



Technical Assistance Consultant's Report

Project Number: 48205-001
October 2015

Armenia: Solid Waste Management Solutions for Remote and Small Communities (Financed by the Government of Japan through the Japan Fund for Poverty Reduction)

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For the Ministry of Territorial Administration and Emergency Situations, Republic of Armenia

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Asian Development Bank

OCTOBER 2015
ASIAN DEVELOPMENT BANK

TA 8875-ARM Solid Waste Management Solutions for Remote and Small Communities

FUNDED BY THE GOVERNMENT OF JAPAN
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INCEPTION REPORT



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1 Introduction

This report has been prepared by COWI A/S (the Consultant) in line with the assignment "TA 8875-ARM: Solid Waste Management Solutions for Remote and Small Communities" (the Contract) funded via the Asian Development Bank (the ADB) by the Government of Japan through the Japan Fund for Poverty Reduction. and executed in close cooperation with the Ministry of Territorial Administration and Emergency Situations of Armenia (MTAES).

According to the ToR, the study should focus on remote and small communities of two south-eastern regions (Marzes) of Armenia – Vayots Dzor Marz and Syunik Marz.

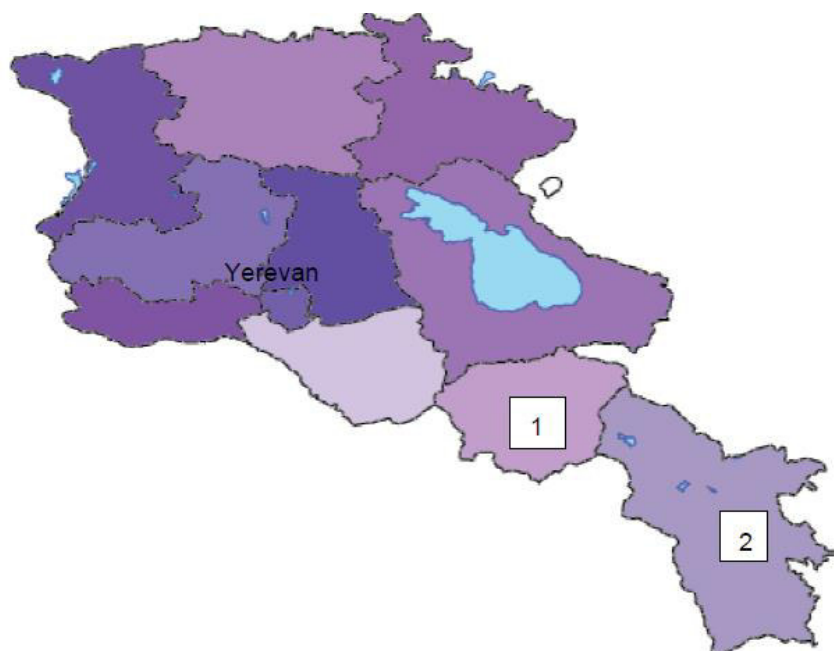


Figure 1 Location of Vayots Dzor Marz (1) and Syunik Marz (2) in Armenia

Chapter 2 of the report describes the Consultant's main activities, Chapter 3 - the key findings of the Inception Phase. Chapter 4 presents an updated plan for further work on the assignment.

2 Activities during the Inception Phase

Within the Inception Phase, the Consultant carried out two missions in Armenia. Each mission included a series of meetings in the communities, visits to waste disposal sites and a series of meetings at MTAES.

The key contact persons representing MTAES for this assignment are:

- › Mr Artashes Bakhshyan – Deputy Minister
- › Ms Lusine Harytyunyan – Leading Specialist

The two missions covered a number of municipalities representing all four Districts of Syunik Region (Marz). The Districts and their administrative centres are shown in Figure 2.

The following members of the Consultant's team took part in the Inception Phase:

- › Andrik Mols - Team Leader/Senior SWM Specialist (international)
- › Ashot Baghdasaryan -Senior Financial Specialist (international)
- › Larissa Lauritzen - Senior Environmental Safeguard Specialist (international)
- › Alice Savadyan - Deputy Team Leader/SWM Specialist (national)
- › Gevorg Martirosyan – Waste Characterization Specialist (national)
- › Arsen Karapetyan - Financial Specialist (national)

A List of persons met during the Inception Phase is included in Appendix .

2.1 Mission 1 in September 2015

During the start-up mission from 7 to 11 September, the Consultant first visited the remote areas located in the southern part of Syunik Marz (see Figure 2), in Megri District, and then a number of communities in Goris District in order to get a better understanding of transport logistics and accessibility of the communities

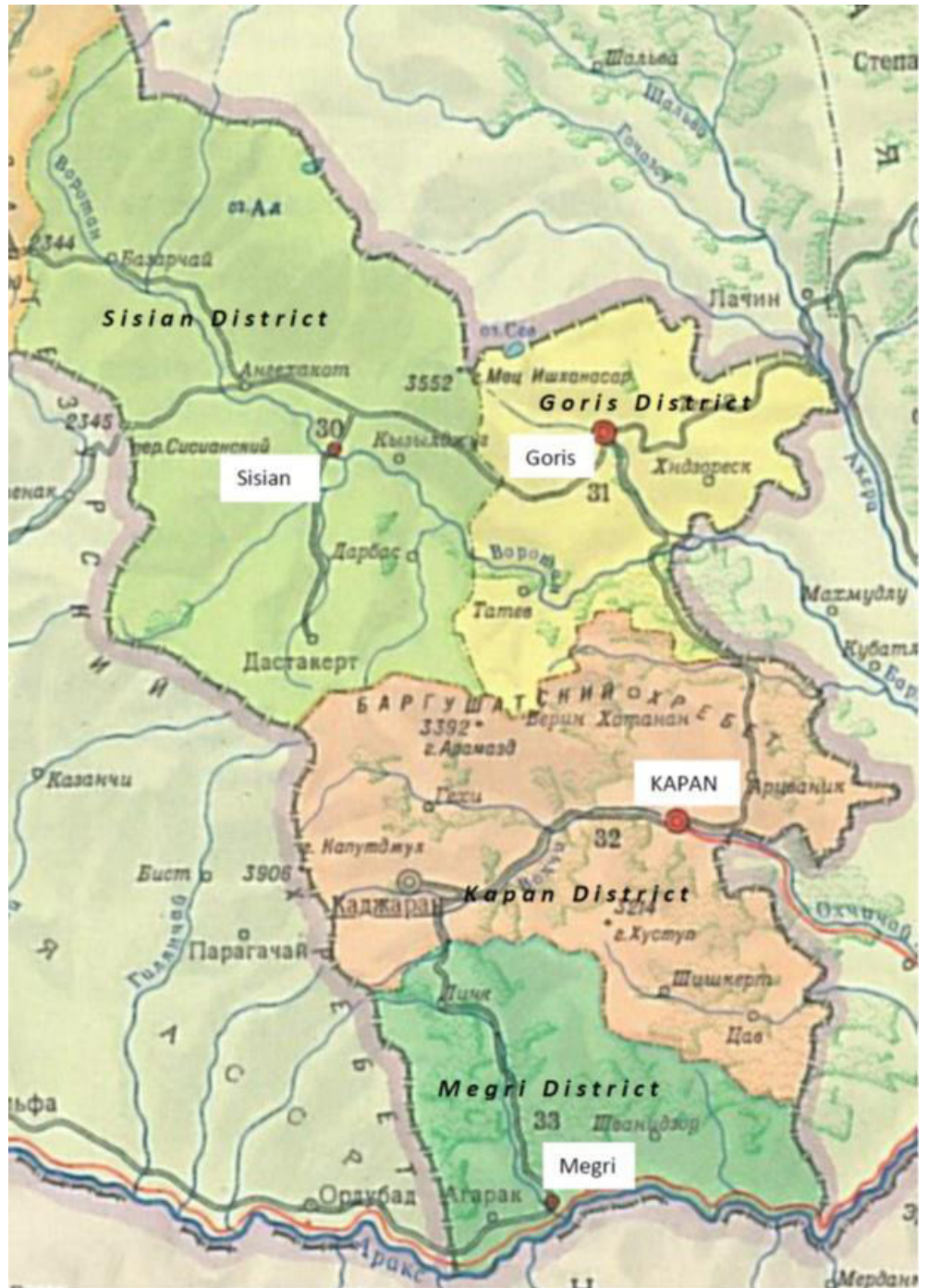


Figure 2 Districts and administrative centres in Syunik Region

Three meetings for presentation of the project and coordination of the work were held with participation of the leading officers of Syunik Marzpetaran (Regional Administration), who provided active support to the Consultant's team during the mission. A representative of the regional department for housing services joined the Consultant's team during the visits in Megri District and Kapan city.

The template questionnaire used during the Mission 1 for collection of data on waste management in communities is included in Appendix B.

2.1.1 Visits in communities

In Megri the Consultant met the heads or their representatives from Megri town, Agarak town and a number of adjacent rural communities. The Consultant's team presented the project, got the inception questionnaires filled in, answered the questions raised by the meeting participants and recorded the main concerns and experience relevant for identification of potential pilot projects briefly described by the meeting participants.

During the meeting, the Consultant learned that a pilot project with collection of waste plastic bottles is under implementation in Agarak community. No information on further treatment of the bottles was available from the community representative. According to information received by the Consultant during additional interviews, the collection of waste plastic bottles was initiated in February 2015 within the US Government Small Grant Programs and was implemented by the local NGO "Initiative and Development" with 6 containers installed, already filled in, but not filled up yet. It is expected to deliver the collected bottles to Kapan, where a project including the establishment of a plant for baling and/or shredding of plastic waste is under preparation by the NGO Urban Foundation for Sustainable Development.

Basing on consultation with the meeting participants, the Consultant agreed about the sites to be visited in surroundings of Megri and then together with representatives of the communities visited the following:

- › Central dumpsite of Megri,
- › Dumpsites in Lehvaz community,
- › Dumpsites in Vardanadzor community.

In Goris town the Consultant had a meeting with heads of communities located in Goris District. The Governor of Syunik Marz attended the meeting. The Consultant informed the participants about the project and collected the questionnaires filled in with the data for the represented communities. The Consultant learned that some of the communities were involved in preparation of application for a project with EU support including purchase of equipment for the waste collection improvement.

In the Goris District the Consultant visited:

- › The central dumpsite in Goris,¹
- › Karahunj community,
- › Verishen community,
- › Tegh community.

¹ Receives waste from Goris, a number of adjacent communities and certain amount of waste collected in the Tatev group of communities)

2.1.2 Meetings at MTAES

Kick-off meeting on 07 September 2015

ADB was represented by: Mr David Dole, Head of the ADB Armenia Resident Mission (ARRM)

MTAES was represented by: Artashes Bakhshyan, Lusine Harutyunyan

COWI was represented by: Andrik Mols, Ashot Baghdasaryan, Alice Savadyan

David Dole presented the ADB funded consultancy assignment and introduced the Consultant.

The practical recommendations for the Consultant's visits to communities and the relevant contacts of facilitators in Syunik Marzpetaran were kindly provided by the MTAES.

Meeting on 11 September 2015

ADB was represented by: Mr David Dole

MTAES was represented by: Artashes Bakhshyan, Lusine Harutyunyan

COWI was represented by: Andrik Mols, Ashot Baghdasaryan, Alice Savadyan, Larissa Lauritzen, Gevorg Martirosyan, Arsen Karapetyan

The debriefing meeting addressed the findings from the first mission and the need for elaboration of the common understanding of the Consultant's scope of work in line with the needs and expectations of the MTAES, the ADB and the Government of Japan². The Consultant briefly informed on its observations, presented the questionnaires filled in by the representatives of communities met during the mission and gave some preliminary suggestions for potential pilot projects.

There was some discussion regarding the scope of services under the project. The MTAES underlined that the international consultancy services would not be of significant value for Armenia, if the proposed investment projects include just rather simple recommendations obvious for the local authorities and specialists. For example, it will not be appreciated by the MTAES, in case a pilot project objective will be to stop dumping of waste in several places in a village (e.g. Tegh visited by the Consultant in Goris District) and arrange for regular waste collection rounds by a vehicle. This would change the waste management practice in one village, where the inhabitants currently dispose their waste by throwing it down a slope of a ravine located within walking distance from their homes.

MTAES recommended COWI to actively involve the local sub-consultants during the diagnostic study in the collection of information on the waste management conditions in selected communities.

² The TA is financed by a grant from the Japanese Government

During the follow-up meetings the Consultant has clarified with the MTAES, which additional information should be collected during the study.

2.2 Mission 2 in October 2015

Recommendations received from the MTAES upon Mission 1 were taken into consideration during the Consultant's Mission 2 carried out from 5 to 9 October 2015. The more elaborated template questionnaire used for data collection during Mission 2 is included in Appendix C.

Information collected with the questionnaire was inserted in the overall data table established by the Consultant for all communities of Syunik Region.

2.2.1 Visits in communities

The Consultant had a meeting in Kapan (at the Aarhus Centre located in the Marzpetaran building) with representatives of the Regional Administration and heads of the Kapan District communities on 7 October.

The site visits in Kapan District were after the meeting carried out to:

- › Kajaran landfill
- › Kapan dumpsite
- › Agarak community
- › Artsvanik community

On 8 October the Consultant had meetings with community heads about the current waste collection system and then visited the local dumpsites in the Tatev group of communities in Goris District. The Consultant visited the following largest communities of the Tatev group: Khot, Shinuhayr, Halidzor, Tatev. The data collection questionnaires were filled in during interviews. The local dumpsites were visited.

Travelling to and from the Tatev community the Consultant was particularly impressed by the investment project with a world longest cable road (operated by Wings of Tatev private company³) and appreciated the arrangements made by the company for regular collection of waste from containers installed along the main roads in Shinuhayr, Halidzor and Tatev communities.

Further visits were carried out in Sisian District, including Shaki community (interviews with the inhabitants about the waste management practice, visit the dumpsite) and Sisian community (meeting at the office the community head, inspection of waste collection points, visit to storage facility for plastic bottles, visit to the dumpsite). The waste plastic bottles are collected in 45 special containers for possible recycling in Kapan within the project implemented by the Urban Foundation.

³ <http://www.tatever.am/en>

2.2.2 Meetings at MTAES

Meeting on 06 October 2015

Participants representing MTAES: Artashes Bakhshyan, Lusine Harutyunyan, Armen Saakyan.

Participants representing COWI: Andrik Mols, Alisa Savadyan, Larissa Lauritzen, Syuzan Ghardyan (interpreter).

The meeting's objective was to agree on the Consultant's scope for the assignment and the most convenient manner of cooperation between COWI and the MTAES. COWI proposed to discuss nine significant aspects of the scope and presented the Consultant's vision of possible options. The MTAES took part in the discussion and provided comments.

The discussion and comments regarding the nine aspects are summarised below:

1. Focus on Syunik

Syunik Marz in general should be considered as a group of remote and small communities, probably the most remote in Armenia. Vayots Dzor Marz is also a similar group of communities, but not so remote as Syunik Marz. The consultancy services are to be provided for elaboration of reasonable solutions for improvements of the waste management system for the Marz. The study will focus on Syunik Marz in detail including with data collection and compilation, meetings and site visits in the region for elaboration of realistic measures for improvement of SWM in line or not in line with the solution proposed by COWI during elaboration of the National SWM Strategy. This solution assumes the establishment and operation of one regional sanitary landfill according to the EU standards in Kapan receiving waste via two transfer stations (one in Goris District and one in Megri District). The diagnostic study will consider alternative solutions and compare them with the solution recommended under the National SWM Strategy.

For Vayots Dzor Marz, the study will not include any meetings or visits, but should be based on a desktop review of readily available information. The purpose of the review is to identify and compare a number of options other than those two considered in the national strategy: (1) waste disposal at a regional landfill or (2) transportation of waste for disposal at Yerevan's landfill.

2. Consideration of three main sub-regions in Syunik Region

Megri-Agarak, Kapan-Kajaran, Goris-Tatev-Sisian would be considered as the three sub-regions including the largest communities with their surroundings having the highest population concentrations and thus the main centres of municipal solid waste generation. The Consultant made initial observations in the three sub-regions during the Inception Phase.

3. Identification of common or separate solutions for the sub-regions

The National Strategy did not include a comparison of alternatives at the level of sub-regions. The comparison could address the expressed concerns related to the environmental impact of long-distance transportation of waste to a regional landfill. In the present study, the Consultant should assess the conditions for cooperation within the sub-regions and consider possible options for common and separate solutions for improvement of municipal waste management in the region taking into consideration the transportation challenges.

4. Service area of the improved SWM system

Not all communities should be included in the solutions proposed for improved waste management in the short term. Based on the interviews and answers to questionnaires so far received by the Consultant it is proposed to include in the service area of the improved SWM system in the first go only the communities with more than 200 inhabitants and also use other criteria for selection of the communities for the diagnostic analysis

5. Population data as a background for waste generation forecast

Data available from census of 2011, latest statistics for 2015, the data from Marzpetaran and from the communities should be compared to decide which of them provide the most realistic picture regarding the number of inhabitants actually generating the municipal solid waste in the communities. Seasonal internal migration of population and tourists should be taken into consideration.

6. Types of pilot projects

There is a public opinion in Armenia supporting the idea of waste treatment and recycling. Some technologies have been tested over the years. A number of industries use recyclable materials recovered from waste. The business expertise, available mainly in Yerevan, should be studied and considered for possible replication in Syunik. MTAES is ready to share relevant information.

7. Approach to training component of the assignment

The Consultant proposed to prepare a set of training materials in a form of videos and photos composed as virtual study tours to various waste management facilities in different countries. The videos could be presented to all communities and used as information materials for the public (at educational centres, during meetings at community offices, via local TV, NGOs, etc.). The videos could facilitate for raising the awareness and for motivation to improved waste management habits. Some of the videos could be tailored for promotion of the pilot projects.

MTAES acknowledge the risk of rather low efficiency of a study tour for a few participants to a foreign country, because the lessons learned by participants of international study tours are typically not shared/disseminated in Armenia. MTAES

recommended to consider an opportunity of teleconferences or videoconferences for discussing the waste management practice. However, MTAES proposed not to exclude an option of a study tour, particularly with focus on collection and treatment of recyclable materials, which could ensure experience valuable for preparation and implementation of the pilot projects.

8. Waste characterisation

Waste characterisation surveys should be carried out as an important component of pre-feasibility assessments for the potential pilot projects related to recovery and treatment of recyclable materials.

9. Ongoing projects to be taken into consideration during the assignment

Future construction of road corridor North-South could ensure much better access to the communities of Syunik Marz. The road section construction in Syunik was originally scheduled for 2016, but has been delayed.

The proposed construction of a railway connection between Iran and Armenia should not be considered as a realistic project for the near future.

Meeting on 9 October

Participants representing MTAES: Artashes Bakhshyan, Lusine Harutyunyan.

Participants representing COWI: Andrik Mols, Alisa Savadyan, Larissa Lauritzen, Syuzan Ghardyan (interpreter).

The participants discussed the questionnaire used during Mission 2, the Consultants observations and initial conclusions based on the visits. The participants underlined their mutual understanding of the SWM challenges caused by the remoteness of communities and the logistics context determined by the landscape conditions of the area including the high mountain ridges separating the relatively narrow populated valleys. The challenges include long transportation distances following the very limited number of roads, configuration of roads with numerous serpentines on the slopes of mountains and passages at elevations exceeding 1,000 m above the valleys accommodating the major residential areas.

It was agreed to start the data collection from the communities of Sisian District. The approach could be further used during the diagnostic study in other districts.

To ensure the proper quality of data subject for review by the Consultant, MTAES will hold meetings with the local consultants responsible for collection of the data from communities in order to verify the data before they are used for the diagnostic analysis.

3 Findings from the Inception Phase

During the Inception Phase, the Consultant has launched the collection of data for the diagnostic analysis to be carried out during the next phase of the project with regard to the following aspects:

- › Waste management practice in the communities, organisation and responsibilities of involved parties
- › Physical infrastructure for SWM
- › Financing of SWM services
- › Cooperation of communities in the sphere of waste management

3.1 Approach to the data collection

As agreed with MTAES, the Consultant during the Inception Phase collected a set of relevant data for communities of Sisian District. The approach tested this way could be adjusted and replicated for collection of data for communities of other three Districts of the Syunik Marz and to a certain extent of Vayots Dzor Marz.

Working on the present assignment the Consultant has established and will develop the overall data file and plans to use GIS for visualisation of the data, which could be transferred to MTAES as a convenient tool for further data management.

3.2 Population data are different

Data on the number of inhabitants in the communities are typically used for assessment of the present and future waste generation rates required for planning of the waste management improvements.

During initial review of the community population data available for Sisian District, based on the census of 2011, the Consultant has noticed the difference between the de-facto and de-jure population. The difference is explained by the formal registration of persons actually not resident according to the registration address. Certain seasonal migration between rural and urban communities is also a known phenomenon in Armenia. Following the recommendations of MTAES, the

Consultant collected for Sisian District (see Table 1) the latest available population statistics (by 1 January 2015) from Syunik Marzpetaran, as well as the data on winter and summer population provided by the communities of Sisian District in the questionnaires and on phone.

Table 1 Population data available for communities of Sisian District

Community	NAME_ARM	2011 De-facto	2011 De-jure	Registered in 2015	2015 Winter	2015 Summer
SISIAN	Սիսիան	12074	14894	16101	9600	11600
Brnakot	Բռնակոթ	1640	1960	2182	1983	2200
Angeghakot	Անգեղակոթ	1406	1582	1931	1639	1939
Shaki	Շաքի	1061	1197	1355	1355	1455
Shaghat	Շաղատ	851	969	1252	1254	1350
Darbas + Shamb	Դարբաս	524	556	1169	1113	1200
Ashotavan	Աշոտավան	497	589	668	642	642
Vaghatin	Վաղատին	463	593	658	660	880
Uyts	Ույծ	367	396	603	610	650
Akhlatyan	Ախլաթյան	438	535	562	580	600
Noravan	Նորավան	360	485	550	500	600
Aghitu	Աղիտու	356	436	512	463	520
Spandaryan	Սպանդարյան	371	371	491	466	506
Sarnakunk	Սառնակունք	444	474	491	500	550
Gorayq	Գորայք	401	435	471	508	570
Tolors	Տոլորս	268	332	465	450	450
Tsghuk	Ծղուկ	329	422	453	386	410
Lor	Լոր	385	365	421	400	420
Shenatagh	Շենաթաղ	313	389	406	400	430
Mutsk	Մուցք	238	324	350	370	370
DASTAKERT	Դաստակերտ	243	323	343	330	300
Vorotan	Որոտան	218	263	311	210	270
Salvard	Սալվարդ	252	263	311	320	320
Ishkhanasar	Իշխանասար	198	294	255	250	250
Hatsavan	Հացավան	185	253	248	250	300
Tasik	Թասիկ	199	221	238	298	340
Getatagh	Գետաթաղ	148	182	204	204	204
Balak	Բալաք	159	174	178	164	210
Brunis	Բնունիս	147	176	167	187	220
Nzhdeh	Նժդեհ	62	92	143	135	145
Torunik	Տորունիք	111	120	131	129	136
Tashtun	Տաշտուն	104	104	106	90	100
Tanahat	Թանահատ	2	7	77	0	50
Tsghuni ⁴	Ցղունի	41	47	0	50	0
Arevis	Արևիս	45	54	0	79	89
Total		25302	30293	33803	26961	30686

The Consultant's immediate suggestion is to use the estimated population data for summer peak of population for waste generation projections and elaboration of

⁴ The community inhabitants spent summer months in remote pasture areas

solutions for waste management improvements in Syunik Region. This approach will be discussed with the MTAES in November 2015.

3.3 Development priorities in the region

Protection of natural resources (particularly the river valleys) and development of tourism are the priorities relevant for SWM solutions to be developed by the Consultant within the present assignment.

Regular waste collection in residential areas and from traditional places of picnics close to residential areas (e.g. 3 springs located between Lehvaz and Vahravar villages) should be part of the SWM solutions proposed for the region. Prevention of dumping along the roads and arrangements for waste collection from road stop places related to the transit traffic is as enforcement issue for the local regulatory authorities.

3.4 Logistics constraints

Development of improved SWM system in general and the Consultant's work on the assignment will face the following constraints in the overall context of the region:

- › All the community heads have mobile phone and access to e-mail, but the telecommunication with communities for the data collection and outreach is difficult. This is due to a large number of communities not used to provide response by e-mail, to be part of the mailing lists, keep the documentation in electronic form, maintain the standard files and reporting forms relevant for SWM and other municipal services, etc.
- › Meetings with community heads would require a major scope of driving in the mountain areas; project related information could be conveniently delivered to the community heads when they attend other meetings in the District centres. Meetings with community heads or other representatives will be carried out during discussion of possible pilot projects in specific communities.
- › Even in the remote communities, many inhabitants have computers and access to Internet, but limited transportation mobility. This should be taken into consideration for planning of the public relations and communication activities related to the pilot projects.

3.5 Waste management practice

Table 2 presents information collected during the Inception Phase on the current practice. Disposal of waste at local dumpsites is the most common practice for all large and some smaller communities. Small communities not having dumpsites would not be in the first go covered by SMW solutions developed within the project.

Table 2 Current waste management practice in communities of Sisian District

Community	2015 Summer population	Where do households typically take their waste?					N of containers	Number of collection vehicle rounds per week	Number of dumpsites
		Burn/bury at home	Take to dumpsite	Bring to container	To collection vehicle on schedule	Leave at kerbside on schedule			
SISIAN	11600			1			130	1	1
Brnakot	2200	1	1						10
Angeghakot	1939	1							2
Shaki	1455		1						4
Shaghat	1350	0	1		1	1		1	3
Darbas+Shamb	1200		1		1			1	2
Ashotavan	642	1	1						4
Vaghatin	880	1			1		0	1	0
Uyts	650		1					1	1
Akhlatyan	600		1		1				1
Noravan	600	0	1		1				0
Aghitu	520	1							0
Spandaryan	506	1	1						8
Sarnakunk	550	1							
Gorayq	570				1				1
Tolors	450		1		1		0	0,5	5
Tsghuk	410	1			1	1			6
Lor	420		1						2
Shenatagh	430								
Mutsk	370	1	0						0
DASTAKERT	300		1						1
Vorotan	270	1	1						4
Salvard	320		1						2
Ishkhanasar	250	1							0
Hatsavan	300	1	1						4
Tasik	340	1	1						9
Getatagh	204		1						1
Balak	210	1							0
Brunis	220	1							
Nzhdeh	145	1	0						0
Torunik	136								
Tashtun	100								
Tanahat	50	0	0						0
Tsghuni	0								
Arevis	89	1							0

Some of the communities take waste for disposal of dumpsites located in other communities. For example, Sisian, Noravan, Aghitu, Yuts and Gorayk communities take waste for disposal to dumpsite located in Uyts community.

According to the Consultant's observations, the waste management improvements in the short term should be planned for communities meeting the following set of 3 criteria:

- › Population above 300 - in smaller villages the inhabitants typically manage (burn/bury) their waste at home
- › Active disposal of waste at community dumpsite(s) – indicating that the inhabitants cannot just manage the waste at home
- › Good access for trucks along main roads during summer and winter time

Waste management improvements in other communities could be planned in the mid-term prospective. However, smaller communities could be included into the considered area of proposed short-term improvements in case they are significant for tourism development potential or are located close to a good road connecting the larger communities. In the latter case the waste could be collected from the smaller communities on the way to the large ones.

3.6 GIS for data analysis and visualisation

The Consultant plans to develop for MTAES a convenient system for management of various types of data relevant for waste management sector. The system will include an integral data table in Excel accessible via GIS tools (e.g. ArcView). The data contained in the table could be reviewed, compared, printed out in a table form or in a form of thematic maps allowing for visual presentation of the data related to communities located in the region or its part.

3.7 Financing of waste collection services

Data collected during the Inception phase from the communities of Sisian District regarding the financial aspects of waste management services are included in Table 3.

As it can be seen from the Table, only a few of communities have established tariffs for waste management services. The different tariffs are established for households (per person) and for legal entities (depending on their types). Majority of communities do not charge their inhabitants for waste collection services (tariffs are marked 0 in the table), but allocate from the community budgets some funds for waste collection, transportation and disposal operations.

Table 3 Customers and tariffs established in communities of Sisian District for waste collection services

Community name	2015 Summer population	N commercial legal entities	N budgetary legal entities	Tariff per person per month 2015	Tarif for legal entities per month 2015
SISIAN	11600	259	13	150	2500
Brnakot	2200			0	0
Angeghakot	1939			0	0
Shaki	1455				
Shaghat	1350	5	2	100	500
Darbas and Shamb	1200			100	3000
Ashotavan	642				
Vaghatin	880			0	0
Uyts	650			120	0
Akhlatyan	600				
Noravan	600			0	0
Aghitu	520				
Spandaryan	506			0	0
Sarnakunk	550			0	0
Gorayq	570			0	0
Tolors	450			0	0
Tsghuk	410			0	0
Lor	420			0	0
Shenatagh	430				
Mutsk	370			0	0
DASTAKERT	300				
Vorotan/ Sisian	270			0	0
Salvard	320			0	0
Ishkhanasar	250			0	0
Hatsavan	300			0	0
Tasik	340			0	0
Getatagh	204	0	0	0	0
Balak	210			0	0
Bnunis	220			0	0
Nzhdeh	145			0	0
Torunik	136				
Tashtun	100				
Tanahat	50			0	0
Tsghuni	0				
Arevis	89			0	0

Information collected during the Inception Phase on the community budgets and their parts allocated for the waste management services is presented in Table 4.

The latest available data were picked up from the website of MTAES and from website of the Treasury Department of the Ministry of Finance.

Table 4 Community budgets and allocations for SWM in Sisian District

Community	Data from MTAES website			Data from MOF Treasury		
	Total community budget expenses (2015), AMD	Amount planned for SMW (in 2015), AMD	Amount actually spent for SMW (in 9 months of 2015), AMD	Total community budget expenses (2015), AMD	Amount planned for SMW (in 2015), AMD	Amount actually spent for SMW (in 2015 as of 22.10.2015), AMD
SISIAN	394.440.500	64.833.200	40713	402.411.183	65.394.100	45.849.761
Brnakot	46.264.600	200.000	200	47.585.856	200.000	200.000
Angeghakot	51.153.500	950.000	0	51.857.790	0	0
Shaki	41.342.000	220.000	0	42.112.406	0	0
Shaghat	40.061.500	350.000	348600	40.274.795	350.000	348.600
Darbas + Shamb	N/A	N/A	342800	40.936.826	550.000	342.810
Ashotavan	15.316.000	200.000	0	15.345.055	0	0
Vaghatin	N/A	N/A	N/A	17.553.919	0	0
Uyts	17.682.300	778.000	0	17.478.651	0	0
Akhlatyan	13.859.800	100.000	0	13.182.774	0	0
Noravan	13.086.800	500.000	0	13.087.526	0	0
Aghitu	14.318.300	600.000	0	14.477.897	0	0
Spandaryan	10.873.900	0	0	11.376.484	0	0
Sarnakunk	15.854.900	0	0	16.109.790	0	0
Gorayq	274.680.000	2.200.000	0	274.680.008	0	0
Tolors	N/A	N/A	N/A	13.815.325	0	0
Tsghuk	33.709.000	140.000	0	35.495.041	0	0
Lor	9.516.500	300.000	0	9.703.891	0	0
Shenatagh	10.615.700	50.000	0	10.615.698	0	0
Mutsk	14.744.200	230.000	0	14.744.211	0	0
DASTAKERT	6.684.900	0	0	6.877.474	0	0
Vorotan	N/A	N/A	N/A	25.718.041	0	0
Salvard	8.289.000	0	0	9.250.078	0	0
Ishkhanasar	11.244.400	0	0	11.244	0	0
Hatsavan	6.698.000	0	0	6.726.657	0	0
Tasik	7.916.900	0	0	7.916.926	0	0
Getatagh	15.898.700	200.000	0	15.778.738	0	0
Balak	8.214.300	250.000	0	8.214.207	0	0
Bnunis	6.418.300	0	0	6.418.300	0	0
Nzhdeh	4.966.000	0	0	N/A	N/A	N/A
Torunik	N/A	N/A	0	5.130.439	0	0
Tashtun	N/A	N/A	0	10.945.864	0	0
Tanahat	4.367.900	30.000	0	4.472.943	0	0
Tsghuni	N/A	N/A	N/A	N/A	N/A	N/A
Arevis	4.533.300	0	0	4.534.690	0	0

As it can be seen from the Table, the data on community budgets and allocations for many communities are not consistent and would require verification during the Consultant's diagnostic analysis.

3.8 Identification of pilot projects

Following the recommendations of the MTAES, the Consultant has initiated the collection and review of information on industries processing some recyclable materials recovered from municipal solid waste.

The following sources of information were reviewed:

- › Programs implemented in various Marzes of Armenia in the sphere of municipal solid waste management and recycling during 2010-2015.
- › The information on legal entities involved in waste recycling contained in the reports prepared within the framework of programs funded by various donors (USAID, UNDP, GEF, etc.) – based on phone consultations with participants of the donor financed projects in Armenia
- › Section on manufacturers of plastic in the information bases of yellow pages <http://www.spyur.am/> and SMEDNC of Armenia
- › Materials of the “Global Cleantech Innovation Program” 2014-2015 National Award event, organized by UNIDO in Yerevan
- › Webpage <http://www.sgp.am/en/Projects?id=40> about GEF project
- › Webpage <http://www.mediamax.am/am/news/special-report/5052/> - about Eco Engineering
- › Webpage <http://smednc.am/> - SMEDNC foundation now implementing the USAID project in cooperation with RA Ministry of Economy

The Consultant has revealed a number of registered and, what is very important, actually functioning companies. The companies provide information on the volumes of recyclables they purchase as raw materials recovered from municipal solid waste. They are presented in the table below:

Table 5 Armenian manufacturing companies using recyclable fractions of MSW

Name of enterprises	Product	Waste accepted for recycling	Requirements for raw materials	Location	Contact person	Comments
OVALPLASTIC LLC	Disposable cutlery sets/ plastic manholes.	-		Yerevan	Karen Ivanov - Operational Director (+374) 55562680	http://www.spyur.am/en/companies/oval-plastic/4396 Has capacity for using recyclables for

<i>Name of enterprises</i>	<i>Product</i>	<i>Waste accepted for recycling</i>	<i>Requirements for raw materials</i>	<i>Location</i>	<i>Contact person</i>	<i>Comments</i>
					http://www.ovapl.com	manhole lid production and is ready to discuss cooperation opportunities
“ECO ENGINEERING” LLC	Plastic grit for acrylic fiber. Transportation of plastic grit in different countries	All types of plastic bottles -PET	Plastic bottles with caps, rims and labels All colors- the price not depends from the colors	Yerevan	(+374) 94616661 Karen Martirosyan – head of logistic department http://www.ecoengineering.am/	Project started in 2011 with the investment of USAID and UNDP (totally 540 000\$) At this
“PROM SINTEZ” LLC	Water chambers with lids	Preliminary processed high pressure plastic bags	Only high pressure plastic bags	Yerevan	Mihran Andranikyan (+374) 99007017	http://promsintez.am/ Has 2 suppliers of processed plastic bags. Prices depend on the colors (light colors are more expensive)
“POLI-SERV” LLC	Polymer profiles for furniture	Waste containing polystyrene and polyvinyl chloride	White color	Kotayk Marz, t. Abo-vyan,	Yurik Sahakyan- Director (+374) 91 428819 http://www.poliserv.am	http://www.spyur.am/en/companies/poli-serv-polymer-product-manufacturing-enterprise/3590
“ARSHAND” LLC	Treated plastic waste for production of PVC waste water pipes	PE pipes for drinking water and PVC for waste water	Each type of PET and plastic bags	Yerevan	Tigran Baveyan (+374)10-669990 , 93-956510 (mobile)	http://www.spyur.am/en/companies/arshand/4946
FREESOL Technologies team	Piping for solar cooling and heating systems for water	Aluminium soda and beer cans	Aluminium soda and beer cans in normal condition	Yerevan	(+374) 98878838 Edgar Andreyan	www.freesol.co AUA student team, winner in UNIDO
“PETROSYAN” IE - supplier for Prom Sitez LLC and other companies	Cleaned and treated plastic bags.	High and light pressure plastic bags recovered from waste		Yerevan	077 319967 Gevorg Petrosyan	At this moment organization is stopped his activity, since accumulated a lot of processed raw material
“LEVON AVAGYAN” IE	roof tiles	All types of plastic waste	No plastic bottle No black color plastic	Tavush marz, Dilijan	Yeghishe Avagyan 094101202	<u>Ready to share experience for establishment of production in Syunik</u>

On 22 October the Consultant had meetings in State Environmental Inspectorate (within the structure of the Ministry of Nature Protection of the Republic of Armenia) maintaining the national database of legal entities registered as posing the pollution of the air, surface water bodies, groundwater bodies, soil. The Consultant received a list of registered legal entities including all waste collection and transportation LLCs. However, no waste recycling organizations were included in the list.

On 22 October the Consultant also had a meeting with the Director of "Wastes Researches Center" SNCO (in the structure of RA MoNP), responsible for issuing of waste management passports for different organizations generating hazardous waste. No recycling organizations were identified in the database of the SNCO.

The Consultant has also reviewed the website of the RA Taxation Service http://www.taxservice.am/OS_EAClassifier.aspx. No information on companies dealing with recyclables were identified on the website.

It could be that additional information could be provided by the governmental institutions on formal requests issued by the MTAES. Further steps for identification of experience and capacity in the sphere of waste recycling will be discussed with MTAES during the diagnostic analysis, so that the various options for pilot projects could be clarified as early as possible.

3.9 Assessment of training needs

An initial assessment of training needs was carried out by the Consultant during the Inception Phase with regard to development of the overall awareness, technical and managerial skills of staff involved in solid waste services in the communities, at the regional and the national level. The Consultant started preparation of the training program, which will be developed during the diagnostic analysis and discussed with the MTAES and ADB.

4 Updated work program

The Consultant plans the next mission in Armenia for collection of the data for the diagnostic analysis and identification of potential pilot projects in Syunik region for 9-13 November 2015.

The overall work program for the assignment, updated taking into consideration the duration of the Inception Phase, is presented in the table below.

Table 6 Updated work program for the assignment

No	Phase	Start and end date
1	Inception	07.09.15-23.10.15
2	Diagnostic analysis for small and remote communities	24.10.15-01.03.16
3	Prefeasibility studies for pilot projects in each selected community	01.03.16-01.07.16
4	Training for communities	01.07.16-01.09.16

An updated time schedule of the Consultant's activities, outputs and inputs by the international and the national specialists is presented in Table 7.

Table 7 Time schedule of the project activities, outputs and inputs

TA 8875-ARM Solid Waste Management Solutions for Remote and Small Communities																																																							
		Year																																																					
		2015												2016																																									
Assignment month number		1			2			3			4			5			6			7			8			9			10			11			12																				
Assignment week number		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52		
Calendar month		IX				X				XI				XII				I				II				III				IV				V				VI				VII				VIII				IX					
Calendar week number		37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35		
Task 0 - Inception																																																							
0.1	Mobilize experts																																																						
0.2	Kick-off meetings																																																						
0.3	Inception report incl. updated Work Plan																																																						
Task 1 - Diagnostic analysis for small & remote communities																																																							
1.1	Identify small and remote communities																																																						
1.2	Review of SWM operations, incl. institutional & legal setting																																																						
1.3	Develop approaches to low-cost SWM improvement solutions																																																						
1.4	Stakeholder consultations / workshops																																																						
Task 2 - Prefeasibility studies for pilot projects in selected communities																																																							
2.1	Assess and recommend suitable SWM solutions																																																						
2.2	Waste characterization study																																																						
2.3	Prepare investment packages for preferred option																																																						
2.4	Stakeholder consultations / workshops																																																						
Task 3 - Training for communities																																																							
3.1	Prepare and implement training program																																																						
3.2	Public participation strategy and communication plan																																																						
Reports																																																							
(i)	Inception Report																																																						
(ii)	Interim Report																																																						
(iii)	Draft Final Report																																																						
(iv)	Final Report, Training Report																																																						
Workshops																																																							
	Workshops on initial findings																																																						
	Workshops for presentation of Draft Final Report																																																						
International specialists																																																							
	Andrik Mols (NET) - TL and senior SWM Specialist																																																						
	Ashot Baghdasaryan (ARM) - Senior financial specialist																																																						
	Larissa Lauritzen (DEN) - Senior environmental specialist																																																						
National (Armenian) specialists																																																							
	Alisa Savadyan - Deputy team leader and SWM specialist																																																						
	Anna Vasyukova - Social development, resettlement and gender specialist																																																						
	Arsen Karapetyan - Financial specialist																																																						
	Karen Arustamyan - Procurement specialist																																																						
	Gevorg Martirosyan - Waste characterisation specialist																																																						
	Hermine Hakobyan - Public relations and communication specialist																																																						
	Viktor Bakhtamyan - Environmental safeguard specialist																																																						
Legend:																																																							
Home and field, intermittent																																																							
Home, intermittent																																																							

Appendix A List of persons met during Inception Phase

Persons met during Mission 1

Meeting at Syunik Regional Administration (Marzpetaran) – 09.09.201			
1.	Mr. Vardan Davtyan	Deputy of Syunig Governor	+374 10287830 syunik@mta.gov.am
2.	Mr. Seyran Avetisyan	Head on Local administration and republican executive bodies department	093 660700
3.	Mr. Edgar Martirosyan	Head of Social department	
4.	Mr. Masis Hovhannisyan	Chief specialist in communal department	093 967607
5.	Mrs. Armine Ohanjanyan	Head of PR department	099 443545
Meeting in Megri municipality - 09.09.2015			
1.	Haykush Hovsepyan	Chief accountant in Alvnaq municipality	077412514 alvanq@mail.ru
2.	Armine Ghazaryan	Deputy head of Tashtun community	098707516 tashtung@mail.ru
3.	Armen Avetisyan	Head of Karchevan community	098333456 levomer@mail.ru
4.	Sarkis Araqelyan	Head of Vahravar community	093818989
5.	Albert Beglaryan	Head of Vardanidzor community	0943602006 yardanidzor@mail.ru
6.	Hovik Mirzoyan	Head of Lichk community	094360171
7.	Misha Hovhannisyan	Adviser to Syunik Marzpet	094211296
8.	Suren Hovhannisyan	Head of Lehvaz community	094949099
9.	Mikael Poghosyan	Deputy Head of Lehvaz community	077760886
10.	Hovhannes Ohanyan	Head of Shvanidzor community	094995433
11.	Vanik Sargsyan	Deputy Head of Megri community	093025112 megricity@mail.ru
12.	Mkrtich Mkrtchyan	Head of Nrnadzor community	094557055
13.	Armen Samcvelyan	Deputy Head of Agarak community	093400114 agarak.syunik@mail.ru

Meeting in Goris municipality 10.09.2015			
1.	Surik Khachatryan	Syunik Governor	
2.	A. Khachatryan	Head of Kornidzor community	077506422
3.	O. Avalyan	Head of Bardzravan community	098987782
4.	S. Harutyunyan	Head of Harjis community	093 993888
5.	H. Hovhannisyan	Head of Vaghatur community	094303066
6.	A.Hartyan	Head of Hartashen community	091912074
7.	Vahagn Adunts	Head of Goris community	094209215
8.	Lusine Avetyan	Head of Karahunj community	093994649
9.	Hacob Arshakyan	Head of Shurnukh community	077014464
10.	Saghatel Galstyan	Head of Tegh community	094143731
11.	S. Hayrapetyan	Head of Khndoresk community	077077722
12.	Garnik Shahnubaryan	Head of Qarashen community	093873787
13.	Garnik Hacobyan	Head of Qashuni community	093971133
14.	M. Grigoryan	Head of Khot community	093822683
15.	Artur Margaryan	Head of Svarants community	094197117
16.	M. Simoyan	Head of Tatev community	094004142
17.	Surik Ohanjanyan	Head of Vorotan community	077031424
18.	A.Hovsepyan	Head of Aravus community	093982262
19.	Levon Sahakyan	Chief of staff in Akner community	077317881
20.	Garnik Hacobyan	Head of Qashuni community	093971133
21.	Karo Tavadyan	Head of Khnatsakh community	093119479
22.	Ararart Ordyan	of Verin Khotanan community	093922933
23.	Gerasimyan Marat	Head of Halidzor community	077748747
24.	Hacob Arshakyan	Head of Shurnukh community	077014464

25.	Smbat Yeremyan	Head of Shinuhayr community	077175777
26.	Varo Grigoryan	Head of Khoznavar community	094815952
Visit of Goris dumpsite 10.09.2015			
1.	Seyran Gevorgyan	Goris TNT LLC director	093935577
2.	Gevorg Bolyan	Deputy Head of Goris community	093939606
3.	Gor Tigranyan	Secretary of staff in Goris Municipality	077222011

Persons met during Mission 2

Meeting at Kapan Aarhus Centre (in Syunik Marzpetaran building) – 07.10.2015			
1.	Mr. Seyran Avetisyan	Head on Local administration and republican executive bodies department	093 660700 syunik.tim@mail.ru
2.	Mr. Edgar Martirosyan	Head of Program Development and Analyses Department	094346894 syuniq.tsragrer@mta.gov.am
3.	Masis Hovhannisyan	Syunik marzpetaran-chief specialist in housing services department	093967607
4.	Artsruni Harutyunyan	Syunik marzpetaran Head of Environmental Department	094300310
5.	Mrs. Ani Sargsyan	Secretary in Vaneq community	098 968715 vaneq.syunig@mta.gov.am
6.	Henrik Ohanjanyan	Deputy Head of Artsvanik community	093887635 artsvanik.syunig@mta.gov.am
7.	Mrs. Anahit Gevorgyan	Secretary of staff in Arajadzor community	94004806 arajadzor.syunig@mta.gov.am
8.	Khachatur Bagdasaryan	Head of Nerqin Hand community	098707516 nerqinhand.syunig@mta.gov.am

9.	Suren Tevanyan	Head of Nor Astghaberd community	093647702 norastghaberd.syunig@mta.gov.am
10.	Artavazd Karapetyan	Kapan – Communal LLC	099331588
11.	Garegin Gabrielyan	Kajaran - Head of Environmental Department	094629499 garegin_eko@mail.ru
12.	Karen Tadevosyan	Deputy Head of Kajaran community	077338033 kargo.61@mail.ru
13.	Marat Martirosyan	Head of Agarak village	093774651 agarakg.syunig@mta.gov.am
14.	Gevorg Harutyunyan	Head of Dzorastan community	094996055 dzorastan.syunig@mta.gov.am
15.	Vyacheslav Markosyan	Head of Yegheg community	093029904 egheg.syunig@mta.gov.am
16.	Arhsvir Hacobyan	Head of Sevqar community	093888037 sevaqar.syunig@mta.gov.am
17.	Lyova Harutyunyan	Secretary of staff in Yeghvard village	093943111
18.	Andranik Davtyan	Head of Chakaten community	093983342 chakaten.syunig@mta.gov.am
19.	Ashot Avagyan	Kapan Aarhus center coordinator	093795921, info_kapan@aarhus.am , kapan.aarhus@mail.ru
Meetings in Tatev Group of communities in Goris region 08.10.2015			
1.	Martiros Grigoryan	Head of Khot community	093822683 khot.syunig@mta.gov.am
2.		Secretary of staff in Khot community	
3.	Sofiya Gevorgyan	Secretary of staff in Halidzor community	077700813 halidzor.syunig@mta.gov.am
4.	Hamlet Hambatsumyan	Deputy Head of Shinuhayr community	0945503620 shinuhayr.syunig@mta.gov.am
5.	Armenuhi Vardazaryan	Secretary of staff in Tatev community	077552544 tatev.syunig@mta.gov.am
6.	Murad Simonyan	Head of Tatev community	094004142

Meeting in Sisian town 08.10.2015			
1.	Aghasi Hakobjanyan	Mayor of Sisian town	093223366 sisian.syuniq@mta.gov.am
2.	Karen Hovhanissyan	Deputy mayor of Sisian town	091201731
3.	Mihrabyan Vachagan	Chief of staff in Sisian municipality	091401048
4.	Armen Nersisyan	Head of sisian Community Unit/ EU project coordinator in Sisian	094434687
Meetings in Yerevan on 22.10.15			
1.	Afanasiy Lazarev	Director of Waste research center SNCO, in the structure of RA MoNP	
2.	Rosa Julhakyan	Head of Accounting and Analyzes Division in State Environmental Inspectorate in the structure of RA MoNP	

Appendix B Data collection questionnaire used during Mission 1

09.09.2015

1	District name/ Տարածաշրջանի անվանումը	
2	Community name/ Համայնքի անվանումը	
3	Name of community representative/ Համայնքի ներկայացուցչի անունը	
	Telephone/ Հեռախոս:	
Waste collection system at present/ Ներկայիս աղբի հավաքման համաարգը:		
4	Is waste collection carried out by a private contractor? (Yes/No) Արդյոք աղբի հավաքման գործընթացը իրականացվում է մասնավոր ընկերության կողմից (Այո/Ոչ)	
5	With containers? (Yes/No) Աղբամաններով (Այո/Ոչ)	
6	How many containers are there in your community now? Ներկայումս որքան՝ աղբամաններ կան Ձեր համայնքում	
7	How many collection trucks are currently in use in your community Ներկայումս քանի՝ աղբատար մեքենա կան Ձեր համայնքում	
8	Are there any waste pickers in your community? (Yes/No) Կան արդյոք, շրջիկ աղբ հավաքողներ Ձեր համայնքում (Այո/Ոչ)	
9	Do you cooperate in waste management with other communities (e.g. joint collection, joint landfill)? Արդյոք համագործակցում եք այլ համայնքների հետ աղբահանության հարցում /համատեղ աղբի հավաքում, ընդհանուր աղբավայր / (Այո/Ոչ)	
10	Is waste collection paid only from community budget? (Yes/No) Արդյոք աղբահանության գործընթացը վճարվում է միայն համայնքի բյուջեից (Այո/Ոչ)	
11	Are customers paying fee for waste collection? Արդյոք բաժանորդները վճարում են աղբահավաքի և աղբահանության համար	
12	Who is collecting the tariff? Ով՝ է սահմանում աղբավճարը	
13	What do you think should be improved regarding waste management in your community? Ինչ՝ եք մտածում Ձեր համայնքում աղբահանության բարելավման ուղղությամբ	
Your comments/ Ձեր մեկնաբանությունները		

Thank you for filling in this form and handing it over to COWI **Շնորհակալություն ձևաթուղթը լրացնելու և առձեռն COWI ընկերությանը հանձնելու համար**

Appendix C Data collection questionnaire used during Mission 2

1. District name/ Տարածաշրջանի անվանումը				
2. Community name/ Համայնքի անվանումը				
3. Name of community representative/ Համայնքի ներկայացուցչի անունը				
4. Position/ Պաշտոն				
5. Telephone/ Հեռախոս				
6. E-mail: Էլ. Փոստ				
7. Number of residents during winter Բնակչության թիվը ձմռան ամիսներին			8. Number of residents during summer Բնակչության թիվը ամռան ամիսներին	
9. Number of commercial legal entities Իրավաբանական անձանց քանակը			10. Number of budgetary legal entities Բյուջետային կազմակերպությունների քանակը	
11. Number of dumpsites Աղբակույտերի քանակը ձեր համայնքում				
12. Number of dumpsites burning from time to time in your community Պարբերաբար այրվող աղբակույտերի քանակը ձեր համայնքում				
13. Where do households typically bring their waste in your community? Սովորաբար համայնքում որտե՞ղ են տնային տնտեսությունները թափում իրենց աղբը				
<i>To backyard</i> <i>Բակում</i>	<i>To dumpsite</i> <i>Աղբակույտում</i>	<i>To container</i> <i>Կոնտեյներում</i>	<i>To vehicle</i> <i>Աղբատար մեքենայում</i>	<i>To kerbside</i> <i>Ճանապարհի երկայնքով</i>
14. Number of containers Կոնտեյներների քանակը			15. Number of collection vehicle stops Աղբատարի կանգառների քանակը համայնքում	
16. Frequency of waste collection Աղբահանության կազմակերպման հաճախականությունը				
<i>From containers</i> <i>Կոնտեյներներով</i>	<i>From vehicle stops</i> <i>Աղբատար մեքենայում</i>		<i>From kerbside</i> <i>Ճանապարհի երկայնքով</i>	
17. With which community your community cooperates in waste management? Ո՞ր համայնքների հետ եք համագործակցում աղբահանության հարցում				
18. Who pays for waste collection in your community? Ո՞վ է վճարում համայնքում աղբահանության համար				
<i>Budget (Yes/No)</i> <i>Բյուջեն (Այո/Ոչ)</i>	<i>Residents (Yes/No)</i> <i>Բնակիչները (Այո/Ոչ)</i>	<i>Legal entities (Yes/No)</i> <i>Իրավաբանական անձիք (Այո/Ոչ)</i>		
19. Budget spent in Ծախսված բյուջեն 2015	20. Tariff for residents Բնակչության համար սակագինը 2015	21. Tariff for legal entities Սակագինը իրավաբանական անձանց համար 2015		

Thank you for filling in this form and handing it over to COWI **Շնորհակալություն ձեռնարկը լրացնելու և առձեռն COWI ընկերությանը հանձնելու համար**

Appendix D Questionnaire for collection of detailed financial data from the largest communities (filled in for Sisian community)

COMMUNITY NAME/ՀԱՄԱՅՆՔԻ ԱՆՎԱՆՈՒՄԸ. SISIAN URBAN COMMUNITY/ՍԻՍԻԱՆԻ ՔԱՂԱՔԱՅԻՆ ՀԱՄԱՅՆՔ

#	Question/Հարց	Answer/Պատասխան	Comment/Ըշում
1	Is the organised waste collection covering all community population or only part? Արդյո՞ք աղբահանումը ընդգրկում է համայնքի ողջ բնակչությանը կամ միայն մասը: - if only part, indicate approximate % եթե միայն մասը, ապա նշել մոտավոր տոկոսը:	all community/ողջ համայնքը	all community/only part ողջ համայնքը/միայն մասը % of coverage by number of inhabitants/ ընդգրկման տոկոսը ըստ բնակիչների թվաքանակի
2	What is level of average payment collection from each customer group? Ինչպիսի՞ն է վճարների հավաքագրման միջին մակարդակը ըստ բաժանորդների յուրաքանչյուր - households/ բնակչություն - budgetary organisations/ բյուջետային կազմակերպություններ - commercial legal entities/ առևտրային կազմակերպություններ	80-85 85-90 Total legal entities/ Ընդհանուր իրավաբանական անձանց	% of annual billing/ տարեկան վճարի տոկոսը % of annual billing/ տարեկան վճարի տոկոսը % of annual billing/ տարեկան վճարի տոկոսը
3	Is there a fee for disposing of waste at dumpsites? Կա արդյոք վճար աղբավայրերում աղբի տեղադրման համար: - if yes, how much is the total revenue received in 2015? Եթե այո, ապա ինչքա՞ն է 2015 թվականին ստացված ընդհանուր եկամուտը:	no/ոչ -	yes/no/ այո/ոչ AMD per year/ ՀՀԴ տարեկան
4	Who is the receiver of the community budget funds allocated for waste management services? Ո՞վ է համայնքային բյուջետային միջոցների ստացողը աղբահանության ծառայությունների մատուցման համար:	"Sisian housing-communal economy" CNCO/"Սիսիանի բնակարանային կոմունալ տնտեսություն" ՀՈԱԿ	name of the receiver/ Ստացողի անվանումը
5	What is the annual cost of waste management services in community in 2014 and in 2015? Ինչքա՞ն է աղբահանության ծառայությունների տարեկան ծախսը համայնքում 2014 թվականին և 2015 թվականին:	2014/24472918 01.10.2015/17616349	AMD/year/ ՀՀԴ/տարի
6	Which part of average cost of WM services is covered by customer tariffs? Աղբահանության ծառայությունների միջին ծախսի ո՞ր մասն է ծածկվում բաժանորդների սակագներով:	100	%

Notes:

1. Annual O&M costs for landfill are about 1-1.5 mln AMD/Աղբավայրի պահպանման և շահագործման ծախսերը կազմում են մոտավոր 1-1.5 մլն դրամ տարեկան:

2. According to the RA Law "On refuse collection and sanitary collection" the community should collect local fees for solid waste and accumulate at local budget (in budgetary or external budgetary accounts) and pay the operator./Համաձայն <<Աղբահանության և սանիտարական մաքրման մասին>> ՀՀ օրենքի աղբահանության վճարները պետք է համայնքը հավաքագրի և կուտակի տեղական բյուջեում /բյուջետային կամ արտաբյուջետային հաշվին/, այնուհետև վճարի օպերատորին:

3. Answers to Q5 are actual paid fees for solid waste removal for the years of 2014 and 2015./5-րդ հարցի պատասխանները 2014թ. և 2015թ. փաստացի վճարումներն են աղբահանության համար: