



# Baseline Assessment Report

## *Waste Policy Armenia Program*

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March, 2023

## Abbreviations

AUA	American University of Armenia
Acopian Center	American University of Armenia Acopian Center for the Environment
MoE	Ministry of Environment
MTAI	Ministry of Territorial Administration and Infrastructure
POM	Program Operational Manual
Sida	Swedish International Development Cooperation Agency

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# Executive Summary

## INTRODUCTION AND METHODOLOGY

The present Baseline Assessment has been implemented within the Waste Policy Armenia, 4-year Program funded by Sweden and implemented by the American University of Armenia (AUA) Acopian Center for the Environment. The **Purpose** of this baseline assessment is to capture both broad learnings about the waste sector in Armenia, as well as answer specific questions related to Waste Policy Armenia's current programming that will directly inform program management and future activity design.

Following Waste Policy Armenia Program design, the assessment focuses on two areas:

- Component 1 - Developing and adopting EPR legislation:** Assessment methods include literature review and stakeholder consultations.
- Component 2 - Developing source separation national model and introducing it as a system in Sevan Town:** Assessment methods include public opinion survey among 16+ population living in Sevan town (sample 396 respondents) and Focus Groups Discussions involving Sevan population and private businesses (in total 5 discussions).

## KEY FINDINGS

### Component 1 - Context for adoption of EPR in Armenia

The Key Informant Interviews, stakeholder consultations, and workshops conducted with government stakeholders have shown that:

- Only a few ministry officers have **good knowledge on EPR**, many others have very limited or no understanding of it, especially municipalities representatives and national government representatives.
- There is a common perception among authorities that the functioning of the EPR system **solely depends on consumers** and a general mistrust that behavioral change in Armenian society is possible at all
- Generally, the EPR is seen merely as another green (environmental) policy, rather than a tool to ensure financing for **safe handling and treatment of problematic waste streams**.
- There is a very **limited or no awareness about EPR among business stakeholders**. It is perceived as a kind of taxation policy with little or no substantial environmental benefits as a result given that the collected taxes would not be directed to any environmental activities.

### Component 2: Context for Introduction of Municipal Solid Waste Separation at Source in Sevan Town

- Community attitude on current waste management in Sevan town**
  - **Overall, people living in Sevan town enjoy access to centralized waste collection system and are mostly satisfied with it:** 88% of them expressed their satisfaction with the services.
  - Issues and shortcoming related to waste collection in Sevan town includes the following: **exhausted waste containers lacking cover and out-of-date waste transportation trucks; malfunction of municipality to properly implement waste collection in some areas of the town; absence of source separation in the town;** lack of designated areas for disposal of construction waste; open garbage chutes in multistore residential buildings; lack of supervision and penalty mechanisms for residents and businesses in case of waste littering; low sense of responsibility and environmental-friendly thinking among community members.

- **Women are more likely to engage and take responsibility for the full cycle of household waste management**, including determination waste is waste, evaluation of the “usefulness” of household items before discarding them as a waste, sorting and differentiating waste and deciding upon possibilities of secondary use of the items and actually taking out the waste in their households.

□ **Community attitude on source separation benefits**

- **People living in Sevan town are mostly aware of source separation and its absence is considered to be an important issue in Sevan town to be addressed by future programming** (88% of survey population have heard about source separation and 95% reported that it is an important issue).
- Almost one third of people living in Sevan town do not dispose at least one type of waste but separate it for reuse or resell, among them plastic packaging and glass packaging are most frequently separated waste.
- According to survey data women in Sevan town **are more prone to think that source separation is an important issue for the community compared to men.**

□ **Community attitude towards introduction of source separation in Sevan Town**

- **Overwhelming majority of people living in Sevan town are prone to do source separation in their households if local authorities introduce such system.** Namely, 96% of total surveyed population reported being willing to participate in source separation in their household.
- **Women are more prone to take the responsibility to sort the household waste.** As a result of gender dynamics, according to some of FGD participants, once the source separation system is formally introduced, **women are more likely than men to carry “the burden of waste separation” on the household level.**
- Making sure that separated waste is properly recycled and income generated through recycling is used to solve community issues is an important motivator for people to do source separation.
- There is a certain awareness gap in terms of understanding of **value chain and main market players of sorting system**, as well as there is a lack of understanding of the **roles and responsibilities of municipality, businesses, community, recyclers and NGO sector in source separation system.**
- If source separation is introduced people are willing to walk farther distances to dispose of separated waste than they walk currently.
- Educating and raising awareness is the most preferable strategy for the residents that the municipality can follow to motivate people to participate in source separation.

## RECOMMENDATIONS

Based on baseline assessment results, some of the recommendations are the following:

### Component 1 - Context for adoption of EPR in Armenia

- Workshops for the representatives of key governmental agencies, including Ministry of Environment, Ministry of Economy, Ministry of Finance, State Revenue Committee, and ArmStat. Workshops should aim to build capacity for and raise knowledge on EPR legislation development, implementation, and monitoring.
- Workshops for key governmental stakeholders on EPR related data reporting and management systems
- Workshops for the business community to raise awareness and build knowledge on key aspects of EPR, specifically responsibilities and obligations of Producer Responsibility Organizations (PRO), procedures of establishing PROs, strategies of meeting targets, among other topics.

- Roundtable discussions that will bring together the government and business community aimed to build trust and understanding of the most efficient model for EPR implementation in the country.

#### **Component 2: Context for Introduction of Municipal Solid Waste Separation at Source in Sevan Town**

- **Conduct capacity building activities among Sevan municipality staff aimed at** development of technical capacity for planning and managing or operating of MSW sorted collection system in Sevan town
- **Conduct awareness raising for both resident and municipality staff to better understand the the** value chain and main market actors in the MSW recycling sector, roles and responsibilities of various stakeholders along the MSW recycling value chain, economic challenges and benefits of MSW sorted collection and social and environmental challenges and benefits of MSW sorted collection.
- Acknowledge gender dynamics of waste management and ensure advancement of waste policies and practices with greater gender awareness.
- Ensure that community consultations and decision-making procedures strictly adhere to the principles of inclusion and equal gender participation.
- Ensure that information presented to the community about source practices takes into account gender dynamics of disposal behavior, both on household and community levels.
- Promote waste sorting and recycling practices with the use of gender-sensitive language and inclusive messaging.

# 1 Introduction

## 1.1 Background

The present Baseline Assessment has been implemented within the Waste Policy Armenia, 4-year Program funded by Sweden and implemented by the American University of Armenia (AUA) Acopian Center for the Environment. The Program aims to improve Armenia's waste management sector capacity to implement more environmentally sound waste management practices through:

1. Providing technical assistance to Armenian Government in developing and adopting EPR legislation for several specific waste streams in line with EU Waste legislation and best practices (Program Component 1)
2. Providing technical assistance to Armenian Government in developing source separation national model and introducing it as a system in a pilot municipality (Program Component 2)
3. Building sector capacities to implement Component 1 and Component 2, as well as to scale up the achieved results (Program Component 3).

## 1.2 Waste governance context

Armenia generates around 740 thousand tons of municipal solid waste annually, the majority of which ends up in around 300 unsanitary dumpsites spread over the country. While the recent policies and strategies on MSW focused more on a better waste collection to be accessible for more households, there was **no focus on setting clear targets** for waste diversion, and developing strong incentives to reach them. The present investment projects do not yet fully apply National Waste Policy. One of the reasons for this is that the national and local institutions have **insufficient experience and capacity to plan and implement the policy**, including the commitments defined in the Comprehensive and Enhanced Partnership Agreement signed with the European Union. Another reason is the **poor waste management culture** that cannot be developed in a short period of time. Also, **poor knowledge on sustainable waste management practices**, such as sorting, recycling and reusing waste will require constant work with target audiences, clear and correct messaging and continuous education.

The national government's current efforts to upgrade the existing waste collection and landfilling infrastructure (through introducing new sanitary landfills, and collection equipment) will ensure higher sanitary standards and waste collection rates. However, **these infrastructure projects lack sustainability components**, such as source separation, which would lead to higher rates of diversion from landfills, value recovery, and greater sustainability of the new waste management systems.

The previous efforts led both by the public sector and CSOs to introduce sustainable waste management practices in the country have often had a **fragmentary approach** and addressed only selected support functions and rules in the sector. Additionally, they often failed to ensure full engagement of all sector stakeholders and market players critical for enabling behavior change across the sector.

The Waste Policy Armenia program proposes a **systemic approach** to the sector issues and a full **multi-stakeholder engagement** to ensure long-term sustainable results benefiting all actors across the sector. It will be critical to enable key sector actors to take ownership, advocate and move towards environmentally sound waste management policy implementation.

Sustainable and equitable waste management policies and practices also need to recognize **human rights<sup>1</sup> and gender equality** concerns across the sector. Among other things, it means **acknowledging the links between gender inequality and waste management** and addressing **the gender nexus of waste management<sup>2</sup>**.

Examination of international best practices and applicable literature<sup>3</sup> indicates that issues related to gender equality and inclusion in waste management field fall within the **four main areas<sup>4</sup>**:

- 1) gendered definition of “waste” and “resources”, whereas in view of gender roles and stereotypical labor division within family and community women and men tend to define waste and assess the value and usefulness of waste materials differently and for different purposes.
- 2) gendered dimensions of disposal behavior and gender tendencies in the context of binning (proper disposing), littering and recycling (being more environmentally conscious).
- 3) formalization of waste activities with a specific attention on women waste pickers, safeguarding their rights and interests, as well as on ensuring equal pay and equal opportunities for women to take different roles and positions in the sector,
- 4) gender specificity of health impacts of unsound management of waste, as well as of toxic and hazardous waste.

Sustainable waste initiatives need to be both targeted and inclusive, hence, must reflect gender tendencies and dynamics.

Importantly, an emphasis shall be placed on **avoiding perpetuation** of existing discriminatory attitudes and stereotypical roles and advancing waste policies and practices with **greater gender awareness**. It is this sense, waste education and awareness raising that contributes to gender stereotypes across the sector is crucially important.

Review of domestic initiatives and studies shows that despite an increased attention and efforts to modernize the waste management sector in Armenia, **there is a lack of understanding of the impact of gender dynamics on waste management**.

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<sup>1</sup> Waste management requires a human rights-based approach (HRBA), as a number of issues and elements within this sector relate to substantive rights. Addressing human rights related risks in the waste sector requires a separate and in-depth study and falls beyond the scope of this report.

<sup>2</sup> See, UNEP-IETC and GRID-Arendal (2019). Gender and waste nexus: experiences from Bhutan, Mongolia and Nepal, [https://gridarendal-website-live.s3.amazonaws.com/production/documents/:s\\_document/511/original/GenderAndWaste\\_lores.pdf?1570449985](https://gridarendal-website-live.s3.amazonaws.com/production/documents/:s_document/511/original/GenderAndWaste_lores.pdf?1570449985)

<sup>3</sup> See, UNEP-IETC and GRID-Arendal (2019). Gender and waste nexus: experiences from Bhutan, Mongolia and Nepal, [https://gridarendal-website-live.s3.amazonaws.com/production/documents/:s\\_document/511/original/GenderAndWaste\\_lores.pdf?1570449985](https://gridarendal-website-live.s3.amazonaws.com/production/documents/:s_document/511/original/GenderAndWaste_lores.pdf?1570449985)

Joni Seager, Ieva Rucevska & Tina Schoolmeester (2020) Gender in the modernisation of waste management: key lessons from fieldwork in Bhutan, Mongolia, and Nepal, *Gender & Development*, 28:3, 551-569, <https://www.tandfonline.com/doi/epdf/10.1080/13552074.2020.1840155?needAccess=true&role=button>

Sonia Maria Dias, and Ana Carolina Ogando. “Rethinking Gender and Waste: Exploratory Findings from Participatory Action Research in Brazil.” *Work Organisation, Labour & Globalisation* 9, no. 2 (2015): 51–63., [https://www.researchgate.net/publication/287404143\\_Rethinking\\_gender\\_and\\_waste\\_exploratory\\_findings\\_from\\_participatory\\_action\\_research\\_in\\_Brazil](https://www.researchgate.net/publication/287404143_Rethinking_gender_and_waste_exploratory_findings_from_participatory_action_research_in_Brazil)

<sup>4</sup> Issues of formalization of the waste sector and addressing health implications of unsound waste management will not be looked into in the context of examination of gender dynamics further in the report, since they fall out of the scope of source separation case study on the example of Sevan town.



Shifting this paradigm is one of the key concerns of the Waste Policy Armenia program, which places a specific attention on the gender-sensitization of the sector. Gender dynamics are examined under Program Component 2 and respective recommendations are presented in the context of development of a source separation national model in a pilot municipality.

### 1.3 Overview on the current status of EPR adoption

The Comprehensive and Enhanced Partnership Agreement (CEPA) signed between EU and Armenia includes a commitment to establish (before 2024) full cost recovery mechanism based on the Polluter Pays and Extended Producer Responsibility (EPR) principles, among other obligations.

The RA Ministry of Environment is the responsible body to develop relevant legislation before 2024 to ensure timely delivery of the working EPR system. Two departments currently working on EPR adoption are the Strategic Policy Department and the Hazardous Substances and Waste Policy Department. The overall work is led by the Deputy MoE. The present program provides technical assistance to the MoE and other key stakeholders in introducing the EPR system for special waste streams in the country. As of 2023, there are no policy documents or provisions that address EPR, with the exception of CEPA mentioned above.

Overall, the ministry stakeholders have a basic level of awareness on EPR and capacity for developing the relevant legislation. The other governmental agencies such as the Ministry of Economy, Ministry of Finance, Tax Revenue Committee, Armenian Statistical Committee will need strong awareness raising and capacity building support to adequately engage in the introduction of EPR in the country.

The American Chamber of Commerce in Armenia (AmCham) in cooperation with AUA Acopian Center has been actively engaging with local businesses to raise awareness on EPR. In 2022 AmCham has commissioned a study to assess the best case scenarios to implement EPR for packaging in the country. The study also investigated the potential of implementing Deposit Refund System (DRS) in parallel with EPR for packaging (for the management of certain types of beverage packaging, such as PET bottles, aluminum cans, and some types of glass bottles). As of 2023, AmCham in cooperation with the Program continues engaging with more businesses to raise awareness.

Overall, the business stakeholders have an insufficient level of awareness on EPR and capacity to adequately engage in the introduction of EPR in the country and will need continuous support.

### 1.4 Overview on the current waste management in Sevan town

The Town of Sevan has around 24 thousand population and is located 60 km from the capital on the northwestern shores of Lake Sevan.

Starting 2023, the Municipality of Sevan will have a new waste collection system introduced as part of the “Kotayk and Gegharkunik Municipal Solid Waste Management” project. The new waste collection system includes

- new sanitary landfill built next to the current dumpsite in Hrazdan
- new mixed waste bins for 91 settlements in two provinces
- new Refuse Collection Vehicles (RCV) to serve 91 settlements in two provinces
- two transfer stations in the towns of Abovian and Martuni.

Both the new waste collection system and landfill will be operated by a new company co-founded by 12 municipalities comprising two provinces.

Around 10 years ago a project to introduce source separation of MSW was initiated in Sevan, including awareness raising campaigns and installment of recycling cages for plastic waste. Reportedly, the sorting rates dropped drastically due to lack of certainty among residents as to whether the separated MSW was actually going to recycling. Currently, Sevan Municipality has a strong commitment to further upgrade its waste handling system with a source separation component, implemented through the Sevan Waste Sorting project within the Waste Policy Armenia 4-year program.

As of 2023, the overall level of awareness on benefits and challenges of separate waste collection is low both among population and local government staff (more details are presented in below chapters). Both population and local government staff will need support to raise awareness and capacity for adequately engaging in the introduction of MSW source separation in the town of Sevan.

## 2 Methodology

### 2.1 Assessment purpose, objectives and scope

The **Purpose** of this baseline assessment is to capture both broad learnings about the waste sector in Armenia, as well as answer specific questions related to Waste Policy Armenia's current programming that will directly inform program management and future activity design. Following Waste Policy Armenia Program design, the assessment focuses on two areas: the introduction of EPR legislation and the source-separation system in Sevan town (hereinafter “assessment areas”).

**The objectives** of the baseline assessment include the following:

- Identify awareness and capacity gaps in the waste sector in Armenia
- Assess gender equality and HR gaps in the waste sector
- Assess capacity gaps and training needs for different stakeholders to adopt sustainable waste management practices, including capacity gaps related to Gender Mainstreaming and HRBA
- Assess awareness gaps for different stakeholders to adopt sustainable waste management practices
- Assess the awareness, attitude and the likely reaction of community citizens in regard to the introduction of municipal solid waste separation at source in the Town of Sevan.
- Inform Waste Policy Armenia Program design and future activities, including addressing capacity and awareness gaps

### 2.2 Assessment methods and sampling

To reach study purposes, the assessment employed a mixed method approach based on the quantitative and qualitative data collection. This allowed for the triangulation of data from different sources and ensured a comprehensive understanding of multidimensional factors that influence the waste management sector in Armenia, focusing on two assessment areas: the introduction of EPR legislation and the source-separation system in Sevan town.

**Assessment methods** included the following:

#### **Component 1 - Developing and adopting EPR legislation**

The baseline assessment for Component 1, related to the introduction of EPR legislation, was heavily based on **qualitative methods**. Namely, the assessment relied on a desk review of secondary data, including similar research and statistics, to gain main insights in this area. In addition, to triangulate the results from secondary data, the research team consulted with the key stakeholders, including governmental representatives, representatives of business associations and sectoral experts. The

purpose of the consultations was to fill in the data gaps identified through the secondary data review and to collect more profound and diversified information for further triangulation.

Finally, the baseline assessment utilized data received from group discussions organized among private businesses, subject to EPR legislation and business associations.

#### **Component 2 - Developing source separation national model and introducing it as a system in Sevan Town**

Under Component 2, the Program team conducted a public opinion survey among the population living in Sevan town, reaching out to approximately 400 citizens, and conducted focus group discussions involving the local population and private businesses.

**Public opinion survey** was conducted through phone interviews among 16+ population living in Sevan town using a semi-structured questionnaire. Overall, the survey reached **396 respondents living in Sevan town**. Key characteristics of study population is presented in Appendix A.

**Focus Group Discussions among population living in Sevan town:** Within the framework of baseline assessment **5 focus group discussion** were conducted as follows:

- 4 FGDs among Sevan residents (among them 2 FGDs were gender mixed-group, 1 FGD was conducted among women and 1 among youth)
- 1 FGD among local business representatives

In total, 43 people participated in the group discussions, among them 28 women (65%). In addition, nine business representatives were present during the group discussion conducted among local businesses; two were female-headed businesses.

## 2.3 Limitations

The assessment limitations include the following:

- The assessment under Component 1 was mainly based on analysing the existing qualitative secondary data.
- The public opinion survey did not apply random sampling approaches when selecting respondents. Instead, the assessment team obtained the phone numbers of the interviewees from Sevan municipality. Additional phone numbers of people living in Sevan town have been obtained through an online recruitment form disseminated among the population residing in Sevan town.

## 2.4 Ethical Considerations

When carrying out phone survey, key informant interviews and focus groups discussions, research team was guided with the following ethical consideration and principles:

*Informed consent:* Verbal Consent from survey respondents, interviewees and participants of focus group discussions was obtained after explaining the aim and objectives of the study, the procedures they need to pass along, and the possible benefits and risks.

*Voluntary participation:* Participation in the survey, interviews and group discussions was voluntary, and this was clearly mentioned in the introduction. The respondents could quit

involvement in the survey, interviews or group discussions at any time. Besides, they were free to refuse to answer any question they disliked.

*Confidentiality:* The names of respondents and participants of group discussions are not disclosed anywhere, and the information provided by them is confidential. The data will not be transferred to third parties and will be analyzed generally.

*AUA ACE was responsible for data collection, processing and analysis. AUA ACE is responsible for data storage, protection, and management according to internal policies and procedures.*

## 3 Key Findings and Conclusions

### 3.1 Component 1 - Context for adoption of EPR in Armenia

The present section discusses the key findings from Key Informant Interviews, stakeholder consultations, and workshops conducted with component-specific stakeholders, namely local and national authorities (namely MoE, MTAI, MoEconomy), municipalities, and business community.

The main topics discussed with stakeholders are outlined in the following five categories:

- overall knowledge of EPR
- role of different actors and stakeholders in EPR
- economic aspects of EPR
- environmental and social aspects of EPR
- regulatory and enforcement aspects of EPR

#### **Governmental stakeholders**

The Key Informant Interviews, stakeholder consultations, and workshops conducted with government stakeholders have shown that, while only a few ministry officers have good knowledge on EPR, many others have very limited or no understanding of it, especially municipalities representatives and national government representatives who have not been previously involved in EPR related policy development. Some knowledge of EPR is acquired mainly through previous EPR related policy development work, literature review, and workshops or other technical assistance by various support programs.

There is a common perception among authorities that the functioning of the EPR system solely depends on consumers and a general mistrust that behavioral change in Armenian society is possible at all.

There is rather a poor understanding of economic aspects of EPR, especially the implications of formalization of primarily shadow economic activities around various waste streams having value recovery potential. Generally, the EPR is seen merely as another green (environmental) policy, rather than a tool to ensure financing for safe handling and treatment of problematic waste streams, that are often of a big concern for the government.

“Armenian Packaging Waste Management Assessment and a guide to set-up a packaging waste management system based on the principle of EPR in Armenia” carried out by the American Chamber of Commerce in Armenia (March 2022) also acknowledges the need for Armenian government to recognize the dynamics in this market and improve the understanding of the tools discussed for the country (EPR, DRS etc.) and their interconnections. According to this study, there is a confusion as to the direction for waste management in the country, which demonstrates that a waste hierarchy is not established. In addition, fragmentation of responsibilities for the waste management between different state authorities and coordination is observed which could be a potential challenge for EPR implementation.

While environmental benefits of EPR are generally accepted, the social implications, such as creation of more decent jobs are rather overlooked. Some more specific environmental benefits, such as safe treatment of hazardous waste are also generally overlooked.

Generally, there is a concern as to whether the EPR regulations will be effectively enforced. There is a view that some waste streams, such as packaging that allegedly are properly managed (recycled), might not need additional mechanisms. Some expressed the need for more information on EPR related data reporting and management procedures to be established.

## Business stakeholders

The Key Informant Interviews, stakeholder consultations, and workshops conducted with business stakeholders have shown that generally there is very limited or no awareness about EPR. The majority of those who have heard about EPR would have a perception of it as a kind of taxation policy with little or no substantial environmental benefits as a result given that the collected taxes would not be directed to any environmental activities. The majority are concerned that introduction of EPR will necessarily increase the prices for goods that produce waste streams under EPR.

According to the “Armenian Packaging Waste Management Assessment and a guide to set-up a packaging waste management system based on the principle of EPR in Armenia” study, there is a misperception of EPR organizations as either it is not recognized as a not-for-profit by the public or is perceived as a governmental body or taxation by the public. Mostly The EPR is perceived as a mechanism of “taxation” driven by the industry.

## 3.2 Component 2: Context for Introduction of Municipal Solid Waste Separation at Source in Sevan Town

### 3.2.1 Community attitude on current waste management in Sevan town

**Overall, waste definition differs depending on the perceptions of people, attitudes towards reuse of items that lost their initial consumer value and their roles in the family, including gender roles and responsibilities.**

According to FGDs, some participants are prone to reuse the items discarded as waste while others are prone to dispose of it. Generally, **waste is defined as something that** has been used, lost its initial consumer value **and is not subject to reuse. As examples of waste participants mentioned plastic packaging, food leftovers, used paper, batteries, construction waste, etc.** On the other hand, there is a general understanding among the FGD participants that all items discarded as waste might be reused or recycled by others.

“For me, waste is something that the nature is not capable to “digest”.  
Something that might cause problems in the future.  
[FGD with citizens, mixed-group, woman]

“Depends the item, it may be used once or several times. For example,  
disposable cups, one cannot use them multiple times. Once used, it is disposed as  
garbage”  
[FGD with citizens, mixed-group, woman]

In terms of waste definitions that attitudes of those who have participated in the projects targeting waste issues differs from those who have not. There were participants who have participated in various projects from donor organizations and established their businesses to reuse paper, textile or plastic waste for production of goods for sale, such as handbags, jewelry, etc. Those participants are more prone not to discard waste and consider various alternatives for their reuse. Overall, the participants are concerned about the waste generated in their households.

“I am mostly concerned about plastic packaging that do not dissolve in the nature.  
They are disposed at the dumpsites, after which are spread around due to wind. It  
also impacts flora. It is also supposed to be burned. Really concerning...”  
[FGD with citizens, mixed-group, woman]

“We dispose the waste generated in our household in the containers but we are not  
aware what happens to it after disposal...”  
[FGD with citizens, mixed-group, man]

Both female and male FGD participants underlined, that in household waste management, **it is the “woman of the house” who mostly determines what is a waste** by evaluating the “usefulness” of household items (whether it is clothing, food, piece of furniture, “something that has been put aside for a while”). Some even claimed that it’s exceptionally women who decide what should be discarded as a waste.

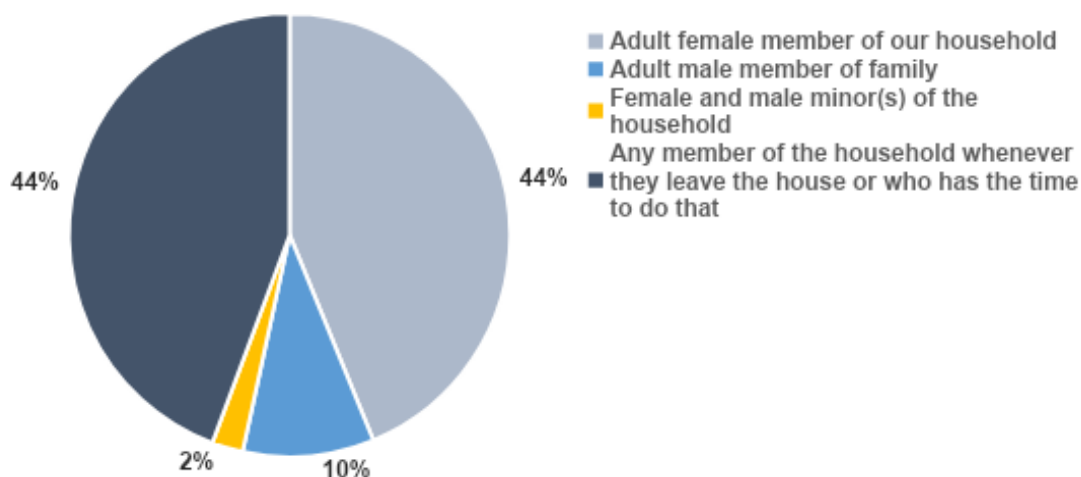
“It is only women who decide. What do we have to do with a worn-out stuff or old shoes”.  
 [FGD with citizens, mixed-group, man, middle age]

“In any case, I firmly believe that the ultimate decision regarding whether a particular item should be deemed a waste or not rests with women. Because generally it’s women’s jobs and their role in the household...I’m talking about multi-apartment buildings not private houses, because source separation is left more to women”.  
 [FGD with citizens, mixed-group, woman, middle age]

Whereas some of FGD participants pointed out that men’s main role in household waste management is to solely take the garbage out of the house (“without even knowing what that it is inside the bag with the garbage”), interestingly enough, survey data revealed that in fact **it is women in Sevan town who are more likely to engage in taking out the waste in the household.**

Whereas 44% of the respondents involved in the phone survey reported that any member of the household would take out the waste when leaving the house or having the time to do that, analysis per gender and age of household members reveals **that adult female members primarily engage in taking out the waste in their households (Figure 1).**

**Figure 1. Who usually takes out the waste in your household? (n=395)**



Majority of FGD participants agree **that the decision on what should be discarded as waste depends on “where the waste is being originated” and who is “responsible” for that area of household management** (such as kitchen vs garage, food waste vs tools, etc). Both female and male members of the household shall, hereby, consult before discarding the items they might not be aware about the value and usefulness of.

“It’s mostly women in the family who make the decision. But it’s men’s decision when it comes to garages. Let's suppose I dispose of something from the garage, could a woman say, “I need that

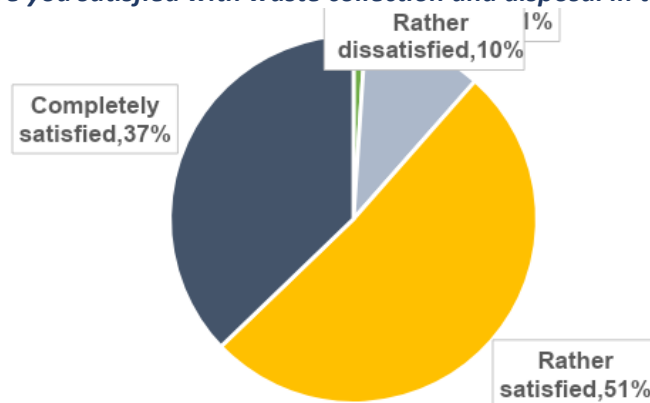
bolt, leave it". She doesn't even enter that garage. But when in the family, a woman decides that she wants to dispose of something, no man will say, "Leave it, we might wear it".  
[FGD with citizens, mixed-group, man, middle age]

In the opinion of FGD participants, **men "think of waste more generally"**, unless it comes to type of waste generated from "manly activities", such as work in a garage, home renovation, removal of heavy household items, etc. Women, on the other hand, spend more time and efforts distinguish what item belongs to which type, can it be considered as waste or not.

"Men simply collect everything in a corner waiting for women to decide what to do with items that are no longer of use".  
[FGD with citizens, mixed-group, man, middle age]

**Overall, people living in Sevan town enjoy access to centralized waste collection system and are mostly satisfied with it.** Namely, as quantitative data analysis shows, 98% of the respondents involved in the phone survey reported that they have access to waste collection in their neighborhood and 88% of them expressed their satisfaction with the services ("rather satisfied" and "completely satisfied" options summarized) (Figure 2). Few households apply other methods of waste disposal, such as waste disposal in nearby private dumpsite or burning.

**Figure 2. How much are you satisfied with waste collection and disposal in the town of Sevan? (n=396)**



Focus group discussions with residents and private businesses in Sevan town also confirm that in general citizens are satisfied with the municipal waste management system. The reasons for satisfaction are clean central and secondary streets, regular waste collection, increasing frequency of waste collection, However, the participants highlighted several issues and shortcoming, that primarily include the following:

- **Exhausted waste containers lacking cover and out-of-date waste transportation trucks.** Due to limited financial resources the CNCO owns old and exhausted waste bins and lacks upgraded waste transportation vehicles. The existing waste containers lack cover due to which waste placed in the containers is spread around by stray animals. In addition, people are afraid of stray animals nearby waste containers to approach and properly place waste. Municipality also faces difficulties when collecting waste fees from the residents.
- **Malfunction of municipality to properly implement waste collection in some areas of the town:** According to FGD participants, from time to time there might be delays in waste collection for specific areas in the town, especially in the neighborhoods of private houses, near industrial factories or shops. In the neighborhoods of private houses waste collection is carried out less frequently.



- **Absence of source separation in the town.** Lack of source separation system in the town has also been highlighted as a priority issue.
- **Lack of designated areas for disposal of construction waste:** Construction waste is not collected by municipal waste collection vehicles while the community lacks a designated area for disposal of such waste. As a result, citizens dispose construction waste in random areas polluting the environment. The existing current sites of disposal of waste are not in proper areas adversely impacting agricultural and tourism destination sites. People also lack awareness about where they are supposed to dispose construction waste.
- **Open garbage chutes in multistore residential buildings.** According to participants, open garbage chutes create health and safety risks for residents living in the multistore buildings. They suggest closing those chutes.
- **Lack of supervision and penalty mechanisms for residents and businesses in case of waste littering.** Another issue highlighted is related to the underdeveloped condominiums that are supposed to cover waste collection and cleaning in their neighborhoods and apply certain supervision measures.
- Municipal waste management system and **infrastructure lacks accessibility and is not properly accommodated for persons with disabilities.**
- **Waste behavior of citizens:** According to participants there is a low sense of responsibility and environmental-friendly thinking among community members. Waste littering practices are widespread among some residents living in the town. Some residents and businesses used to burn waste not having access to municipal waste containers in their nearby areas. Still there are HHs that did not use municipal waste management system and dispose of their waste in private informal dumpsites close to their households or burn it.

The FGD participants have some experience in communicating their waste-related concerns with the local municipality. According to them, in some cases the grievances raised by them have been properly addressed, however, there were also cases when the response from the municipality was delayed or no action have been taken from the municipality.

When it comes to disposal behavior, according to some FGD participants, men more than women are prone to littering than binning. It must be noted, opinions on this account are different, with participants also pointing that women are more likely to litter or not to place the garbage properly into the bin and rather leave it in the area next to it.

The core difference, however, according to FGD participants, lies within the kind of items men and women are more likely to inappropriately dispose (throw out onto the street, out of the window, etc). Thus, Majority of FGD participants consider that men are more likely to litter in terms of throwing away cigarettes or cigarette packaging, plastic bottles, sunflower peels. According to FGD participants, men are also known for improperly disposing waste while spending time on Lake Sevan beach.

“Let’s say, even if a woman is smoking, I have never seen such a woman who would through the cigarette’s packaging out of the car’s window. Yet this is what men do in majority of cases”.  
[FGD with citizens, mixed-group, woman, middle age]

They [men] come to Sevan beach, spend time, drink and have fun and then leave all the garbage and beer bottles on the shore and leave. They don’t even consider collecting that waste and throwing into the bins, yet there are bins everywhere along the beach”.  
[FGD with citizens, mixed-group, woman, middle age]

**Younger population are less satisfied with waste collection and disposal in Sevan town compared to other age groups.** Analysis per confounding factors, including gender (male/female), age groups (from 15 to 29/from 30 to 44/from 45 to 59/60 and older), education (secondary and vocational/high), housing type

(apartment/house) and economic situation (low/middle/high)<sup>5</sup> of the respondents, revealed statistically significant differences per only respondents' age. Namely, the satisfaction level is lower among younger respondents (aged 15 to 29) compared to other age groups (above 30), 76% and 89% and higher, respectively. For the rest of the confounding factors, no statistically significant differences have been found (Table 1).

**Table 1. How much are you satisfied with waste collection and disposal in the town of Sevan? Per confounding factors<sup>6</sup> (n=382)**

Confounding factor	N of sample	% of satisfied	Significance test
<b>Per age groups</b>			
From 15 to 29	90	76%	Kruskal-Wallis's test, p<0.00
From 30 to 44	139	93%	
From 45 to 59	84	89%	
60 and older	69	96%	

Dissatisfaction with municipal waste management was also expressed by the participants of FGD with youth. In this regard, some of the participants noted that because of poor waste collection in districts with private houses, residents either put the waste in front of their houses which is further spread because of stray dogs and other animals or dump it in Lake Sevan.

“I wouldn't say that garbage collection is done so well, because in the summer when I was working at a brewery, we had to wait a week and a half so that the garbage would be taken away. And a shamefully bad sanitary and hygienic environment was created”.  
[FGD with youth, mixed-group, male]

Others also mentioned that a significant factor to poor waste management is people's behavior, referring to those who throw away plastic bags, bottles, cigarette residues and other things throughout the city. Participants of the FGD with youth also pointed out that waste is not regularly collected from businesses such as factories and café/restaurants which creates an unsanitary and unhygienic environment, with negative impacts on both public health and the appearance of the city.

## Conclusions

- Overall, waste definition differs depending on the perceptions of people, attitudes towards reuse of items that lost their initial consumer value and their roles in the family, including gender roles and responsibilities. For most of FGD participants differences in how women and men define waste are primarily **connected with gender division of household roles and responsibilities**.
- FGD and survey data shows that **women are more likely to engage and take responsibility for the full cycle of household waste management**, including determination waste is waste, evaluation of the “usefulness” of household items before discarding them as a waste, sorting and differentiating waste

<sup>5</sup>“Low” income group includes the respondents who provided “Income is not sufficient for food” and “Income is sufficient solely for food, not for clothes” responses to the question “Which of the following best describes your family's economic situation?” Middle income group includes those whose income is sufficient for food and clothes but is not enough for expensive items such as a refrigerator or a washing machine. “High” income group include those who mentioned that they can afford to buy some valuable items such as a refrigerator or a washing machine or they can afford to buy anything they need

<sup>6</sup> Only factors demonstrating statistically significant differences are reported

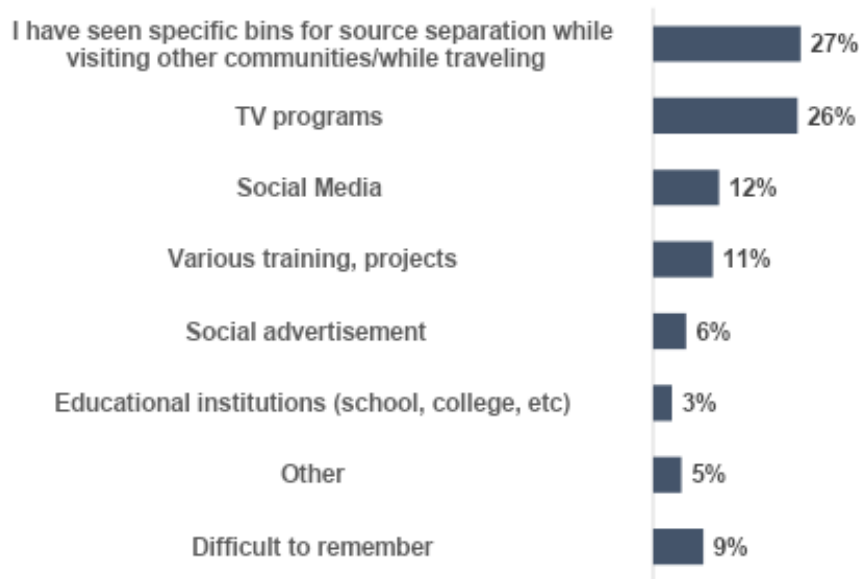
and deciding upon possibilities of secondary use of the items and actually taking out the waste in their households.

- **When it comes to waste behavior**, opinions among FGD participants are different regarding whether women or men are more prone to littering than binning, and moreover, sorting. The core difference, however, is being pointed to the kind of items men and women are more likely to inappropriately dispose. Thus, Majority of FGD participants consider that **men are more likely to litter in terms of throwing away cigarettes or cigarette packaging, plastic bottles, sunflower peels**. According to FGD participants, men are also known for improperly disposing waste while spending time on Lake Sevan beach.
- Overall, people living in Sevan town enjoy access to centralized waste collection system and are mostly satisfied with it. However, the system has its issues and shortcoming that include the following: exhausted waste containers lacking cover and out-of-date waste transportation trucks; malfunction of municipality to properly implement waste collection in some areas of the town; absence of source separation in the town; lack of designated areas for disposal of construction waste; open garbage chutes in multistore residential buildings; lack of supervision and penalty mechanisms for residents and businesses in case of waste littering; low sense of responsibility and environmental-friendly thinking among community members. In addition, FGDs reveal that municipal waste management system and **infrastructure lacks accessibility and is not properly accommodated for persons with disabilities**.
- **Younger population is less satisfied with waste collection and disposal in Sevan town compared to other age groups**. In terms of contributing factors, poor waste collection in districts with private houses, irregular collection of waste from businesses, as well as littering behavior of community members was brought up by the participants of FGD with youth.

### 3.2.2 Community attitude on source separation benefits

**People living in Sevan town are mostly aware of source separation and its absence is considered to be an important issue in Sevan town to be addressed by future programming.** As the analysis shows 88% of survey population have heard about source separation. In terms of awareness of source separation, the analysis per confounding factors, including gender, age, education, housing type and economic situation of the respondents, did not reveal any statistically significant differences per respondents' groups. The popular sources of information about source separation among informed respondents include seeing specific bins while visiting other communities/travelling (27% of total responses), TV programs (26%), social media (12%) and various trainings and awareness-raising projects (11%) (Figure 4).

**Figure 1. Where have you heard of source separation for the first time? (n=349)**



In terms of practicing source separation, 36% of the respondents reported that there is at least one type of waste that they do not dispose of but separate it for reuse or resell. Most frequently, people reuse or resell plastic packaging (25% of surveyed population), glass packaging (11%) and paper packaging (8%) (Table 2).

**Table 2. Which type of waste do you separate? (n=141)<sup>7</sup>**

Type of waste	N	% of responses	% of total surveyed population
Plastic packaging	100	50%	25%
Glass packaging	42	21%	11%
Paper packaging	33	16%	8%
Organic waste	22	11%	6%
Metal packaging	5	2%	1%
<b>Total</b>	<b>202</b>	<b>100%</b>	<b>51%</b>

Though vast majority of the respondents have access to municipal waste management services (98%) and are satisfied with it (88% of respondents with an access to municipal waste management) they also believe that absence of source separation is an important issue in their community considering the various problems the town of Sevan currently faces. Namely, 95% of respondents reported that it is an important issue to be considered and targeted by future programs. Survey data shows that **women are more prone to think that source separation is an important issue for the community compared to men** (Chi-square test, p=0.17). Namely, 97% of women believe it is an important issue versus 91% men.

<sup>7</sup> Multiple choice question, total 202 responses received, on average each respondent who answered this question provided 1.4 responses

As already mentioned, during the FGD, the absence of a source separation system in the town has also been highlighted as a priority issue for the community and a shortcoming of the municipal waste collection system. FGD participants believe that residents benefit most of all in case source separation system is introduced. In contrast representatives of private businesses believe that recyclers are those who benefit most of all. According to participants, the introduction of source separation may also promote the business sector and new business ideas as separated waste will serve as a source of secondary raw material. According to the participants, in order to ensure the success of the newly introduced system, a complete value chain, adequate follow-up and supervision mechanisms should be in place.

“Yes, it is very important issue for our community. It directly related to our daily life, our comfort. Its really unpleasant to see garage in every side”.  
[FGD with youth, mixed-group, male]

“Everyone will be ready to do source separation of they aware that the value chain is complete and sorted waste is recycled”.  
[FGD with youth, mixed-group, male]

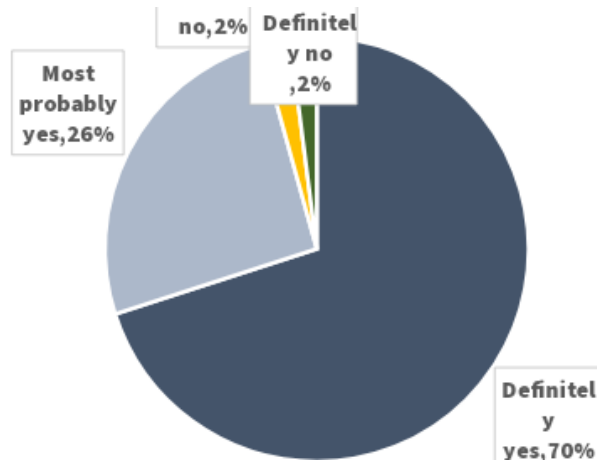
### Conclusions

- People living in Sevan town are mostly aware of source separation and its absence is considered to be an important issue in Sevan town to be addressed by future programming: 88% of survey population have heard about source separation and 95% reported that it is an important issue
- Almost one third of people living in Sevan town do not dispose at least one type of waste but separate it for reuse or resell, among them plastic packaging and glass packaging are most frequently separated waste.
- According to survey data women in Sevan town **are more prone to think that source separation is an important issue for the community compared to men.**

### 3.2.3 Community attitude towards introduction of source separation in Sevan Town

**Overwhelming majority of people living in Sevan town are prone to do source separation in their households if local authorities introduce such system.** The survey also aimed at revealing respondents’ predispositions towards joining source separation whenever it is introduced at the community. According to the results, vast majority of the respondents (96% of total surveyed population) are willing to participate in source separation in their household, if local authorities introduce such system. Namely, 70% of the respondents reported that they will definitely join this initiative and 26% will most probably join it. Four percent of the respondents are not willing to do source separation. As for the reasons for not joining it, the respondents most frequently mentioned that waste management is not a priority issue for their household, they do not believe that the separated waste will be recycled or that they do not have enough space in their household to insert separate bins.

***Figure 2. Will you be willing to practice source separation in your household if local authorities introduced waste separation system? (n=396)***



The respondents who reported that they are willing to join source separation also provided the reasons why it is important to them. According to the results, the frequently mentioned motivations for them are the maintenance of hygiene and healthy environment (35% of the responses), reduction of waste going to landfills (17% of total responses) and advancement of the community through introduction of source separation system (15% of total responses). More respondents are motivated with the opportunity for the community to generate income from recycling of sorted waste (14% of total responses) than are interested in their personal benefits (8% of total responses) (Table 3).

**Table 3. Why is source separation important to you? (n=377)<sup>8</sup>**

Motivation	N	% of responses	% of total surveyed population that are willing to do source separation
It's important for maintaining hygiene and healthy environment	249	35%	66%
Less waste will go to landfills	122	17%	32%
The community will become more advanced through sort separation system	107	15%	28%
The community will generate income from recycling sorted waste	99	14%	26%
I can generate income by handling separated waste to recyclers	58	8%	15%
It will create possibility to recycle the waste	49	7%	13%
Difficult to answer	18	3%	5%
<b>Total</b>	<b>702</b>	<b>100%</b>	<b>186%</b>

<sup>8</sup> Multiple choice question, total 702 responses received, on average each respondent who answered this question provided 1.9 responses

According to FGD participants **women are more likely to take the responsibility for sorting the household waste**. As a result of gender roles and family responsibilities, some of FGD participants pointed out that **women are more likely than men to carry “the burden of waste separation” on the household level**, once the system is formally introduced by the municipality.

“Men will through waste in whatever trash can is open at the moment, without differentiation. It is women who will then come and start sorting and relocating waste per respective cans”  
[FGD with youth, mixed-group, male]

“Especially at first it will be difficult for men [to sort household waste]. They will say “what is this new stuff we shall bother about?””  
[FGD with youth, mixed-group, female]

**Making sure that separated waste is properly recycled and income generated through recycling is used to solve community issues is an important motivator for people to do source separation.** In terms of importance of different components that would motivate residents to do source separation, 94% of the respondents mentioned that it is important to them to know that income from the recycled materials is used to solve community issues (94% of respondents) and that the separated waste is properly recycled (92%). Making sure that all community members do source separation and that the municipality can apply fines if they do not separate and dispose waste properly are also important motivating factors for the respondents mentioned by 87% and 83% of surveyed, respectively. Finally, compared to other components, getting rewards for properly sorting and disposing of waste received less importance (69% of the respondents mentioned this as an important factor) (Figure 6).

**Figure 6. To what extent the following is important to you to be motivated to practice source separation**



All above-mentioned factors have been tested per confounding factors to reveal significant differences for respondents’ groups, including gender, age, education, housing type and economic situation. The analysis revealed significant difference only per respondents’ age and only one factor. Namely, knowing that the municipality can apply fines if respondents do not separate and dispose of waste properly is more important to respondents aged 30 to 44 (important to 90% of respondents from this age group) compared to respondents from other age groups (Table 4).

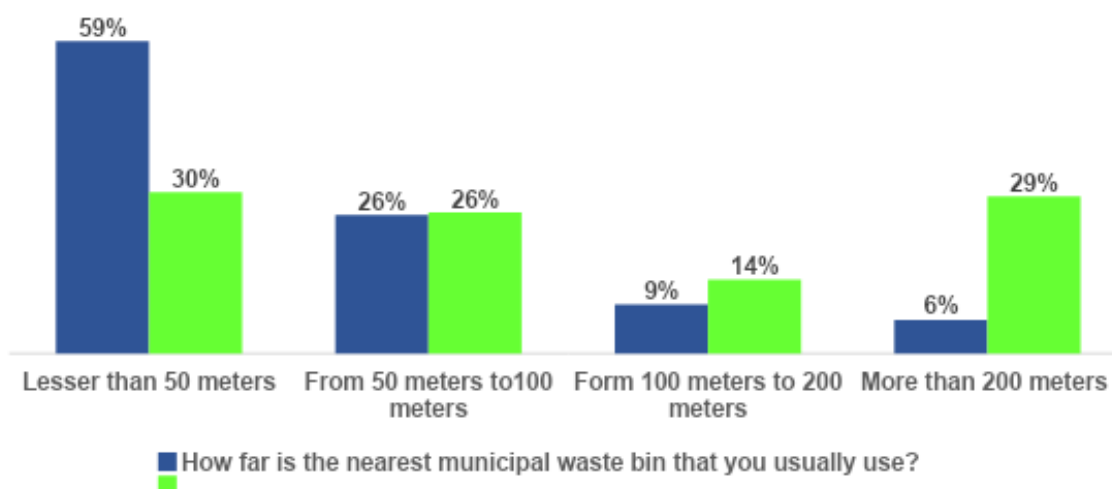
**Table 4. Know that the municipality can apply fines if I do not separate and dispose of waste properly (n=387)**

Confounding factor	N of sample	% of satisfied	Significance test
<b>Per age groups</b>			
From 15 to 29	90	83%	Kruskal-Wallis's test, p<0.00
From 30 to 44	143	90%	
From 45 to 59	86	72%	
60 and older	68	79%	

During the FGDs, being aware that all community members joined waste separation system and consistency and follow-up of the activities have been highlighted as important factors to motivate people to join source separation and practice it in a long-terms perspective. The participants bring example of another project carried out in the community several years ago. The project targeted waste separation for plastic, however it failed due to inadequate follow-up and incompletely introduced value chains. Namely, according to the participants, though at the beginning the community residents were motivated to separate plastic and placed it in the designated bins, eventually they stopped doing that seeing that plastic was mixed with other types of wastes and was transported to the same dumping site.

***If source separation is introduced people are willing to walk farther distances to dispose of separated waste than they walk currently. Interestingly, respondents are willing to walk farther distances in case a source separation system is introduced than they do it currently. Namely, 29% of the respondents mentioned that they are willing to walk more than 200 meters to dispose of a separated waste versus 6% that currently walk that far. Similarly, 14% of the respondents are willing to walk from 100 to 200 meters in contrast to 9% of the respondents walking that distance currently (Figure 7).***

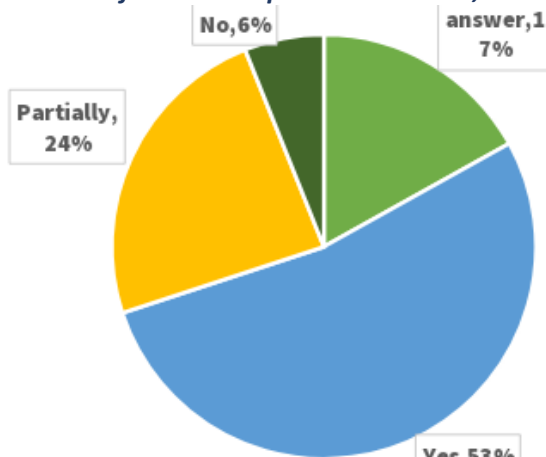
**Figure 7. How far is the nearest municipal waste bin that the respondents currently use and how far they are willing to walk in case source separation is introduced (n=396)**





More than half of the respondents (53%) believe that separated waste will be recycled if source separation is introduced in the town. Twenty-four percent believe it will be partially recycled and 6% don't think recycling will be organized. Seventeen percent of the respondents had difficulty answering this question (Figure 8).

**Figure 8. Do you think that if waste is separated in Sevan, would it be recycled? (n=396)**



**Educating and raising awareness is the most preferable strategy for the residents that the municipality can follow to motivate people to participate in source separation.** When given the alternatives of three strategies that the municipality may follow when introducing source separation, that include educating and raising awareness, applying reward methods and applying punishments, respondents more frequently reported being prone to education and awareness-raising methods (50% of total responses). This method is followed by reward methods (27% of total responses). Application of punishments is the least preferred strategy (23% of total responses) (Figure 9).

**Figure 9. Which actions of the public authorities do you think is most important that will motivate your friends or your neighbors to practice source separation?**



The FGD participants introduced different opinions on the effective mechanisms the public authorities may follow to persuade community residents to join source separation system.

According to FGD participants **educating and awareness raising** are the most efficient ways to motivate community residents to do source separation. Participants bring examples of positive results of awareness raising that contributed to preventions of waste littering practices among citizens.

“First and foremost, you need to educate people. They need to be explained why recycling of waste is necessary. If I do not understand that I will not be motivated to do that. The issue of awareness-raising is the most important”

Some of FGD participants believe that **application of penalties** is necessary to promote responsible waste behavior among population. It was also acknowledged that application of supervision and penalty mechanisms in a small town might be challenging and not effective as mostly social relationships prevail among municipality representatives and residents versus formal relationships. The participants are also for **mandatory** introduction of the system to ensure its efficiency, otherwise not all residents will join it. Meanwhile, knowing that all community members joined source separation is an important motivation for the residents to properly practice source separation. Participants also offer public deterrence mechanisms, such as making public through social media the cases of waste littering or improper disposal of separated waste.

“There are no punitive measures in place, no penalties, something to ban such behavior (added: refers to littering)”

[FGD with citizens, mix-group, women]

In contrast, according to FGDs employment of **reward mechanisms** are not that effective, however application of reward methods, such as competitions between different neighborhoods, may have some positive effects in terms of Program success and reaching cleaner environment in the town.

Making sure that sorted waste is properly recycled is the most frequently mentioned type of information the respondents want to receive about the implementation of source separation system (23% of total responses). Respondents would also like to learn how to practice source separation (17% of total responses) and how they can support the initiative (10% of total responses). Meanwhile it should be mentioned that 37% of the respondents had difficulty to answer this question (Table 5).

**Table 5. What type of information would you like to receive about the implementation of source separation system in the town of Sevan?<sup>9</sup>**

Information	N	% of responses	% of total surveyed population
How is sorted waste recycled	116	23%	29%
How to practice source separation (what type of waste should go where)	87	17%	22%
How can I support this initiative	49	10%	12%
What kind of financial benefits does the community get from source separation	44	9%	11%
How many households are involved in source separation in my community	37	7%	9%
Regular information on the quantity of sourced waste in the town of Sevan	31	6%	8%
Difficult to answer	146	29%	37%
<b>Total</b>	<b>510</b>	<b>100%</b>	<b>129%</b>

<sup>9</sup> Multiple choice question, total 510 responses received, on average each respondent who answered this question provided 1.3 responses

Provision of regular and timely information on the introduced system and transparency and accountability of the activities for all phases are highlighted during the FGDs as important components for the Project success. According to groups discussions, community residents are mostly interested in volume of waste collected in the town, the practical benefits of the system for the community and cost-efficiency reflections of the activities. Another important component is provision of information about the recycling phase – whether the separated waste was properly recycled, what financial benefits was generated and how it contributed to the municipal budget. Allocation of some amount of profit to addressing country-level issues that are sensitive for the country (such as army) would enhance willingness of residents to join source separation. Finally, the number of jobs created under the Project is another motivating information of the community members to be informed about.

Overall, the analysis of FGDs provide a solid ground to claim that there is a certain awareness gap in terms of understanding of **value chain and main market players of sorting system**, as well as there is a lack of understanding of the **roles and responsibilities of municipality, businesses, community, recyclers and NGO sector in source separation system**. The FGD participants also have contradicting opinion on the ownership of separated waste placed in the waste bins. Some of them claim that waste should belong to the municipality which should have contract with the recyclers. Others believe that it should be directly owned by recyclers.

During the FGDs, the participants also highlighted certain risks related to the introduction of source separation system that should be taken into account while Program implementation. Namely, according to participants introduced new waste bins might be damaged becoming subject to vandalism by community members. The community had such negative experiences of damaged public properties.

Gender inequalities and norms that are embedded in a given society manifest themselves in almost all aspects of waste management<sup>10</sup>. **Building sustainable waste management practices requires revisiting gendered patterns of waste behavior on household and community levels through education and awareness-raising.**

Waste education (both formal and informal) and awareness-raising shall be conducted with gender awareness and avoid perpetuating discriminatory attitudes and stereotypical roles and responsibilities that are prescribed to women and men both in the household and in the community. This also means, that **intersecting inequalities** that disproportionately affect women (education, social status, location, health conditions, etc.) shall also be taken into account in order to ensure equal participation in community matters, as well as equal opportunities to get formally involved in community waste management.

While promoting waste sorting and recycling practices, the use of gender-sensitive language and inclusive messaging is critical. **Waste education shall aim to boost such practices equally among men and women and avoid presenting handling and sorting waste as a part of “women’s household responsibilities”**, thus putting disproportionate household responsibilities on women if/when waste sorting practices are formally introduced in the community.

**Stereotypes influence community's perception on women's role in municipal waste management system, with women's involvement in decision-making capacities being particularly low.** The FDG participants expressed **both positive and negative attitudes** towards the role of women in municipal waste management. Some male participants noted that increased involvement and leadership from women could benefit the community and waste management process. However, others, mostly male participants, expressed negative views, citing the challenging nature of the job and difficulty for women to be part of informal negotiations.

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<sup>10</sup> See, UNEP-IETC and GRID-Arendal (2019). Gender and waste nexus: experiences from Bhutan, Mongolia and Nepal, [https://gridarendal-website-live.s3.amazonaws.com/production/documents/:s\\_document/511/original/GenderAndWaste\\_lores.pdf?1570449985](https://gridarendal-website-live.s3.amazonaws.com/production/documents/:s_document/511/original/GenderAndWaste_lores.pdf?1570449985)

“There is no role for women in waste sector”.  
[FGD with businesses, male-headed business, middle age]

“You can solve issues on the scale of the whole city over a glass. It would be difficult to do it with women”.  
[FGD with citizens, mixed-group, woman, middle age]

Responses of FGD participants indicated, **women are mostly involved in waste disposal fee collection, street sweeping, and bookkeeping roles. Majority of FGD participants pointed out that women are not involved in decision-making processes, despite half of the municipality staff being women.**

When asked about **women's roles as drivers, dumpsite managers, or waste collectors**, participants had **mixed opinions**. Some female participants believed that stereotypes and societal pressures prevent women from taking on these roles, while some male participants saw potential for women to work as truck drivers once there were better working conditions and modern trucks.

“This is Armenia and we are Armenians. Women would be ashamed to be involved in waste collection. It’s a common practice in foreign countries and there is no shame to do it. Women (Armenian) who move to other countries would even do that while there. But they would be ashamed here.”.  
[FGD with citizens, mixed-group, woman, middle age]

“People do not even agree to work in that field. It is hard to recruit anyone for those positions [waste truck drivers] It’s a quite difficult job and is carried out in poor hygienic conditions ...”  
[FGD with citizens, mixed-group, woman, middle age]

FGD participants provided recommendations aimed at interdiction of source separation system, that include the following:

- Introduction of some advanced technologies, such as waste collections machines that provides financial compensation for collected waste or creation of collections points for certain types of waste.
- Include all educational institutions in the awareness-raising campaigns such as kindergarten, school, art schools and vocational educational institutions.
- Primary introduce source separation for private businesses and public organizations, such as banks, hospitals, schools, etc. and then promote such practice among citizens.
- Involve of private waste management companies instead of governmental or municipal organizations.

## Conclusions

- Overwhelming majority of people living in Sevan town are prone to do source separation in their households if local authorities introduce such system.
- FGD data reveals that **women are more prone to take the responsibility to sort the household waste**. As a result of gender dynamics, according to some of FGD participants, once the source separation system is formally introduced, **women are more likely than men to carry “the burden of waste separation” on the household level**.
- Making sure that separated waste is properly recycled and income generated through recycling is used to solve community issues is an important motivator for people to do source separation.
- Educating and raising awareness is the most preferable strategy for the residents that the municipality can follow to motivate people to participate in source separation.
- **If source separation is introduced people are willing to walk farther distances to dispose of separated waste than they walk currently.**

- There is a certain awareness gap in terms of understanding of **value chain and main market players of sorting system**, as well as there is a lack of understanding of the **roles and responsibilities of municipality, businesses, community, recyclers and NGO sector in source separation system**.
- **Waste sorting and recycling practices shall be promoted with the use of gender-sensitive language and inclusive messaging**. Educational materials and awareness-raising campaigns shall aim to boost such practices among women and men equally, while avoid presenting sorting waste as a part of “women’s household responsibilities” and hence putting disproportionate household responsibilities on women if/when waste sorting practices are formally introduced in the town.
- Waste sector reforms shall aim to address all factors (societal attitudes, working conditions and safeguards, male dominated working culture in the sector) **that limit women’s involvement in the municipal waste management system, including in decision-making capacities**.
- **Poor sanitary and safety conditions of work, especially that of waste collection crew (truck drivers and waste collectors)**, were raised by FGD participants as an issue of concern that needs to be addressed in the scope of waste sector reforms in Sevan town.

## Recommendations

Recommendations presented under this chapter aim to inform future activities of Waste Policy Armenia Program by addressing, in particular, capacity, awareness and gender-sensitization needs.

### Component 1 - EPR

- Workshops for the representatives of key governmental agencies, including Ministry of Environment, Ministry of Economy, Ministry of Finance, State Revenue Committee, and ArmStat. Workshops should aim to build capacity for and raise knowledge on EPR legislation development, implementation, and monitoring.
- Workshops for key governmental stakeholders on EPR related data reporting and management systems
- Workshops for the business community to raise awareness and build knowledge on key aspects of EPR, specifically responsibilities and obligations of Producer Responsibility Organizations (PRO), procedures of establishing PROs, strategies of meeting targets, among other topics.
- Roundtable discussions that will bring together the government and business community aimed to build trust and understanding of the most efficient model for EPR implementation in the country.

### Component 2 - Sevan

- Conduct capacity building activities among Sevan municipality staff aimed at:**
  - Development of technical capacity for planning and managing or operating of MSW sorted collection system in Sevan town
- Conduct awareness raising for both resident and municipality staff to better understand the:**
  - value chain and main market actors in the MSW recycling sector
  - roles and responsibilities of various stakeholders along the MSW recycling value chain
  - economic challenges and benefits of MSW sorted collection
  - social and environmental challenges and benefits of MSW sorted collection.
- Acknowledge gender dynamics of waste management and ensure advancement of waste policies and practices with greater gender awareness.**
  - Sevan municipality, decision makers and all other stakeholders (experts, CSOs, media, etc) shall acknowledge gender dynamics of waste management.
  - Gender dynamics of waste definition and disposal behavior both on household and community levels, and gendered definition of “waste” and resource” in particular shall be reflected in community consultations for setting priorities regarding waste management. This is also the precondition for ensuring sustainability of newly introduced waste source separation system.
- Ensure that community consultations and decision-making procedures strictly adhere to the principles of inclusion and equal gender participation.**
  - Equal participation of women, persons with disabilities, youth, elderly, lower-income groups and other members of the community who are traditionally being left from waste sector decision making shall be prioritized by the municipality and other relevant stakeholders (decision makers, experts, CSOs).

- Women’s involvement in community waste management processes in all stages shall be ensured, especially in view of the fact women in Sevan town are more prone to think that source separation is an important issue for the community compared to men.
- Ensure that information presented to the community about source practices takes into account gender dynamics of disposal behavior, both on household and community levels.**
- Information and awareness-raising activities shall aim to boost sorting behavior among men, including men’s involvement in waste handling in the household, so that burden for sorting is not left primarily on women, once source separation system is formality introduced in the community.
  - Campaigns and awareness-raising activities shall aim to address and revisit patterns of littering behaviors both among men and women. FGD participants particularly pointed out the need to change such patterns of male littering behavior as throwing away cigarettes or cigarette packaging, plastic bottles, sunflower peels. As for women, FGDs pointed on inappropriate binning (placing garbage not into the bin, but leaving in the area next to it).
- Promote waste sorting and recycling practices with the use of gender-sensitive language and inclusive messaging.**
- Waste education (both formal and informal) and awareness-raising shall be conducted with gender awareness and avoid perpetuating discriminatory attitudes and stereotypical roles and responsibilities that are prescribed to women and men both in the household and in the community.
  - Waste education shall revisit stereotypical attitudes and perceptions through which handling and sorting waste on the household level is presented as a part of “women’s household responsibilities”. Waste education shall promote equal involvement of all family members in such activities and developing sustainable waste management practices.
- Ensure accessibility and quality of community waste infrastructure and services.**
- Waste services and infrastructure shall be properly accommodated for persons with disabilities.
  - Decent job, safeguards, safe, healthy and sanitary conditions shall be ensured for all workers of waste sector, particularly, for truck drives and waste collectors.
- Based on data and analysis presented in the Baseline report, further examine and address causes of dissatisfaction of different groups with waste collection and disposal in Sevan town. Ensure that concerns of each group - women, younger population, persons living in private houses or remote areas, businesses, persons with disabilities - are properly addressed by upcoming waste sector reforms.**
- Ensure that waste sector reforms address all factors, including societal attitudes, discriminatory approaches that prevail in male dominated working culture in the sector, lack of proper working conditions and safeguards, that limit women’s involvement in the municipal waste management system, including in decision-making capacities.**

## Appendix A – Key Characteristics of Study Population

Overall, 67% of respondents were female and 33% were male. As for the age groups, 24% were aged from 15 to 29, 36% from 30 to 44 and the rest were older than 45. In terms of education groups, 34% had basic or secondary education, 25% had vocational and 42% hold high or postgraduate education degrees. Finally, 37% and 15% were wage-earners in public and private sectors, respectively. Unemployed comprised 11% of survey population followed by students (10%), housekeepers (9%) and pensioners (8%) (Table 6).

**Table 6. Key Characteristics of Respondents Involved in the Survey (n=396)**

Key Characteristics	N	%
<b>Gender</b>		
Male	132	33%
Female	264	67%
<b>Age</b>		
From 15 to 29	97	24%
From 30 to 44	143	36%
From 45 to 59	86	22%
60 and older	70	18%
<b>Education</b>		
Basic	20	5%
Secondary	112	28%
Vocational	100	25%
Higher	160	41%
Postgraduate	2	1%
<b>Occupation</b>		
Wage-earner in public sector	145	37%
Wage-earner in private sector	58	15%
Unemployed	43	11%
Student	39	10%
Housekeeper	34	9%
Pensioner	33	8%
Entrepreneur, self-employed	23	6%



Other	16	4%
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Survey also collected information about the households the respondents were representing. On average, each HH consisted of 4.38 members (median value 4.00, standard deviation = 1.755). Majority of the HHs (72%) had from 3 to 6 family members. In contrast, 17% had 1 or 2 family members and only 11% had seven and more family members. In terms of economic situation of the families, 24% of the respondents reported that their income is not sufficient for food or is sufficient for food but not for clothes. Thirty nine percent reported that their income is sufficient for food and clothes but not for expensive items such as a refrigerator or a washing machine. Finally, 37% of the families can afford valuable items or can buy anything they need. As for the housing type, vast majority of the respondents (71%) live in apartments, 27% lives in houses and 2% - share rooms with other families (Table 2).

**Table 2. Key Characteristics of Households (n=396)**

Key Characteristics	N	%
<b>Number of HH members</b>		
From 1 to 2	66	17%
From 3 to 4	139	35%
From 5 to 6	146	37%
7 and more	45	11%
<b>Income of HHs</b>		
Income is not sufficient for food	27	7%
Income is sufficient solely for food, not for clothes	62	17%
Income is sufficient for food and clothes but is not enough for expensive items such as a refrigerator or a washing machine	141	39%
We can afford to buy some valuable items such as a refrigerator or a washing machine	61	17%
We can afford to buy anything we need	73	20%
<b>Housing type</b>		
Apartment	282	71%
House	108	27%
Shared room	6	2%

