members required additional risk-mitigation efforts and delayed the project implementation.
- Limited amount of SSWIP did not allow award more target communities which were committed and cooperative.
- COVID-19: delayed construction activities.

### Recommendations

- Combine capacity building, behavior change-driven activities with material support: provision infrastructure and/or equipment. Such an approach will keep the partner communities committed in the course of implementation of the project. In the meantime, the activities aimed at capacity building and behavior change should be carried out continuously. Over time, it will become a habit and gradually, a culture.
- Still many communities in Ararat Valley remain water-stressed. The Government needs to continue to support water-stressed communities to improve their water infrastructure.

- During the implementation of infrastructure projects, the Government is encouraged to use participatory methodology and water/energy saving technologies tested successfully under the PURE Water/ASPIRED projects and raise international donor funding for that purpose.

### III. CONCLUSION

From Marc 2017 to June 2020 the Urban Foundation for Sustainable Development (the Urban Foundation) in cooperation with the Country Water Partnership (CWP) NGO and Environmental Law Research Center of Yerevan State University (YSU ELRC) implemented Participatory Utilization and Resource Efficiency of Water (PURE Water) project.

The Project aimed to contribute to the increase of water productivity, efficiency, and quality, as well as foster behavior change to reduce the rate of groundwater extraction in the Ararat Valley through number of combined interventions: (a) improvement of policy and regulatory framework to foster citizen participation; (b) participation in and oversight of water resources management; (c) increase of public awareness and education; and (d) improvement of water infrastructure in target water-stressed communities. The project was implemented in 12 water-stressed communities (Vedi, P.Vedi, Aygavan, Burastan, Berkanush (Ararat Region) and Aratashen, Aknalitch, Guy, Griboyedov, Yeghegnut, Yeraskhahun (Armavir Region)) with an overall population of around 40,000.

The achievements of the project are promising:

- A sound basis for the Government of Armenia (GOAM) is in place for comprehensive legislative improvement (legal analysis, a strategy of legislative improvements and a road map, drafted legislation)
- A positive behaviour change of relevant government agencies is in place. (RA Ministry of Territorial Administration and Infrastructure (MTAI Water Committee, RA Ministry of Environment (MoE) Water Resources Management Agency (WRMA), and RA National Assembly (NA) Standing Committee on Territorial Administration, Local Self-Government, Agriculture and Nature Protection (NA Standing Committee))
- A positive change in behaviour of other key stakeholders (fish-farms, water user associations)
- Increased transparency and accountability of decision makers and water managers are achieved (simplified water-use permitting platform, website/portal of Armavir WUA for awareness and for the simplified request of irrigation water, upgraded MMIS for water problem raising and complaints, phone survey instrument as an oversight and feedback tool)
- Residents in target communities are more vigilant and demanding due to public monitoring and advocacy (LG/CSO small grants, citizen scientists monitoring, a social audit by residents, citizen journalists' articles and social media posts)
- Residents in target communities are mobilized and actively participate in community life (town hall meetings for small infrastructure projects identification and monitoring, annual budget hearings, advocacy, awareness campaigns)
- Residents of target communities, including schoolchildren and youth, are better educated and aware of water issues, as well as of their water rights, and protection mechanisms (open lessons, educational seminars, study tours, eco-camp and eco-clubs, public information and education materials).

## Further Gaps and Needs

The USAID PURE Water project achieved the important milestones. It contributed to the behaviour change of stakeholders in the efficient management and use of groundwater resources in Ararat Valley. The project also had a sound contribution to the participatory and transparent water governance.

However, there are still gaps as well as needs for further improvement of transparent and participatory governance in groundwater resources in Ararat Valley. The gaps were revealed and the needs were raised by the project stakeholders (water users, local governments, water users associations, relevant decision-making authorities) responsible for water sector, by the project evaluation and by the project team during the implementation of the project:

- A group of needs relates to completing some initiatives started within the PURE Water project and expanding/replicating some other accomplished activities (websites for other WUAs, linking websites to the Water Committee data server/GIS, making sure the water-use permitting portal is operational, assisting the NA Standing Committee to pass the laws on WUAs and Ecological Policy).
- Another need is connected with the landmark political change taken place in Armenia in April 2018. After the Velvet Revolution, an exceptional commitment to cooperation was demonstrated by Armenian authorities. The water sector is one of the priority reform areas for the new Government. As part of the reforms, it is on high political agenda with the aim to rethink and improve current irrigation water management to make it more efficient, transparent, accountable, and participatory.
- To make informed decisions in designing the reforms, the Government will need a comparative analysis of different models of irrigation water management, such as by Water User Associations, communities themselves and the private sector to come up with the most efficient and effective strategy for resolving that major issue.
- BMOs were not quite enthusiastic and motivated to provide input for and learn from the project. According to the project observations these were mainly because of the following reasons:
  - BMOs are underemployed to implement assigned responsibilities. Each of them has only 2-3 responsible staff for water basin covering dozens of communities and large geographic area.
- BMOs are still under the pretty strong control of MNP. The discussions of PURE Water with MNP indicated that the WRMA mostly directly implements some functions of BMOs because they lack resources and capacity. In fact, the functions prescribed by the Water Code for BMOs actually were not fully granted to them and their functions are limited to submissions to the WRMA of their observation on WUP applications and sending information about the situation.
- Communities within the BMOs service areas almost are not engaged in decision-making regarding water use permitting process and in basin management planning, in general.
- The baseline study showed no earlier participation by youth. The PURE Water project improved the situation. Young generation from target communities actively participated in the project activities. However, youth participation still remained low as compared with the age group from 45-75.
- COVID-19: some project activities have been delayed and/or redesigned because of pandemic.

## IV. RECOMMENDATIONS

- Ensure completion of the draft legal acts in water sector deriving from the Strategy and Road Map developed within the PURE Water project with a view of adoption by RA National Assembly
  - Law on Water Users Association by the RA National Assembly
  - Law on Ecological Policy
  - Law on Ecological Information
- Make amendments to RA Water Code and RA Government Decisions that regulate re-use and free use of water



- Assess diversified management options for the irrigation water to ensure efficient and competitive irrigation management in Ararat Valley.
- Develop websites for 14 WUAs.
- Upgrade the GIS system of Water Committee to ensure transparent e-governance of irrigation water
- Reassess and improve the organizational management and operations of WUAs in a participatory manner by engaging water-users.
- Improve capacities of WUAs:
  - Organizational and institutional development (improved procurement, financial managements, rules and regulations, etc.).
  - Trainings to operate websites and GIS system.
- Make simplified online water-use permitting platform operational.
- The Government needs to further promote decentralization of water management, create conditions and provide resources for BMOs to fully implement their functions as prescribed by the Water Code.
- BMOs capacities need to be improved to implement efficient basin management in its service area.
- Promote civic engagement in the course of basin management process - starting from the development of basin management plans to the issuance of water use permits. The cooperation and coordination should be established between BMOs and communities located in its service area to ensure wider transparency and participation in basin management of the service area.
- Community activists, CBOs and CSOs, as well as development organizations need to make continuous efforts to entrench ownership and responsibility of citizens for the decisions taken in their communities through their direct participation. Continuous actions will mature over time civic activism and engagement and will turn them to habitual practices, behavior and culture.
- The Government needs to pursue in the future to continue the dialogue with fish farms in encouraging them to use water-saving technologies and discuss legislative changes related to the secondary/multiples water use.
- Environmental education should be continued in the schools by the state and CSOs. It is recommended to replicate the courses developed under this project to other schools. CSOs that have relevant experience, such as ATP, should be involved in this process to help redesign this course.
- Replicate innovative and cost effective monitoring and water-saving technologies piloted under the project (smart water meters for individual farmers land plots, saving and re-use of water from drinking fountains, trap for trash for irrigation canals, WUA website/portal).
- Ensure the sustainability of various successful interventions implemented within the framework of the Project: citizen scientists, citizen journalists, social audit, etc.
- Continue to implement drinking and irrigation water infrastructure projects in Ararat Valley by replicating water and energy saving technologies piloted under the project.
- Target local governments need to continue practicing management, oversight and feedback mechanisms provided under the PURE Water project: participatory budgeting, phone surveying, public hearings, problem identification methodology, etc.
- Community-based NGOs, water sector and environmental NGOs need to continue working with local community activists and together with them continue to voice and advocate water sector related problems using different tools mastered within the PURE Water project: town-halls, social audit, "citizen scientists"/idea contest, citizen journalists, etc.
- The Government needs to improve policies and regulations to ensure that predominant role of big fish-farms do not infringe the rights of small and medium fish-farms.
- Combine capacity building, behavior change-driven activities with material support: provision infrastructure and/or equipment. Such an approach will keep the partner communities committed in the course of implementation of the project. In the meantime, the activities aimed at capacity building and behavior change should be carried out continuously. Over time, it will become a habit and gradually, a culture.
- Still many communities in Ararat Valley remain water-stressed. The Government needs to continue to support water stress communities to improve their water infrastructure.

- During the implementation of infrastructure projects, the Government is encouraged to use participatory methodology and water/energy saving technologies tested successfully under the PURE Water/ASPIRED projects and raise international donor funding for that purpose.

## V. PURE WATER PROJECT PARTNERS

- Aratashen community
- Yeghegnut community
- Vedi community
- Pokr Vedi community
- Khachpar community
- Yeraskhahun community
- Aknalich community
- Burastan community
- Berkanush community
- Aygavan community
- Griboyedov community
- Guy community
- RA Ministry of Territorial Administration and Infrastructure (RA MTAI)
- RA MTAI Water Committee
- RA Ministry of Environment (RA ME)
- RA ME Water Resources Management Agency
- RA NA Standing Committee on Territorial Administration, Local Self-Government, Agriculture and Environment
- Ararat Regional Government
- Armavir Regional Government
- Advanced Science & Partnerships for Integrated Resource Development (ASPIRED) Project
- Hayastan All-Armenian Fund
- Coca-Cola Global Foundation
- Coca-Cola Hellenic Bottling Company Armenia
- Armenia Tree Project
- ICARE-Armenia
- AUA Acopian Center for the Environment
- Hetq Investigative Journalists NGO
- Hetq online newspaper
- Yerkir Media TV
- Media Initiatives Center
- World Bank
- Eurasian Fund for Stabilization and Development
- EU "Water Initiative Plus" project
- Environmental and health sector NGOs
- Water user associations
- Fish farms

## VI. ANNEXES

### General Annexes

Annex General 1 -	In-depth interviews report
Annex General 2 -	MoU Aknalich
Annex General 3 -	MoU Aratashen
Annex General 4 -	MoU Aygavan
Annex General 5 -	MoU Berqanush
Annex General 6 -	MoU Burastan
Annex General 7 -	MoU Griboyedov
Annex General 8 -	MoU Guy
Annex General 9 -	MoU Khachpar
Annex General 10 -	MoU Poqr Vedi
Annex General 11 -	MoU Vedi
Annex General 12 -	MoU Yeghegnut
Annex General 13 -	MoU Yeraskhahun
Annex General 14 -	MoU with Water Committee
Annex General 15 -	Partner communities
Annex General 16 -	Water one-pager

### Annexes: Result Area 1

Annex RA 1-1	Draft RA Law on Environmental information
Annex RA 1-2	Local Advocacy Plans
Annex RA 1-3	Advocacy-Campaign-Strategy
Annex RA 1-4	Draft RA Law on Environmental Policy
Annex RA 1-5	Draft RA Law on WUAs
Annex RA 1-6	Grant Cycle Review Advocacy Small Grants
Annex RA 1-7	Draft Irrigation Water Contract
Annex RA 1-8	Report on BMO meetings
Annex RA 1-9	RFA Advocacy Monitoring Small Grants
Annex RA 1-10	Strategy & Road Map for Improved legislation
Annex RA 1-11	Summary Recommendations on Amending the Contract signed with Water User Associations
Annex RA 1-12	Task force meetings – attendees
Annex RA 1-13	WPAN advocacy action plan
Annex RA 1-14	Advocacy Toolkit

### Annexes: Result Area 2

Annex RA 2-1	Citizen Journalists-References to the posts & articles
Annex RA 2-2	Citizen Scientists: Idea Forum Agenda
Annex RA 2-3	Citizen Scientists: proposal ideas
Annex RA 2-4	Citizens Scientists: awardees with budgets
Annex RA 2-5	Climate Change handout
Annex RA 2-6	Drinking water disinfection Information Leaflet
Annex RA 2-7	Gender and Water handout
Annex RA 2-8	Gender, Water, Sanitation & Health
Annex RA 2-9	Grant Cycle Review Citizen Scientists
Annex RA 2-10	Grant Cycle Review LG-CSO grants
Annex RA 2-11	Instructions on monitoring kits
Annex RA 2-12	list of public oversight mechanisms adopted by the project partner communities
Annex RA 2-13	Online Water Use Permitting platform User Manual
Annex RA 2-14	Poster for the schools with the messages by the schoolchildren
Annex RA 2-15	Report on Educational Activities for Schoolchildren

Annex RA 2-16	Report on Social Audit activities
Annex RA 2-17	RFA-LG-CSO Collaboration small grants
Annex RA 2-18	Study visit plan
Annex RA 2-19	Trainer guide
Annex RA 2-20	Training WRM Home Reading
Annex RA 2-21	Upgraded MMIS User Guide
Annex RA 2-22	Water and Health Information Leaflet
Annex RA 2-23	Water Monitoring Information Leaflet
Annex RA 2-24	WRM Presentation
Annex RA 2-25	WRM Training Materials 1
Annex RA 2-26	WRM Training Materials 2
Annex RA 2-27	WRM Training Module: Water in Our Life

### **Annexes: Result Area 3**

Annex RA 3-1	Annex Rights Q&A
Annex RA 3-2	Baseline Study on Water Utilization in the Ararat Valley
Annex RA 3-3	BCC Plan PURE Water
Annex RA 3-4	Water health Q&A
Annex RA 3-5	Water Users Directory
Annex RA 3-6	Bookmarks
Annex RA 3-7	Best Practice fish farmers brochure
Annex RA 3-8	Brochure_Participation in water resource management
Annex RA 3-9	Brochure_Water as a meaning of life
Annex RA 3-10	Drinking Water_Q&A
Annex RA 3-11	Desktop calendar 2019
Annex RA 3-12	Community success stories
Annex RA 3-13	Hetq News articles 1
Annex RA 3-14	Hetq News articles 2019-2020
Annex RA 3-15	Irrigation water_Q&A
Annex RA 3-16	List and classification of stakeholders
Annex RA 3-17	Information Sheet and Interview Consent Form
Annex RA 3-18	List and classification of stakeholders-baseline
Annex RA 3-19	List of messages for different stakeholders
Annex RA 3-20	Poster_Water is precious, every drop is special_campaign
Annex RA 3-21	Promo
Annex RA 3-22	PSAs' scenarios 1
Annex RA 3-23	PSAs Scenarios
Annex RA 3-24	Public Events Concept
Annex RA 3-25	PURE Water Follow-up stakeholder analyses and mapping
Annex RA 3-26	PURE Water Newsletter Year 2
Annex RA 3-27	PURE Water Newsletter_ARM 1
Annex RA 3-28	PURE Water Project External Evaluation Report
Annex RA 3-29	PURE-Water_HH Questionnaire
Annex RA 3-30	Report on Focus Groups_PURE WATER
Annex RA 3-31	TV Programs & Reports 2019-2020
Annex RA 3-32	Water Sector Stakeholder Analysis in Ararat Valley, Armenia
Annex RA 3-33	One pager_ Water is precious, every drop is special_campaign

### **Annexes: Result Area 4**

Annex RA 4-1	Aratashen community water project EMMP
Annex RA 4-2	Yeghegnut community water project EMMP
Annex RA 4-3	Pokr Vedi community water project EMMP
Annex RA 4-4	Khachpar Infrastructure Project EMMP
Annex RA 4-5	Vedi community water project EMMP

Annex RA 4-6	EMMP Survey-Vedi
Annex RA 4-7	Follow-up Phone Survey Aratashen
Annex RA 4-8	Follow-up Survey Report Yeghegnut
Annex RA 4-9	Small-scale Infrastructure Projects Baseline Survey Report
Annex RA 4-10	Project proposal of Aratashen
Annex RA 4-11	Project proposal of Khachpar
Annex RA 4-12	Project proposal of Poqr Vedi
Annex RA 4-13	Project proposal of Vedi
Annex RA 4-14	Project proposal of Yeghegnut
Annex RA 4-15	Five Infrastructure projects' signs
Annex RA 4-16	Water quality test- Khachpar
Annex RA 4-17	Yeghegnut water test