

Involuntary Resettlement Due Diligence Report

February 2015

ARM: Water Supply and Sanitation Sector Project- Additional Financing

Prepared by the Armenian Water and Sewerage Closed Joint Stock Company (AWSC) for the Asian Development Bank.

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INVOLUNTARY RESETTLEMENT DUE DILIGENCE REPORT

SUBPROJECT 10, ARAGATSOTN MARZ

ARMENIA. WATER SUPPLY AND SANITATION SECTOR PROJECT. PHASE II

Project Number: L2860-ICB-1-10



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ABBREVIATIONS

ADB	Asian Development Bank
PC	Public Consultation
GoA	Government of Armenia
RA	Republic of Armenia
AMD	Armenian Dram
LAR	Land Acquisition and Resettlement
LARF	Land Acquisition and Resettlement Framework
AWSC	Armenian Water and Sewerage Company
SCWE	State Committee for Water Economy
WSS	Water Supply and Sewerage
LA	Local Authorities
DRR	Daily Regulating Reservoir

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1. INTRODUCTION

A. Project Background

1. On the back of the successful implementation of the Water Supply and Sanitation Sector Project, Phase I, the Government of Armenia (GoA) through the State Committee for Water Economy (SCWE) has requested Asian Development Bank (ADB) to support the funding of a new project. ADB agreed to provide GoA with the loan of 40 mln US\$ (Armenian Dram) to rehabilitate and extend Water Supply and Sewerage (WSS) systems across 10 Subprojects and improvements in operational efficiency and financial management of Armenian Water and Sewerage Company (AWSC)¹. The additional financing project of the WSS Sector, Phase II, includes 18 towns and 92 villages in order to implement the above-mentioned procedures. Within the scope of 10 Subprojects it is foreseen to make investments in 10 regions. This due diligence report concerns to Subproject X in the absence of any land acquisition and consequently, no resettlement impacts.

B. Scope of the Project

2. The Project is aimed (a) to rehabilitate and upgrade water supply infrastructures, (b) to improve the performance of water supply services, and (c) to improve the management and operational efficiency of the water utility company.
3. As a result, Project will ensure further public health and environmental improvements by providing potable and reliable water supply to beneficiary households. It will also support poverty reduction by (i) reducing the incidence of waterborne diseases and costs of medical care; (ii) improving the time poverty of women due to labor intensive housework such as water collection, which may allow them to participate more in social and economic activities; (iii) providing safer and more reliable water supply; and (iv) improving the quality of life of households in all the project towns and villages by improving their access to safe and sustainable drinking water.
4. The Project will establish safe, reliable piped water supply for 110 communities: 18 towns and 92 villages within 10 Marzes (Aragatsotn, Ararat, Amavir, Geharkunik, Tavush, Lori, Kotayk, Shirak, Syunik, and VayotsDzor). The Project will be implemented through subprojects. The beneficiaries of Subproject X from Aragatsotn Marz are Talin town and Aruch, Partizak, Nor Amanos, Arevut, Kanch, Hako, Sorik and Qaraberd villages. The total number of beneficiaries is 11,412.

¹AWSC – a government-owned commercial company that is managed and operated through a management contract by an international water utility company.

C. Design Features of Subproject X

5. The network in beneficiary communities was mostly built in 1960s-70s. Some waterlines and water metering units were built in 2009-2011 in the framework of the projects financed by ADB. About 80% of system is in emergency condition.
6. The following approaches lay as the basis of proposals for improvement of water supply systems of the settlements Talin town and Aruch, Partizak, Nor Amanos, Arevut, Kanch, Hako, Sorik and Qaraberd villages covered by the project:
 - leakage reduction,
 - water quality improvement,
 - water amount calculation, service quality improvement,
 - extension of water supply duration,
 - rational usage of potable water.
7. The following works are included in the proposed measures for improvement of water supply condition in the communities covered by the Subproject:
 - reconstruction and restoration of water supply distributing networks, regulating and water metering junctions, waterlines of private houses, public entities, community and state buildings;
 - reconstruction of external conduits in Sorik, Hako, Qaraberd and Arevut.
8. The studies of the sewage system in the subproject communities revealed that these communities do not have complete sewerage system.
9. Given the number of communities included in the ADB financed project and limited resources envisaged for improvement of these communities, the first priority actions included those works that will solve the most urgent issues giving the preference to the proposals that can be technically and financially achieved.
10. The main criteria for water supply system improvement for Talin town and Aruch, Partizak, Nor Amanos, Arevut, Kanch, Hako, Sorik and Qaraberd villages is briefly presented below, which served as a basis for developing the priority investment program:
 - possibility to include the residential areas in AWSC area,
 - collection level by the customers and willingness to pay,
 - current condition of the water supply to the community and the possibility of improvement,
 - capacity of the system, including that of the water source and possibility of water provision,
 - possibilities to increase the manageability level of the system,
 - technical condition of all of the elements of the system and improvement needs,
 - water metering availability and possibilities to apply or introduce the metering system,
 - necessary volumes of construction of private house entry lines and water meter installation,

- possibilities to reduce leakage and wastage and the required bill of quantities,
- possibilities to reduce operation costs, management efficiency.

Foreseen detailed activities In order to improve water supply system in the settlements of Subproject is given in the Table 1 below.

Table 1: Summary of Activities For Subproject X by communities

Activities	U/M	t. Talin	v. Aruch	v. Partizak	v. Nor Amanos	v. Arevut	v. Kanch	v. Hako	v. Sorik	v. Karaberd	Total
Reconstruction of external conduit	lm	-	-	-	-	4000	-	1550	3660	2300	11510
Repairing of DRR,	m ³	2500	-	-	-	-	-	-	100	-	2600
Reconstruction of chlorination plant	pcs	1	-	-	-	-	-	-	-	-	-
Replacement of chlorinating equipment	pcs	-	1	1	1	-	-	-	-	-	3
Reconstruction of water supply internal net by pipes of de50-de160 diameter, testing, washing, disinfection	lm	19065	7850	3650	6450	970	2880	1550	1300	8320	51915
Construction of entry lines of private houses by replacing water metering wells	pcs	569	238	86	120	35	35	26	25	230	1364
Changing entry lines of multistory houses and social buildings	pcs	45	-	-	-	-	-	-	-	-	45
Construction and Reconstruction of WC & FH	pcs	12	-	-	-	-	-	-	-	-	12
Construction of buried valve junctions	pcs	58	9	2	13	2	1	3	1	11	100

11. The water supply of Talin town is implemented by gravity system of Karmrashen Kentaghbyur catchments. The water coming from the catchments is disinfected in the chlorination plant of Talin DRRs. The distribution network of Talin town is served by 4 DRRs with 2500m³ total volume. The water supply of Aruch, Partizak, Nor Amanos villages is realized by gravity system from Wosketasi catchments. The water coming from the catchments is disinfected in the chlorination plant of DRRs operating in the territory of the communities. The water supply of Arevut, Kanch, Hako, Sorik villages is realized by street taps situated in different parts, they need to be changed.

D. Objective and Scope of the Report

12. There is no land acquisition requirement; hence no resettlement impacts, in this subproject. The objective of this Due diligence report (DDR) is to review the Subproject X Land

acquisition and resettlement (LAR) impacts, if any, based on the detailed design and propose mitigation measures, if necessary in accordance with ADB Safeguard Policy Statement (June, 2009). This Report has been also developed according to the project of WSS sector - of Additional financing Resettlement framework (2011).

2. LAR REQUIREMENTS FOR THE PROJECT

13. In accordance with Safeguard Policy Statement requirements, the project is defined as B category for involuntary resettlement impact (limited impacts). The preliminary design and later on the detailed design of this subproject showed that the rehabilitation and construction would be conducted on property owned by the AWSC, on municipal/community land, or within the rights-of-way assigned to municipal/community infrastructure.
14. Land Acquisition and Resettlement Framework (LARF) for AWSS Project (Phase II) has been prepared by the AWSC and was endorsed first by the SCWS under the RA Ministry of Territorial Administration and then by the Government of Armenia in March 2012. The document details mechanisms, procedures and compensation entitlements to be applied in the planning and implementation of Land Acquisition and Resettlement (LAR) activities. A sample Land Acquisition and Resettlement Plan (LARP) for AWSS Project (Phase II) was developed in December 2011 for the purpose of guidance in preparing a LARP, if there are land acquisition and resettlement impacts. The document addressed project LAR impacts based on the preliminary design and respective budget for its implementation. The sample resettlement plan was also endorsed by SCWE and uploaded on ADB's website together with the Project LARF on 19 December 2011.

3. MINIMIZING OF LAR IMPACTS

15. One of the main preconditions of the detailed design was the avoidance of LAR impacts as LARF states that subprojects involving acquisition of private properties and/or cause significant IR impacts are ineligible for project financing and thus must be dropped from the project.
16. Therefore, prior to each section detailed design, the cadastral maps for each community were examined to understand if there are any overlaps between the private or used lands and the existing water pipes. Verification of the cadastral maps was done also in the field, based on the survey and measurement where applicable. After the exercise, impact on the legally/ illegally used lands/structures was avoided in the detailed design.
17. Main principles of the detailed design are as follows:
 - New lines were selected in the community streets, which helped to avoid the LAR as well as usage of the used lands by community members in the future. Also it will ensure

easier maintenance of the infrastructure as well as prohibit illegal use of water from the pipes network.

- Where the private usage of the land was identified (legal or illegal) a new design solution was given to avoid the impact.

18.

19. Figure 1 below shows how the impact on residential areas was avoided in Talin town. The existing waterline passed through residential areas, particularly through homestead plots. According to the project, it is foreseen for the mentioned conduit disconnection, dismantling and construction of a new waterline near the territory along asphalt cover road.

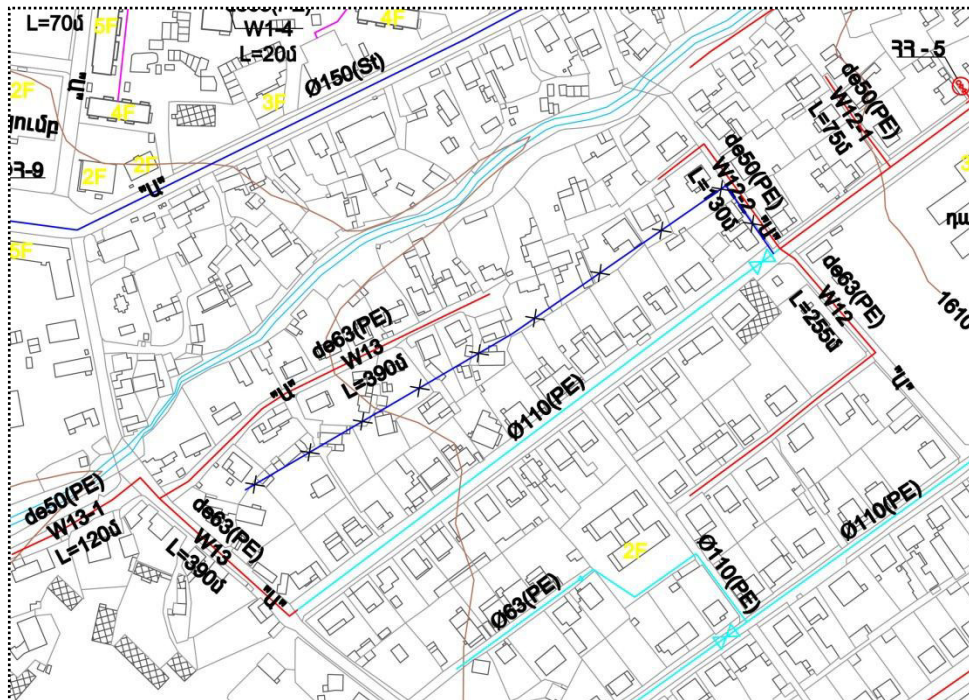


Figure 1. Talin town

Note:

	existing waterlines
	designed waterlines
	waterlines out of order
	waterlines implemented by other project

20. Figure 2.below shows how the impact on agricultural areas was avoided in Sorik village. The existing waterline passed through arable lands. According to the project it is foreseen to avoid arable lands and build a new waterline near the territory along asphalt covered road.

Table 2: Public Awareness Campaign Implementation Status in AragatsotnMarz

No	Community	Date of meetings	Place of meeting	Approximate Time spent per meeting	Number of participants	Number of Female participants	% of Female participants
1	v.Aruch	23.10.2014	Village hall	30minutes	16	6	37.5
2	v. Partizak	27.10.2014	village hall	40 minutes	10	7	70.0
3	v.Nor Amanos	23.10.2014	village hall	40 minutes	13	6	46.2
4	v.Arevut	27.10.2014	village hall	30 minutes	16	1	6.3
5	v.Kanch	24.10.2014	village hall	35 minutes	7	3	42.9
6	v.Hako	24.10.2014	village hall	50 minutes	18	10	55.6
7	v. Sokik	24.10.2014	village hall	40 minutes	12	-	0
8	v. Karaberd	23.10.2014	village hall	50 minutes	12	7	58.3
Total					104	40	38.5

4. SCOPE OF POTENTIAL LAR IMPACTS

- 22.Subproject X will not cause any permanent and/or temporary impacts, as the operation and maintenance activities will be conducted on property owned by the AWSC, on municipal land, or within the rights-of-way assigned to municipal infrastructure.
23. Therefore, no impact is envisaged on privately owned land plots or community lands rented or otherwise used by community members. Construction of the water transmission pipeline will not cause any impact on the businesses as well. The roads and shoulders are wide enough so customers should not be impeded and there will be no loss of income. Additionally, constructors will provide temporary access during construction works.
24. No impacts on the water supply access to households and businesses are expected in the project areas during the reconstruction of the water supply pipes and reservoir. The following measures are foreseen to eliminate such impacts, despite these disturbances being rather short in duration:
- Informing all residents and traders about the nature and duration of work well in advance so that they can make necessary preparations;
 - Increasing the workforce and using appropriate equipment to complete the work in a minimum timeframe on these stretches; and
 - Ensuring that the connection to the new system is well coordinated before disconnecting households and business from the old system.
25. During the implementation of construction works, temporary restriction of access or difficult pass ability situation may occur. The following provisions will be included in the construction

Contractors' contract for the purpose mitigation or neutralization of the impact due to the above-mentioned issues.

- Before the commencement of civil works, the construction Contractor will ensure the alternative solution for the access of community members to their land or place of residence;
- In case of unavailability of alternative solution for the access, the Contractor will have to arrange/plan his works so that they do not affect local residents. Contractor also should inform all residents and traders about the nature and duration of work well in advance so that they can make necessary preparations;
- To maintain customer access to the acting businesses, Contractor will provide wooden walkways and appropriate vehicle access across trenches at intervals.
- In certain unforeseen cases when the land user loses his crop due to the restriction of access to the land the contractor has to report to the supervision consultant and stop the civil work activities in the affected areas until the crop are compensated as indicated in the LARF provisions.
- AWS CJSC will monitor Construction impact in terms of relevance to the described procedures and approaches.

5.CONCLUSION

26. A final screening and due diligence for involuntary resettlement impacts for Subproject X were implemented to ensure that the Subproject will not cause any LAR impacts. Both permanent and temporary impacts were considered and analyzed during this process.
27. Subproject X includes upgrading and rehabilitation of existing physical facilities. The detailed design confirms that rehabilitation and construction will be done on property owned by the AWSC, on municipal land, or with the rights-of-way assigned to municipal infrastructure.
- The activities will not require permanent or temporary land acquisition irrespective of the ownership status and current usage of the land.
 - There is no impact on businesses and/or any impact-generated activities
 - No one will lose access to facilities, services, or natural resources.
28. During the construction phase AWSC will monitor the construction works in terms of any temporary/permanent impact, such as limitation of access to businesses or other livelihood resources etc. Any impact identified during construction works to be compensated based on the LARF provisions.