

Rethinking waste

Baseline Study of Solid Waste Management in South-west and Pelagonija Regions

SALAR International
A part of the Swedish Association of Local Authorities and Regions

Authors:

Emil Angelov, Project Team Leader

Bojana Stanojevska Pecurovska, Local Waste Management Expert

Editorial Team:

Helena Ohlsson, Project Manager

Mohammed Al Kamil, Deputy Project Manager

Thomas Nylund, International Waste Management Expert

Design of the publication:

Stanislava Sharovic Pavkovic, Art Director

This is a short version of the Baseline Study of Solid Waste Management in South-west and Pelagonija Regions carried out in late 2022 during the Inception phase of the Sustainable Municipal Waste Management Services project.

SALAR International used reasonable efforts to ensure that the data, analysis, opinion, and other information used in the report are correct. Although gathered from sources believed to be reliable, SALAR International acknowledges that the accuracy of data or information used cannot be guaranteed. The completeness and accuracy of all the data and information used to produce the report are dependent upon the sources of such data and information, which are outside of SALAR International's control.

SALAR International would like to thank all the institutions and individuals that participated in the study for their unreserved support and contribution. © SALAR International, 2023. All rights reserved.

Rethinking waste

Baseline Study of Solid Waste Management in South-west and Pelagonija Regions

FEBRUARY 2023

Intro

Increasing economic development and ever-evolving consumption patterns increase waste generation and complicate the composition of waste. This is a worldwide phenomenon and North Macedonia is no exception. The waste management situation in Macedonia can be characterised as sub-standard, insufficient and ineffective resulting in negative effects on the environment and the public health[1]. Steps have been taken to remedy the situation with the development of Regional waste management system and corresponding plans (RWMP) for the planning regions in 2016. Even the less ambitious national targets call for a drastic reduction in the total amount of municipal waste going to landfill and an increase in the proportions prepared for re-use or recycled.

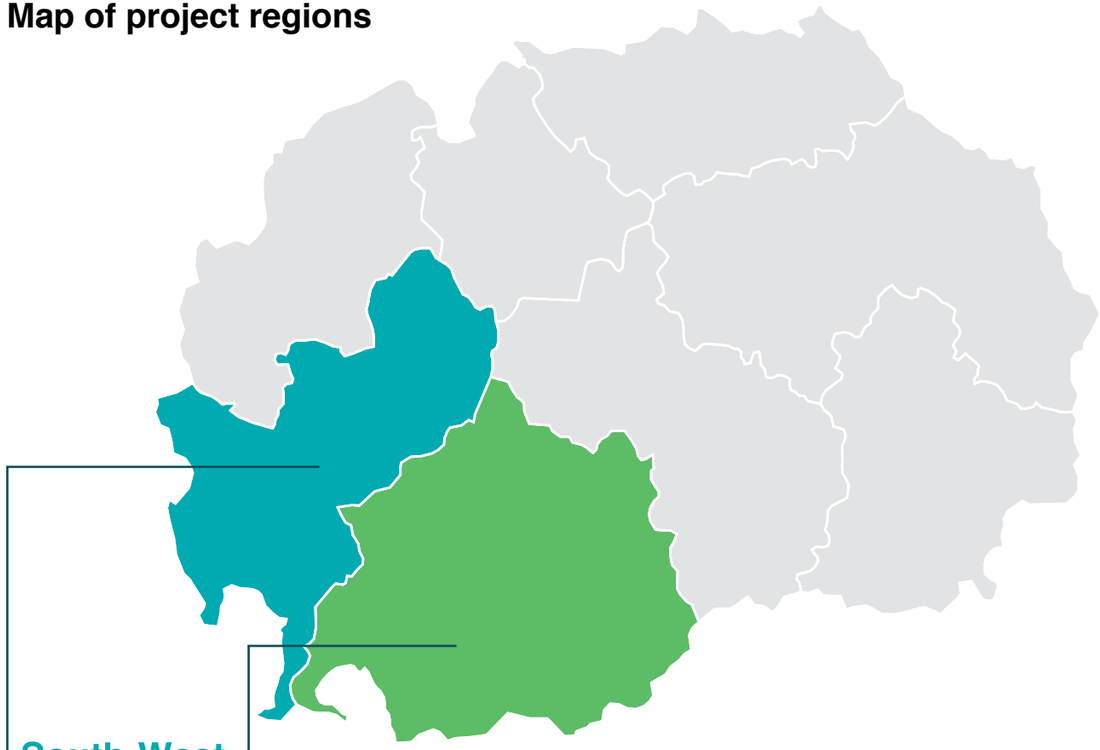
This baseline study aims at providing a more nuanced analysis of the identified institutional weaknesses in implementation of waste management policies in the country. It also presents a snapshot of the overall situation with municipal waste management services and public perception of waste issues in the two project regions – Pelagonija and South-west.

Methodology

- Document review
- Public opinion survey
- Municipal administration/ public utility survey
- Interviews

[1] Waste management strategy of the Republic of Macedonia (2008-2020) - https://www.moepp.gov.mk/wp-content/uploads/2014/12/Waste-Management-Strategy-of-the-RM-2008-2020.pdf

Map of project regions



South-West Region

Population: 177,398
Municipalities: 9
Urban: 52.2%
Rural: 47.8%

Pelagonija

Population: 210,431
Municipalities: 9
Urban: 69.9%
Rural: 30.1%

Source: 2021 Census

Main takeaways from the study



99.7%

OF COLLECTED WASTE ENDS UP ON LANDFILLS



82%

OF THE POPULATION IS PROVIDED WITH WASTE COLLECTION SERVICES WITH SIGNIFICANTLY LOWER COVERAGE IN RURAL AREAS



WASTE SELECTION POINTS AVAILABLE FOR

32%

OF THE POPULATION IN THE REGIONS. THAT NUMBER IS DOWN TO 16.5% IN RURAL AREAS

ACCESS TO WASTE COLLECTION SERVICES IN RURAL AREAS HAVE

62.4%

OF INHABITANTS



DOWN FROM

94.5%

IN URBAN CENTRES



SATISFACTION WITH WASTE COLLECTION SERVICES IN BOTH REGIONS IS REASONABLY HIGH AT

54%

(COMPARED TO OTHER PUBLIC SERVICES)



WASTE MANAGEMENT IS THE THIRD PRIORITY ISSUE IN THE REGIONS AFTER BAD LOCAL ROADS AND STRAY DOGS



ONLY **7%**

OF RESPONDENTS FROM MUNICIPAL ADMINISTRATION AND UTILITIES STATED THAT THEY USE GENDER DISAGGREGATED DATA FOR WASTE MANAGEMENT PLANNING



63%

AND

43%

OF BULKY WASTE IS IMPROPERLY DISPOSED OF IN SOUTH-WEST AND PELAGONIJA REGIONS, RESPECTIVELY



87%

AND

77%

OF CONSTRUCTION/DEMOLITION IS IMPROPERLY DISPOSED OF IN SOUTH-WEST AND PELAGONIJA REGIONS, RESPECTIVELY

Municipal waste management practices

Waste collection services in Pelagonija and South-west regions are provided by the public utility companies. Services are provided to 82% of the population and waste collection equipment and vehicles barely comply with the technical requirements and the needs of the population. The situation is worse in the rural areas. There is a noticeable discrepancy between the estimated generated waste in the regions and the amount of collected waste reported by the municipalities. According to the data, Pelagonija manages to collect around 80% of the generated waste while that number for South-west was around 50% for 2017 and 2018 and dropped to less than 30% in the following years.

Main challenges

- There is no formal collection systems for construction and demolition waste in Pelagonija and South-west region
- The established waste collection practices and the performance of the utilities in both regions result in large number of dumpsites. The RWMPs from 2016 identified 109 dumpsites in Pelagonija region and another 85 in the South-west region
- Average age of waste collection vehicles is over 25 years. Break downs and frequent maintenance create issues with waste collection schedules
- Waste collection fee (per household) varies significantly among the municipalities between 50 – 250 MKD (0.8 – 4 EUR). The reported fee collection rate for households also varies between 60% (Plasnica) and 82% (Bitola).

Regional waste management planning

RWMPs are policy documents that provide a strategic framework for the integrated management of the solid waste generated in each region. By the end of 2016, all planning regions have received their RWMP. A 2020 analysis for the European Bank for Reconstruction and Development (EBRD) recommended merging South-west with Pelagonija, and Southeast with Vardar region to achive the needed economy of scale.

As part of the RWMS, municipalities retain the overall responsibility for waste management planning and implementation and oversight of public utility companies, which remain the main providers of waste management services. For the management of the regional landfills, inter-municipal waste management utilities will be established by the inter-municipal waste management boards. This creates a clear distinction between planning/contracting and operations which should result in greater transparency and higher cost efficiency.

The RWMPs recognise the key challenges of the regional waste management system – overstaffing and lack of qualification in public utilities, a deficit in planning and monitoring, low fee collection rates, insufficient performance and cost monitoring, inefficient collection and poorly controlled disposal and limited coverage of rural/remote areas – and propose several scenarios for improvements.

Conclusions



Decentralisation

Decentralization in North Macedonia has been institutional, not functional. Large number of public institutions have been transferred to local authorities, but the central government has maintained a significant control over those institutions. The system impedes local authorities to adapt and rationalize the organizational structure and proper functioning of some of the decentralised institutions. As a result, implementation of the policies results in unexercised competences, dissatisfaction of citizens with the services delivered and significant debt (outstanding payables), which in many instances led to blocked accounts. This affects the behaviour of both central and local governments and induces inefficiencies.



Data management

Waste management data collection and analysis is sporadic, inconsistent and rarely used for decision-making purposes. Most of the waste management data are estimates that are incoherent and not validated. Only about one third of the municipalities report annual data on transported and disposed municipal solid waste to the Ministry of Environment and Physical Planning (MoEPP), despite legal obligations. Reliable data is needed to support the organisation of waste collection, for infrastructure capacity planning and to measure performance against targets. Moreover, lack of reliable data impedes municipal capacities to do proper economic calculations and waste management planning.



Regional waste management system

The introduction of the regional waste management system left the municipalities without a real sense of ownership and with very little understanding of the overall purpose of the RWMPs and the needed changes in practices and attitudes. This creates distrust and scepticism of the plans' implementation which is at the bottom of the list of municipal priorities. Environment has proven to be a low priority for most, and many municipalities do not have environmental departments and the environmental competences are often overlooked. Municipal understanding of waste management is mostly reactionist in nature – it involves collection and landfilling. The complex nature of waste management that includes following population and waste generation trends, making forecasts, setting targets and achieving them, communicating with the public, and raising public awareness seem to be something that is not fully grasped at the local level.



Delivering universal service

In a similar context, the notion of universal service is largely overlooked by the utility companies and the administration in general (population coverage is 82% on average). Providing baseline communal services to every resident on their territory is readily traded for lower operational costs and simpler operations. Those left behind are the most vulnerable segments of the population that also suffer exclusion on other fronts.

The number of utility staff in some municipalities seems disproportionally large compared to the size of the territory and population they cover. This makes the utilities both overstaffed and underqualified for provision of quality communal services. This can be a serious obstacle in trying to introduce any organisational changes aimed at improving efficiency and providing effective service delivery.



Financing of waste management

There is high disparity in development and financial stability of different municipalities in the regions. With several exceptions, most of them are badly indebted and can barely provide the required services. The combination of declining population, weak fee collection and general lack of capacities renders them powerless in improving the situation.

The very low waste collection fee varies between 50 – 250 MKD (0.8 – 4 EUR) and the reported fee collection rate for households also varies between 60% and 82%. It has not been adjusted for decades and combination of the two puts a heavy burden on the financial standing of the utility companies. The setting of the fees for waste management is not market-based and the issue of adjusting them has been highly politicized in the past and is considered an unpopular move.



Gender and human rights considerations

Being closest to local communities, municipalities have the responsibility and the power to apply the principle of gender equality and human rights-based approach in designing and delivering public services. The study found that, there is lack of understanding of the importance of gender mainstreaming and chronic deficiency of gender disaggregated data. Less than 7% of municipal staff stated that they use gender data for waste management planning.

There is lower coverage with waste collection in rural areas and among some ethnic communities, According to the study, access to waste collection services in rural areas is 62.4%, down from 94.5% in urban centres. Satisfaction with waste collection services in rural areas is also lower (45%) compared to those in the towns (59%). Municipalities are not merely service providers, but also duty bearers, and they often need to pay special attention, depending on the policy area, to the rights of particular groups of people.

Recommendations

The purpose of this study was to provide a snapshot of the waste management situation in the country and develop performance indicators that would help measure the success of the project. Based on the findings, the improved service delivery should come through more effective planning, systemic process of identification and dissemination of best practices and better coordination between levels of government to allow for effective localisation of waste management policies.

- Communicating what works best with other stakeholders is important – best practices should be identified and systematically recorded and collected in a form of a practitioner's guide for municipal waste management. Association of Units of Local Self-Government (ZELS) networks and capacities in training delivery should be used for in communicating and disseminating the best practices to municipalities in the country.

- Effective coordination structure for implementation of waste management activities must exist between MoEPP, Regional development centres and municipalities to achieve effective coordination, monitoring and enforcement of waste management in the country. Clear division of roles and functional processes must be identified and assigned to allow for translating national development policies into local operational plans and their effective execution.

- Efforts must be made to create simple but functional waste data management system that will help municipalities and utility companies to better follow trends and develop practices that are preventive rather than reactive in nature. Existing data collection points, (lack of) interoperability of different information systems and analytical practices should be identified and proper solutions to bridge gaps should be provided.

- To allow for better coordination of gender-related activities, include the gender aspect in delivering routine waste management services and secure ownership of wider pool of stakeholders, the Guide on gender mainstreaming of waste services prepared by Network of Associations of Local Authorities of South-East Europe (NALAS) should be consulted.

- All these activities should be delivered through participatory approaches, and help municipalities offer greater opportunities for inhabitants to participate and express their opinions and preferences on waste-related issues. Participation, if handled well, can also lead to improved trust, which in turn is a positive factor for local economic development and better service delivery. Continuous awareness raising activities on waste management should also be considered and introduced whenever waste-related activities are planned.

SALAR International

The Sida-funded project “Sustainable Waste Management Services” is implemented by SALAR International in cooperaiton with the Ministry of Environment and Physical Planning, Ministry of Local Self-Government and the Association of the Units of Local Self-Government of the Republic of North Macedonia.