



**MAPPING THE POTENTIAL
OF INFORMAL WASTE PICKERS
TO BECOME SOCIAL ENTREPRENEURS
AND TO DRIVE UP
THE LOCAL SOCIAL ECONOMY**

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Policy study

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December 2017



This study is supported by the GIZ Regional Project on Social Rights for Vulnerable Groups commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ).

The analysis, results and recommendations in this study represent the opinion of the author(s) and are not necessarily representative of the position of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

Acknowledgement

This policy study would not have been possible without the immense support from the Association for research, communications and development PUBLIC from Skopje. They unconditionally shared their knowledge, resources, contacts and time during the whole duration of this work. I particularly owe deep gratitude to Klimentina Iljevski and Aleksandra Iloska for being open, constructive and supportive allies.

CONTENTS

| | |
|--|----|
| EXECUTIVE SUMMARY..... | 6 |
| 1. INTRODUCTION | 8 |
| 1.1 Why is this mapping necessary?..... | 8 |
| 1.2 Why organisation and formalisation of informal waste pickers?..... | 9 |
| 1.3 The pathway of the communal waste in the informal waste picking sector in the country | 10 |
| 1.4 Previous experiences with formalising the informal waste pickers in Macedonia and reasons for failure | 10 |
| 1.5 Lessons to be learned from the global experiences with formalising informal waste pickers | 11 |
| 2. Methodological approach to this analysis | 14 |
| 2.1 Legal framework – locating informal waste pickers | 14 |
| 2.2 Fieldwork findings | 19 |
| 3. Possible scenarios for formalisation of informal pickers in the waste management system..... | 36 |
| Scenario 1: Self-organisation of the informal pickers in association, cooperative, social enterprise or another legal form of representation | 36 |
| Scenario 2: Collective waste packaging managers to create SE with focus on informal pickers | 37 |
| Scenario 3: Organised “junkyards” and recycling companies to create social business focused on employment of informal pickers..... | 37 |
| Scenario 4: Civil-society organisations to create SEs with focus on inclusion of informal pickers in the waste management system | 38 |
| Scenario 5: Employment in the public communal enterprises as waste collectors based on creation of new operational unit | 39 |
| 4. Recommendations: How to support the more throughout operation of informal pickers in the waste management system?..... | 41 |
| Helpful strategies | 41 |
| Conclusion and way forward | 41 |
| References | 44 |
| Appendix 1..... | 45 |

Waste collection by the informal sector in the country is recognised within the policy documents as an important factor in waste management. Reports argue that between 70-90 percent of the recycled plastic, cardboard paper, and iron is collected by informal pickers. Yet, its value is underestimated and it remains at the fringes, with no formal recognition like other sectors. The strong entrepreneurial spirit among the informal waste pickers and their resilience to sustain economically active should motivate us to seek solutions. Therefore, diversification of their economic activity (and not only in low-paid jobs) is the needed response to the poverty and social marginalisation experienced by this group.

FINDINGS FROM THIS STUDY

Informal pickers of recyclable waste are in general persons with lack of educational qualifications, skills, and previous working experience. They usually come from large families with more than two children and although it is generally perceived that all of them are beneficiaries of state-supported social assistance, this is not always the case. They get engaged in informal waste picking because of poverty, as individuals or as a family activity, including their minor children who often are excluded from the educational process. This only enhances the perpetual cycle of poverty, at individual and family level. Their only satisfaction from being in this job is the possibility to bring food to the table each day for the family. For them, this activity is so routinized that they seem to never have been thinking of getting out of the job or finding a way to improve the work conditions or productivity. Many of them are manipulated by middlemen who seem to earn well on the back of these hidden workers. Their dream is to find another job and they see themselves as waste pickers only with a well-paid salary and social and health benefits. Majority of them fear of more structural organisation of the work, lack creative thinking on new possibilities offered by the job and only a few are ready to open up a business in waste recycling or see themselves as leaders who can organise the people around them. This is not a male profession. Women on equal basis participate in this activity but given the contextual background, they are more fearful of being an independent worker or a leader in this business.

The current legal framework recognises a category of “individual waste picker” which seems to be fitted for another category of citizens with intentions to depot their communal waste. It is vague and incomprehensive to the role and activities performed by informal pickers for whom this activity is a basic existential opportunity. It also seems to provide “alibi” for the existence of the middlemen and the obligations of the registered junkyard shops to determine the origin of the received waste. Given the increased responsibilities delegated to the municipalities with the decentralisation process, some of the entry points for legalising the activities of the informal pickers need to be advocated with the Municipal Councils and the mayors.

The consulted experts are conclusive that given the scale of work of the informal waste pickers and the deficiencies in the public waste collection sector, it is a positive step to approach to formalisation and organisation of the informal waste pickers. It is necessary to think of new modes to address the issue in a legal way and to think of increasing the competition within the waste collection sector. The experiences of the past have taught us that it is not enough to give these people an opportunity to earn more, but it is necessary to work with them on their “culture” of informal waste picking. They accentuate that this group needs targeted focus on work ethics, fulfilling work obligations, loyalty, and conduct based on agreed principles and accountability. In their views, besides (regardless of) the work for a formalisation of this group, it is necessary to think of technical support in organising and managing their operating system as well as to think of professional re-orientation that would

shift many of these individuals into other job profile. Above all, it is necessary to build a culture of solidarity and social recognition of the valuable job informal pickers do in the society.

Small and larger operators in the system of managing waste storing, treatment and recycling agree that their operation mainly sustains based on the work done by the informal waste collectors. They confirm some of the established “truths” of this problem in regards to the culture of informal pickers, the difficulties in sustaining them in conventional, regular employment and the need for more structural work with this group. Yet, they attain that a solution is needed and that the institutions should have a more active role in discussing and debating of potential alternatives.

RECOMMENDATIONS:

How to support the more throughout operation of informal pickers in the waste management system?

- new financing schemes, subsidies (such as “grace period” for social benefits for a period of one year with gradual decreasing of contribution from the state, if the picker remains in employment;
- re-designing of active labour market measures, and providing opportunities and access for this target group to engage in education, training, internship, on-site training, in particular, to support the inclusion of women in the labour market;
- financial incentives for new social enterprises (SEs) or social businesses that employ informal pickers;
- introduction of a new tax on waste for households and companies up to two percent of the waste communal tax, with tax exemptions for households with lower social status;
- increasing the competition in the waste collection process and increasing the role of private operators in diverse segments of the waste collection (dividing segments of waste collection, such as bio-degradable and non-degradable communal waste);
- increased efforts in reorganising the operation of the public waste collection institution;
- redesigning the waste collection fee to promote fair share among stakeholders included in the communal waste collection;
- encouraging the primary selection of waste and door-to-door communication between informal pickers or their representative entity and, households and companies;
- developing mentoring and professional (re)orientation schemes for absorption in other working sectors;
- sustaining employment for families so that children can return to school and continue with education;
- a holistic approach to addressing the needs of pickers: housing and education, children, in particular, will need to have access to the resources they need to enable them to stay away from waste picking;
- supporting families that need assistance in children care, in particular to those lacking access to kindergarten;
- piloting one selected scenario, preferably supporting a civil society organisation (CSO) to create SEs with focus on inclusion of informal pickers in the waste management system in a smaller municipality with a public waste enterprise and mapped CSO whose mission is to work with marginalised groups.

1. INTRODUCTION

1.1 WHY IS THIS MAPPING NECESSARY?

Unemployment is a persistent problem in the Republic of Macedonia since its independence. Unemployment of marginalised groups, people with lower level of education and those outside of the labour market for more than four years are shedding light of the rigidity of the labour sector in the country, the inefficiency of the state measures to fight unemployment and the need for innovation in the sector that could trigger new opportunities for employment. According to the Labour Force Survey¹ 2016, 56.5 percent of the population over 15 years of age in the country was active and participating in the labour market, while 43.5 percent were outside the active population. From the gender perspective, 56.2 percent of the women in working age are inactive, while 10 percent are registered as unemployed. The majority of the inactive population or 44.7 percent are persons with primary and lower secondary education. The unemployment rate among the Roma population is higher than the non-Roma population and Roma women are particularly vulnerable, with almost double the rate of that for non-Roma women. In 2015, 21.5 percent of the total population in Macedonia was at-risk-of-poverty, while the inequality of income distribution (Gini coefficient) in the same year was 33.7 percent. The highest risk of poverty is identified among the youth population up to an age of 17, while the lowest risk was identified among the population aged 65 and over. From a gender perspective, unemployed men are with the highest risk of poverty, while retired women with the least. In the country, 30.4 percent of the total population is severely materially deprived. This means that 30.4 percent of the population is lacking at least 4 out of 9 items in the economic strain and durables dimension. In 2015, 41.6 percent of the population in Macedonia lived at risk of social exclusion. Both men and women were equally exposed, or 41.3 and 41.8 percent accordingly.

The informal or grey economy in Macedonia is larger if compared to EU member states. Studies provide estimates at 34-35 percent of GDP.^{2,3} The status of the labour market is one of the leading factors that encourage that rise of the informal economy and the undeclared work. According to the 2016 Labour force survey, the total number of persons in informal employment was 133 777 persons, which represents 18.49 percent of the total employment in the country. From a gender perspective, men are more prone to informal employment than women, as they constitute 67.33 percent of the total informal unemployment. Informality is more prevalent among the Roma population (64 percent) compared to non-Roma population (25 percent)⁴.

The rigidities and disparities of the labour market in the country need to be tackled by innovative forms of employment opportunities for marginalised people. Workers engaged in the informal waste sector are one of the marginalised groups that remain hidden in the policies and measures targeting informal employment and vulnerability. The strong entrepreneurial spirit among the informal pickers and their resilience to sustain economically active should motivate us to seek solutions. Therefore, diversification of their economic activity (and not only in low-paid jobs) is the needed response to the poverty and social marginalisation experienced by this group.

Waste collection in the informal sector in the country is recognised within the policy documents as an important factor in waste management. Reports argue that between 70-90 percent of the recycled plastic, cardboard paper, and iron is collected by informal pickers. Yet, its value is underestimated and it remains at the fringes, with no formal recognition like other sectors. In the same time, the largest part of municipal waste in the Republic of Macedonia in 2016 was generated by households in areas covered by the system of municipal waste management (84 percent of the total collected).

¹ The State Statistical Office of the Republic of Macedonia (2017) Labour force survey 2016, Skopje: The State Statistical Office.

² Schneider, F., Buehn, A. and Montenegro, C. (2010) Shadow Economies All over the World. New Estimates for 162 Countries from 1999 to 2007. Policy Research Working Paper 5356. Washington D.C.: World Bank Group.

³ Williams, C.C., Baric, M. and Renooy, P. (2013) Tackling Undeclared Work in Macedonia. Dublin: Eurofound.

⁴ Kusnikova, N. and Mirchevski, V. (2016) "Legal framework for social entrepreneurship and related challenges of the SEs in Macedonia", in Ilijevski, K., Iloska, A., Kusnikova, N. and Mirchevski, V. (auth) Challenges and Opportunities for Employment of Marginalized Groups by Social Enterprises, Skopje: PUBLIC, pp. 13.

The total amount of created communal waste in Macedonia in 2016 was 796, 585 tonnes or 376 kg per citizen. In total 99.4% of the municipal waste was disposed to landfills⁵. As the Waste Management Strategy of the Republic of Macedonia (2008-2020) annotates: “In most of the EU countries and certainly the new accession countries, waste generation per capita continues to rise, despite the efforts for waste minimisation at the source and to decouple the growth of the waste quantities and economic growth”⁶. In Macedonia, as in most developing countries, the majority of the waste picking happens informally, more people work in the informal waste sector than the formal and pro-forma costs of informal waste picking and waste collection are lower than formal service costs. Formalising and legalising informal waste picking depends on social and governance factors⁷. The goals of the legal framework working in direction of protection of the environment could be futile if educational campaigns on households’ recycling and reuse of products are not coupled with ideas on the inclusion of informal pickers in the waste management system and the social economy.

1.2 WHY ORGANISATION AND FORMALISATION OF INFORMAL WASTE PICKERS?

The basic rationale for organisation and formalisation of informal pickers lies in the prospect of greater income generated through the collection activities at the primary waste selection and through development schemes that allow these workers to be included in later stages of sorting, processing, recycling and reusing of these materials. Being formalised means better working conditions and access to employment benefits such as social and health insurance. Working individually, informal pickers do not have access to protective equipment or training, nor do they observe basic principles of hygiene and occupational health and correct waste handling. They lack the skills, knowledge, and capital to scale up their productivity⁸. Being included in the waste management system they increase the amount of recycling and waste collection, as primary benefits of the environment, improve the quality of materials and the efficiency of municipal waste collection entity and improve the productivity of waste management system, in general.

Formalisation into organisations and business based on their social dimension and solidarity are beneficial for low-skilled workers who experience difficulties in participating in the traditional labour market. And although it is thought that these organisations and business lack efficiency standards as the conventional companies, in the case of formalising informal picker, this is the case since these workers are highly skilled to operate in this field.

If activities of informal pickers are ceased or restricted, the impact towards the socio-economic position of these workers would be detrimental in addition to the environmental impact. They would be propelled to more informality, making them more vulnerable to labour exploitation and social exclusion. There would be greater pressure for children to remain hidden and excluded from education and even engaged in other criminalised conducts.

If their activities are recognised and integrated into the formal waste management system, then the prospects of identifying, staying in the recycling business are greater, as is their re-orientation to other job profiles. For this to happen, the country and the municipalities need to transform the internal functioning of their waste management departments, institutions and overall framework and to look to brokering actors (civil-society organisations-CSOs, social enterprises, cooperatives, etc.) that are able to communicate with the entities representing informal pickers, and co-develop proposals that meet the joint needs: for formalisation and control inherent to public services, and for solidarity, flexibility, and inclusion important for the informal pickers.

⁵ The State Statistical Office of the Republic of Macedonia (2017) Sustainable development, 2017, Skopje: The State Statistical Office.

⁶ Government of the Republic of Macedonia (2008) Waste Management Strategy of the Republic of Macedonia (2008 - 2020), pp.39.

⁷ Scheinberg, A., Nesić, J., Savain, R., Luppi, P., Sinnott, P., Petean, F. and Pop, F. (2016) “From collision to collaboration – Integrating informal recyclers and re-use operators in Europe: A review”, Waste Management & Research, Vol. 34(9): 820–839.

⁸ Fergutz, O., Dias, S. and Mitlin, D. (2011) “Developing urban waste management in Brazil with waste picker organizations”, Environment & Urbanization, Vol 23(2): 597–608.

1.3 THE PATHWAY OF THE COMMUNAL WASTE IN THE INFORMAL WASTE PICKING SECTOR IN THE COUNTRY

The informal waste picking sector in the country is composed of individual pickers or waste pickers and small unregistered businesses (“junkyard shops”) that buy recyclable material collected by the individual pickers. Individual pickers are seen as in conflict with public communal enterprises or other private entity or natural person with an obligation to provide the waste collection service on the municipal level. Dispossessing any material from the public or private littering infrastructure attained by the authorised entities is illegal. These small businesses and waste pickers sell the recyclables to medium-scale or larger junkyard shops. They separate, classify, and sell recyclable material in larger lots. At a later stage, larger companies collaborate with collective or individual packaging waste managers in regards to the recycling process since the latter are obliged to recycle the packaging waste used and placed on the market by companies operating in Macedonia (their clients). All actors engaged in this process should be able to determine the origin of the collected waste, yet, it is widely known by both the institutions and the public that majority of that waste is collected through the operation of the informal pickers.

1.4 PREVIOUS EXPERIENCES WITH FORMALISING THE INFORMAL WASTE PICKERS IN MACEDONIA AND REASONS FOR FAILURE

There were several attempts by civil society organisations from Macedonia in partnership with external donors, the local authorities and public institutions to formalise waste pickers. Despite the coherent efforts of the relevant stakeholder, this process is in status quo. Thus, it is important to dwell into what hindered the long-term effects of these initiatives, to analyse the challenges streaming from within and outside the system and what necessary aspect should be met in future scenarios of formalisation to avoid failure and further damage for the stakeholders.

Among the largest projects in this sphere was the USAID “Plastic Recycling Project” (PRP) implemented through 2005-2011 with the aim to support the establishment and growth of the plastic recycling industry in Macedonia. One of the phases of the project was implemented through a partnership with the Ministry of Labour and Social Policy, Employment Service Agency, City of Skopje, Private Communal Enterprise “Komunalna Higijena”, Pakomak (the first authorised company for packaging and packaging waste management) and civil-society organisations from the five targeted cities: Skopje, Tetovo, Kumanovo, Strumica and Bitola. MDC-Ti.Net from Skopje partnered in the project gaining an important know-how in this sphere. The key outcomes of the project were the established infrastructure for primary selection of plastic PET waste by promoting public-private partnerships; established Association of plastic collectors and pickers, PETRA; provided technical support to the Ministry of Environment and Physical Planning in drafting and adopting the Law on packaging and packaging waste; subsidised collection of PET waste and increased processing capacity of PET waste. Through the project activities, the collection of PET plastic waste increased from 350 tons in 2005 to 6000 tons in 2009 and indirectly engaged 3000 to 5000 individuals in the information, collection, and processing of plastic⁹.

Despite the intention to stimulate self-employment initiatives (the project distributed grants/ loans to assist the informal pickers and enable long-term employment) within the waste management system, from today's perspective it can be contended that the project did not produce long-term sustainable results. MDC-Ti.Net intended to develop by-laws that would legalise the activity of the informal pickers and to enhance the capacities of informal pickers and instructions to use investment funds to target the needs of the informal sector. But this idea remained unfinished. One of the consulted experts, who was the leader of that project, indicated that there was a strong political will during that period to resolve

this issue but the economic crises decreased the project budget and the foreseen activities were not continued. The Ministry of Labour and Social Policy tolerated the practice of informal pickers to gain income higher than the legally prescribed limit for one year, but this practice was not institutionalised, and it discontinued after one year.

There has been no impact evaluation of the project, but the consulted experts pointed to few important barriers. On one side, as some of the experts reported, was the inability of the public communal enterprises to take over the management of the practice enabled through the project. There is lack of human resource within the institution to lead such a process, and moreover to deal with the outflow of workers who leave because the legal provisions in the Law on Social Protection (148/13) obligates them to report additional monthly income that could temporarily suspend their right to social assistance. In their view, the institutions were not willing to assist in mediating between the fear of losing the state-supported social assistance and the insecurity of the current job. On the other side, it was obvious that the institutions were not able to cope with the workforce as such, and were unable to forge respect for the internally agreed rules and obligations. Informal pickers lacked the individual psycho-social support that would avert some of the characteristics of the “culture” of informal waste picking based on freelance, free-mindedness, lack of structure or work ethics, lack of respect of rules and sense of commitment and mechanisms for accountability so that they retain this job. The experts commented that all future endeavours in this sphere need to seriously take into consideration the habits and lifestyle of the informal pickers and accommodate a system that would negotiate between the conventional rule of doing business and a culture of informal waste picking.

Second larger project in this sphere was “Inclusion of informal Roma waste collectors into the formal waste schemes” implemented by MDC-Ti.Net from Skopje through December 2012 and February 2014. The project was funded by the European Instrument for Democracy and Human Rights. This project intended to enable informal waste collectors to become part of the formal waste management on the local level by introducing models developed by the municipalities, private/public utility companies, representatives of employment agencies, Association of Informal Waste Collectors, private recycling companies and civil society. The project was timed to be a good opportunity for local governments to engage in finding a long-term solution and initiate employment of informal pickers, and in particular among the Roma population. It was implemented in the municipalities of Kochani, Strumica and the city of Skopje. Its main outcomes were: a Situation analysis to serve as a baseline for developing strategies and action plans of inclusion of informal waste collectors, and developed and adopted Action Plans on the municipal level for inclusion of informal waste collectors in the formal waste management. The Actions Plans, although adopted by the Municipal Councils and the Council of the city of Skopje, were never implemented in practice.

There were also other isolated projects in this field area. But it remains an impression that all these intentions did not institutionalise human resources, operating practices and mentorship support for the informal pickers. Hence, the goals of developing sustainable inclusion of the informal picking sector in the waste management system were not met. As one expert commented: “If nobody funds the activities, to create a team that will ensure that all goes as planned, then it is easier to say: Well it is not our problem!”. This mentality of “not in my backyard” needs to change in “yes, in my backyard” so that all relevant stakeholders understand their socially responsible role in addressing this issue.

1.5 LESSONS TO BE LEARNED FROM THE GLOBAL EXPERIENCES WITH FORMALISING INFORMAL WASTE PICKERS

Brazil, India, Colombia, Philippines, China are some of the countries that include the informal picking sector in the municipal waste management. Legalisation and integration generally depend on the demand of informal pickers to organise themselves in cooperatives, unions, and/or associations, to register, pay taxes, and operate legally within the framework of the service chain (waste collection and disposal) or the value chain (recycling industries). Informal integration refers to a situation where recycling is a recognised official occupation, and informal pickers have a legal identity, are protected by laws, covered by social protection schemes, and paid for the value of the service they are deliver-

ing to the city and the environment¹⁰. Authors argue that the historical development and nature of the municipal waste management systems, the political orientation of the political parties in power, both locally and nationally, the national policy and legislation related to waste management as well as local governance, the strength and nature of broader social movements and how informal pickers relate to them, the extent and nature of support from government and CSOs, and the political orientation of these external supporters influence how inclusion of informal pickers can be engendered in one context¹¹. Hence replicating experiences in any other context with the expectation to produce the same results is unrealistic. Yet, there are lessons to be learned of what kind of an ecosystem supports and enhances the positive environmental, social and economic impacts of inclusion of informal recycling in the waste management system.

For example, the informal recycling sector in Brazil is self-organised, based on solidarity and the frequent form of formalisation is a co-operative. The legal framework allows municipalities to hire waste pickers co-operatives (WPCs) as private service providers without going through the bidding process and their service is paid by the municipality¹². The Federal Government established a program for inclusion of the informal waste picking sector, with a 4-year budget of around US\$22.6 million. The program aims to organise and create 35 networks of WP co-operatives in 22 states with the purpose of expanding the capacity building, supports the improvement of WP working conditions and empowers WP collective enterprises. They employ door-to-door separate collection under WPC responsibility, teach recycling and request households to segregate recyclables and store them separately from wet waste and at the end, there is a satisfactory service quality agreed by the municipality and WPC¹³. Several aspects of the program contribute towards its effects: the political and social recognition of the work of informal pickers; horizontal decision-making within the cooperatives and inclusion of the target group in the cooperative's management and operation; the utilised door-to-door strategy; inclusion of informal pickers in an environmental education process introduced in the communities, and there is development of supporting infrastructure, such as transfer depots. The engagement of the public is necessary, and during the environmental education process, citizens learn the importance of recycling and source separation and the role of improved recycling for improving the family income of informal pickers. This tends to motivate them to participate in the selective collection¹⁴.

The global practices indicate that political will at local and national/federal level for recognition of the work of informal pickers and the introduction of the legal framework that allows their legal operation within the system of waste management were the first steps in the formalisation of waste pickers. Institutional support, in capital and infrastructure, gave the legal entities of informal pickers the means to organise, manage, and carry out the waste collection. The creation of self-confidence and trust between informal pickers is a precondition for the organisation in legal entities while the social acceptance of informal pickers' activities is an important factor to establishing regular relations with the government and the private sector. Mentoring and specialised technical assistance were provided in the organisation and supervision of the logistics, zoning, and route planning. The decision making related to the organisation and management of the legal entities or any form of legal representation should be made with participation and sharing between informal pickers. Finally, two additional features of the Brazilian system are influencing the positive outcome. Selective waste collection on a local level, in a solidarity frame, is seen as a public service. A public service is guided by the principle of universality, which means it must not limit the service provision to profitable sectors only. It must be an affordable service to the entire population so that it achieves an economy of scale that makes it both efficient and affordable.

¹⁰ Dias, M.S. (2016) "Waste pickers and cities", *Environment and Urbanization*, 28(2): 375-390; Rutkowski, E.J. and Rutkowski, W.E. (2015) "Expanding worldwide urban solid waste recycling: The Brazilian social technology in waste pickers inclusion", *Waste Management & Research*, 33(12): 1084-1093; Scheinberg, A., Nesić, J., Savain, R., Luppi, P., Sinnott, P., Petean, F. and Pop, F. (2016) "From collision to collaboration – Integrating informal recyclers and re-use operators in Europe: A review", *Waste Management & Research*, Vol. 34(9): 820–839.

¹¹ Samson, M. (2015) Forging a New Conceptualization of "The Public" in Waste Management, Wiego, Working Paper No. 32.

¹² Rutkowski, E.J. and Rutkowski, W.E. (2015) "Expanding worldwide urban solid waste recycling: The Brazilian social technology in waste pickers inclusion", *Waste Management & Research*, 33(12): 1085.

¹³ Ibid. 1087.

¹⁴ Ibid.

Even in cases of formalisation in cooperatives or social enterprises, there are common problems associated with such form of organisation. Both have internal hierarchies, although they practice more horizontal management than the traditional companies, there are organisational issues to be mitigated as the work unfolds, usually there is a lack of effective leadership among the waste pickers, disputes over transparency, lack of capital, in terms of infrastructure and space, without which they cannot expand and scale up their productivity¹⁵. Cooperatives and SEs have limited access to loans and credit lines available for other conventional businesses. These financial lines are incompatible with the characteristics of organisations representing the informal pickers which in large are based on social economy and solidarity¹⁶.

These pros and cons need to be taken into consideration when deciding on a refereed scenario for the inclusion of the informal pickers in the waste management system in the country.

¹⁵ Kabadiwalla Connect (2015) "Self-organization in the informal waste sector | Models of Inclusion – Part II".

¹⁶ Fergutz, O., Dias, S. and Mitlin, D. (2011) "Developing urban waste management in Brazil with waste picker organizations", *Environment & Urbanization*, Vol 23(2): 597–608.

2. METHODOLOGICAL APPROACH TO THIS ANALYSIS

This analysis employed three research tools to acquire insight and understanding of the position, role, social value and policy and political recognition of informal pickers in the municipalities of Shtip and Kumanovo and the city of Skopje. It included:

- Analysis of the waste management system (analysis of the legal framework, policy documents on the national and local level and other supporting studies) that could help us to determine the position of informal pickers in the current legal and policy framework, recognition and barriers in performing these activities, as well as the current possibilities for organisation and potentials to by-pass obstacles to legal operation of informal pickers;
- Analysis of perceptions, needs, and attitudes towards the formalisation of informal pickers from the municipalities of Shtip and Kumanovo and the city of Skopje. Using semi-structured questionnaires, interviews were conducted with 30 informal pickers from Kumanovo, 29 informal pickers from Shtip and 40 informal pickers from Skopje. In addition, using semi-structured questionnaires, interviews were conducted with two formal junkyard owners from Kumanovo, three informal junkyard owner from Shtip and one company for employment of persons with disabilities – protected company working in the area of recycling from Skopje¹⁷;
- Analysis of experts' views on how the process of formalisation of informal pickers should be established, lead and developed. Using semi-structured questionnaires, interviews were conducted with five experts with long professional experience in this field in the public, private and the civil sector. In addition, interviews were conducted with representatives of other relevant stakeholders such as: The Ministry of Labour and Social Policy, Ministry of Environment and Physical Planning, the Social department of the City of Skopje, the public communal enterprise “Komunalna higijena” from Skopje, the public communal enterprise “Chistota i zelenilo” from Kumanovo, representatives of the company for package and package waste management “Pakomak”, and the electronic waste management “Nula Otpad” and a representative of the Association of secondary materials and pickers, as part of the Macedonian chamber of commerce¹⁸.

The sample of informal waste pickers was based on snow-balling, so that one person referred to others. The intention of the analysis was never to create representative sample but rather to induce as diverse perspectives and demographics of respondents as possible. The characteristics of the target net sample presented under the chapter on presentation of findings allow a summary of the prevalent ideas, perceptions, and attitudes of the respondents. The sample of experts was intentional and experts were selected based on their professional background in the field, while the sample of junkyards and recycling industries was convenient and based on expressed interest to participate in the research. The participation in the research was voluntary.

The fieldwork was carried out during September – November 2017. The list of involved participants is provided in Appendix 1.

2.1 LEGAL FRAMEWORK – LOCATING INFORMAL WASTE PICKERS

Within the current legal framework, it is necessary to find the answers to the following questions pertaining the status and role of informal recyclers in the formal system of waste management:

- What kind of a service is the waste collection, who is authorized to perform it, and how is it organised?
- What is the position of the informal recyclers and their recognition in the current legal framework, and the barriers to performing these activities?

¹⁷ Two other recycling company from Skopje were contacted and initially agree to participate in the research but did not meet the deadline for interviews.

¹⁸ The public communal enterprise “Isar” from Shtip was contacted by due to the local elections was not able to meet the deadline for the interview.

- What are the current possibilities for organisation and the potentials to by-pass the obstacles in operation?

According to Article 2 from the Law on Communal Services (95/2012), communal services are considered a matter of public interest. They are under the jurisdiction of the municipalities (Article 22, Law on Local-Self Governance, 05/02) and accordingly, the municipality can establish public enterprise or delegate the service to other legal and natural persons, based on an agreement for service providing (Article 22, Law on Local-Self Organisation). According to Article 8 of the Law on Communal Services, the Government of the Republic of Macedonia, the municipalities, the municipalities in the City of Skopje and the City of Skopje are obliged to provide conditions for organised and permanent performance of the communal services and their development, providing: 1) material, technical and other conditions for the construction, maintenance and operation of the facilities as part of the communal infrastructure and ensure technical and technological unification of the systems for permanent and continuous performing of communal services; 2) the necessary quality and scope of the communal services depending on the material capacity of the municipality, the municipalities in the City of Skopje and the City of Skopje, and 3) the control over the legal entities and natural persons providing particular communal services. According to Article 12 of the same Law, in order to better address the communal affairs, the Municipal councils or the Council of the city of Skopje adopt a decision on communal order and measures for its implementation, including collection, transportation, and handling of collected municipal waste. According to Article 13 of the same Law, the communal service provider is obliged to perform the services consistently and with quality, and maintain a functional and proper condition of the facilities, equipment, and devices included in the process.

Of interest to this analysis is the management of communal waste that according to Article 4 from the Law on Waste Management (197/14), encompasses household and commercial waste. Household waste is daily collected, as is the specific dangerous household waste, big proportion waste, etc. Commercial waste is produced by legal or natural persons in conducting their professional activity and is similar in characteristics to the household waste.

Waste management services should be based on the principle of universality implemented through non-discrimination, sustainability, quality and efficiency, transparency, reasonable economic prices and encompassing the full territory (Article 11, Law on Waste Management (197/14)).

According to Article 12 from the Law on Waste Management (197/14), one of the basic principles of the Law is “the polluter pays” meaning that the generator and / or the owner of the waste is obliged to bear all costs incurred during waste management, including costs of collection, transportation, treatment, storage, disposal, prevention and monitoring of waste, as well as costs for sanitary measures for the damage caused by the waste or the damage that would be caused by the waste. According to Article 42a from the same Law, the legal entities and natural persons who create or own a communal or another type of non-hazardous waste are obliged to transfer it to the legal entities or natural persons holding a license for collection and/or transportation of waste, that is, license for carrying out the activity, storage, treatment and / or processing of waste, or leave it on places designated by the mayor of the municipality, the municipalities in the city of Skopje and the city of Skopje. Before the disposal, communal waste should be selected based on the type and its characteristics and handed over to the places (collecting centres) determined to collect the selected waste. Producers of commercial waste are obliged to conclude a separate contract with the service provider on the territory of the municipality or the city of Skopje.

Communal and other types of non-hazardous waste are collected and transported by legal and natural persons who are registered to provide such service and possess a license for collection and transportation of waste. According to Article 45 from the same Law, in order to perform collection and transportation of communal and other types of non-hazardous waste, entities must have employed at least one person with professional background in accordance with the regulations for registration for such activity, as well as to have material and technical equipment resources for performing the activity. The mayors of the municipalities and the City of Skopje, the Council of the Municipalities and the Council of the City of Skopje may establish public enterprise for the collection, transporta-

tion and/or treatment of communal and other types of non-hazardous waste. Also, the collection, transportation and/or treatment of the communal and other types of non-hazardous waste may be entrusted to legal entities and natural persons, in a procedure in accordance with the Law on Concessions and Public-Private Partnership (6/2012, 144/15, 33/15, 215/15). The agreement will mandatory prescribe the terms and manner of operation of the service provider, the price and terms of payment for the service, and the territory on which the entity is providing the service. The procedure for awarding a concession or for entering into a public-private partnership, after obtaining consent from the municipalities and the City of Skopje, may be carried out by the responsible Ministry of Environment and Physical Planning. The public enterprises and the private entities and natural persons must hold a permit for collection and transportation of waste as well as a permit for performing the activity of storage, treatment and/or processing of waste.

All private entities and natural persons involved in waste management are obliged to adopt and implement strategic, planning and program documents for waste management, in order to support the protection of the environment and the public health and to support the achievement of the goals and guidelines set in the National Environmental Action Plan and internationally adopted responsibilities in waste management (Article 15, Law on Waste Management). The procedure for adoption of these documents is based on a mandatory assessment of their impact on the environment and human health (Strategic Environment Assessment) as stipulated in the Law on Environment (01/15). Based on the Article 15 from the Law on Waste Management, the competent national authorities, the municipalities and the City of Skopje, as well as the private entities and natural persons involved in waste management are obliged to adopt and implement strategic, planning and program documents for waste management. This applies also to the natural persons registered as sole traders and included in the process of collecting, selecting, transportation, treatment, processing, storage and disposal of waste. According to Article 22 from the same Law, the Municipal Councils or the Council of the city of Skopje are obliged to adopt acts that will regulate the selection, collection, and transportation of communal waste and others non-hazardous waste types. According to Article, (1) from the same Law, the collection of waste is carried out by waste collectors whereby the waste is collected from the generator or the holder of waste and it is transported to places designated for waste disposal. The private entities and natural persons collecting waste are responsible for safe collection and transportation of waste from the site of collection to the point of storage, including transport with special vehicles preventing dispersal or waste disposal during collection and transport. It is important that the private entities and natural persons are obliged to keep records and to determine the origin of the received or delivered waste on special forms, as well as to keep records of the individual collectors of non-hazardous waste from which they have received and purchased the waste. If the private entities and natural persons cannot determine the origin of the received or delivered waste, they are not permitted to buy it. In such case, they need to report to the Interior Affairs institutions. Waste such as metal and electrical parts of the railway lines, metal parts and metal wire from air telephone lines, all kinds of manholes, gutters for sewage infrastructure and shaft borders, all kinds of road signs and lightning rods, monuments and other art and archaeological objects, etc, are illegal to be bought and sold in the waste management system, unless the person can prove the ownership (Article 32a, Law on Waste Management).

The provision of waste collection service at the local level should be based on the principle of universality and the Council of the Municipalities or the City of Skopje, upon proposal of the mayor, prescribes the conditions, the method and the collection schemes and the transportation of communal and other types of non-hazardous waste, as well as the procedures for separating hazardous components from communal waste. The regulation also includes designation of an area where the universal service will be carried out, the conditions to be met by the service provider, the types of penal and stimulating measures, technical and other requirements relating to the security of the collection and transportation services, and the fee for the services. According to Article 121 from the Law on Waste Management, when the communal waste collection and transport service is provided by a public enterprise established by municipalities and the City of Skopje, the price is approved by the Council of the municipalities and the city Skopje. When a service provider is a private entity and/or a natural person, the price for collection and transportation of the communal waste is determined by the concession agreement or the agreement on public-private partnership. In most cases in the country,

waste management as a public service is provided through the public communal enterprises. There are few examples of smaller municipalities, in particular in the rural areas that have contracted private operators. It is expected that such governance would work in favour of establishing a sustainable and durable waste management system. Yet, throughout the years, given the activities of the informal pickers, the quality and efficiency of the public service are questioned by the citizens and other stakeholders included in the waste management system, such as the collective operators of waste. Even the Waste Management Strategy of the Republic of Macedonia (2008-2020) is critical in how effective and efficient are the services provided by the public enterprises and annotate the lack of involvement of the private sector in this field, including the participation of sole-traders. The Strategy observes that the communal fees that are invoiced and charged directly from the communal enterprises, not from the municipalities, can impede the development of increased private sector participation in the waste collection activities¹⁹. The current low fee rate for service charges and the poor financial situation of many municipalities poses risks, and the risks associated with the legal and institutional context and the competition problems, limit the scope for introducing competition in waste management services and the participation of private sector²⁰. Public service providers are generally ineffective in their use of assets, mainly as a result of lack of competitive pressure. The relationship between municipalities and service providers is non-transparent and lacks responsibility. Municipalities are extremely limited in their ability to mobilise capital investment funds for the waste management infrastructure and equipment, and according to the Strategy, the situation is unlikely to change in the near future²¹. Macedonia's main priority is to establish a system of separate collection of waste²² and in line with that priority, there is a need to rethink the system for waste collection and management.

So, where do the informal pickers come in? The Law on Waste Management recognises a category of "individual waste collector" defined as "a natural person who occasionally or regularly collects and sells non-hazardous waste to a private or natural person who holds a license to provide storage, treatment and/or waste processing and for which it is registered by the buyer". While this does not only refer to informal pickers for whom this activity is a basic existential opportunity, it seems to be vague enough to allow their operation and provide fewer restrictions for the operation of both individuals and registered junkyards. At the same time, such an individual waste collector is different from the natural person that is formalised as sole trader based on the Company Law and registered in the institutions.

There are no penalties for individual waste collectors for not performing their obligation for primary selection of communal waste in the appropriate littering bins. We need to keep in mind that informal waste picking is technically illegal as the pickers interfere with others' property – the property of the service provider procured to perform the collection and transport the communal waste at a specific territory. Until placed in the littering bins, the waste is a property of its generator, and with his/her authorisation it can be collected by the informal pickers. When the waste is placed in the collective littering bins, it becomes a property of the authorized service provider and its disposition is illegal. Hence, it is interesting to argue how private entities and natural persons by-pass the obligation for documenting and determining the origin of the received waste from informal pickers. It seems that here the role of the middlemen is rationalised, that is, to provide the legal cover for the large amount of collected waste whose origin is difficult to establish but for certain it is more difficult to collect it from public spaces other than the littering bin or large land-fills.

The National Waste Management Plan (2009-2015) of the Republic of Macedonia recognises the activities of the informal pickers. "The recovery of recyclable materials such as metals, paper, plastics, batteries, automotive batteries and accumulators, waste oils etc. are undertaken by the informal sector. The recovery of many types/grades of potentially recyclable materials is not financially viable under the prevailing conditions. The logistical costs for a formal waste picking system for paper are just covered by the sales price of paper. The informal sector, which has taken over the resources

¹⁹ Government of the Republic of Macedonia (2008) Waste Management Strategy of the Republic of Macedonia (2008 - 2020), pp.38.

²⁰ Ibid. 39

²¹ Ibid. 39.

²² Ibid. 53.

belonging to the closed down recycling network, is very active, though these resources are not used efficiently with both actual and potential economic and environmental consequences²³.

So, what are the possibilities of the informal pickers to operate within the current legal framework? The Law on Cooperatives (54/02) provides an opportunity for the formalisation of the informal pickers as a cooperative. Cooperatives are globally used to formalise the operation of informal pickers. However, this is not the case in Macedonia. The goal of the cooperatives is to allow joining of private entities and natural persons in improving or protection of specifically defined economic interest (Article 2). Cooperatives are formed by at least three private entities or natural persons. It requires founding assembly that approves the Statute of the cooperative and the shares of each of the founders and elects the bodies of the cooperative. The cooperative is later registered in the Court register. Cooperatives can make profits but are obliged to invest a minimum five percent in a reserve fund for 20 years and the rest can be shared among the members²⁴. In theory, the benefits of creating cooperatives are: (i) the process of power-sharing and democratic governance of the members of the cooperative. The cooperative is managed by its members and elected representatives (that can be recalled at any time) and each member is entitled to one vote, regardless of the size of his share in the cooperative; (ii) cooperatives are stable and cannot be terminated for a reason of one member until a unanimous decision has been taken by all parties of the cooperative or if imposed by a judicial authority when the operation of the cooperative is not in line with the law. However, the registration procedure is similar to registering of any other form of private company, which could be a barrier in utilising this format in the legal organisation of the informal sector. Also, the process of management could be seen as complicated.

Interesting opportunity for inclusion of the informal sector into the formal recycling process beyond the collection of recycling materials is to look for a permit to establish a system for collection, return receipt, processing or disposal of waste from used products and packaging. Reuse of packaging is any procedure by which the packaging during its life-cycle can be reused once and/or more times or be refilled for the same or similar purpose. This reusable packaging becomes packaging waste when it is no longer a subject to reuse or refilling. This service can be provided by legal entities and natural persons holding a collection and transport permit.

In addition, based on Article 123 from the Law on Waste Management, the Municipal Councils and the Council of the City of Skopje can determine a waste management fee in the amount of one to two percent of the cost designated for collection and transport of the communal waste (in the case of the municipalities of Skopje only when the service provider for collection and transportation of communal waste is different from that of City of Skopje) as an income in a separate fund that the municipalities can use to finance the implementation of the objectives set out in the local plans and programs for waste management, or the regional waste management plans, as well as for the purpose of financing regional waste management centres in the amount of at least 40 percent. While additional taxation is never a popular measure, in the context of Macedonia and with the persistent problems in waste management, it could stimulate innovation in this sector, trigger larger participation of the private and civil sector, and facilitate deeper political commitment by local actors in this area. In this case, there could be tax deductions for households with a lower socio-economic status. In it obvious that new (legally recognised) practices of informal pickers to access the material are necessary. An interesting example comes from the cooperation between a civil-society organisation from Negotino “Poraka Negotino” and the Home condominiums, or individual households from the city. “Poraka Negotino” is targeting people with disabilities and as part of their occupational therapy they bought a machine for baling of plastic and developed pre-recycling activities with their target groups. The pilot project was financially supported by Ludwig Boltzmann Institute. The grant was initially used to implement a campaign aimed at increasing the awareness among local citizens to start separating the plastic waste. The project communications targeted: 1) usage of traditional media;

²³ Government of the Republic of Macedonia (2008) National Waste Management Plan of the Republic of Macedonia (2009 - 2015), pp.35.

²⁴ Kusinikova, N. and Mirchevski, V. (2016) “Legal framework for social entrepreneurship and related challenges of the SEs in Macedonia”, in Ilijevski, K., Iloska, A., Kusinikova, N. and Mirchevski, V. (auth) Challenges and Opportunities for Employment of Marginalized Groups by Social Enterprises, Skopje: PUBLIC, pp. 18.

2) door-to-door campaign, implemented by the project team; and 3) communications with the local authorities. The team is divided into 3 groups: 1) persons that collect plastic from individual households. This team has branded uniforms and equipment; 2) team for selecting the plastic by colour; 3) a blind person who separates the bottle from the cap; and 4) team for baling of the plastic. On annual basis, Poraka - Negotino collects 40 tons of plastic. The plastic is sold to a private company, while the income is used for the needs of their beneficiaries.

CONCLUSION

The current legal framework recognises a category of “individual waste collector” which seems to be fitted for another category of citizens with intentions to depot their communal waste. It is vague and incomprehensive to the role and activities performed by informal pickers for whom this activity is a basic existential opportunity. It also seems to provide “alibi” for the existence of the middlemen and the obligations of the registered junkyards to determine the origin of the received waste. And in this context, it seems to be tolerated that informal waste picking is technically illegal. Given the increased responsibilities delegated to the municipalities with the decentralisation process, some of the entry points for legalising the activities of the informal pickers need to be advocated with the Municipal Councils and the Mayors. Encouraged primary selection of waste, division in fractions of waste which are delegated to different operators to collect and transport, fair distribution of communal waste fee as per level of engagement, the introduction of waste management fee and new financial instruments for supporting the legal activities of the informal pickers need to be approved by the Municipal Council. It is also necessary to look for other opportunities for (legal) access to the communal waste allowed in the current context, such as door-to-door strategy and greater collaboration with Home condominiums and individual households on selective separation of non-degradable communal waste. Informal pickers would need technical assistance in finding the appropriate mode of formalisation and establishing a structure in line with the regulation. Regardless of the form of legal representation of informal pickers, technical assistance is needed, in particular, to obtain a permit to perform collection and transport of communal waste, preparation of strategic, planning and program documents for waste management, and later, in establishing a management structure and operating procedures, in line with the regulation.

2.2 FIELDWORK FINDINGS

FIVE MEMBERS OF THE FAMILY ARE INCLUDED IN WASTE PICKING FOR AROUND 300 DENARS PER DAY



We did not know how to survive. We are all unemployed, with small social assistance... so we started with waste picking and selling bottles. We usually leave the house together. But then we split. I head towards one street, my husband to the next, one kid on a third, the other kid on the fourth, so we can pick more. Then we meet at home, we collect the plastic bottles at one place, we sort them and then they get them to the dumping place. And all that on our back, we don't have a cart, anything – explains 44-year-old Vildana from Shtip.

Vildana is a 44-year-old unemployed woman who in her life had the opportunity to finish only eight years of primary school. Her husband is also unemployed, as is their 22 years old son. Apart from him, the spouses have four more children, and the seven-member family lives in one room in Stip, with a social assistance of 2,400 denars.

For this family, every day is similar to the previous – a daily struggle for survival by picking and selling plastic bottles. The richness of the dinner depends on how many plastic bottles they have collected

during the day. They avoid other waste because they do not have a cart. “You can carry only plastic bottles with your hands and on your back” - says Vildana, adding that they work only in the nearby neighbourhoods of Senjac and Vilevac because they are closer to their home.

She says that she started with this work so long ago that she does not even remember when.

“We did not know how to survive. We are all unemployed, with small social assistance... so we started with waste picking and selling bottles. We usually

leave the house together. But then we split. I head towards one street, my husband on the next, one kid on a third, the other kind on the fourth, so we can pick more. Then we meet at home, we collect the plastic bottles at one place, we sort them and then they get them to the dumping place. And all that on our back, we don't have a cart, nothing" - explains the 44-year-old informal waste picker.

The day begins with the first, morning cruising of the garbage bins, which lasts for about three hours, from 6 am to 9 am. Afterwards, they rest and head again at 12 pm, and their last tour is in the afternoon. And all this work of the whole family earns them 200 to 300 denars a day, that they receive immediately, in cash, and they sell to different junkyards in the city.

She is not satisfied with the payment received by the junkyard owners. *"This is insufficient payment. One kilo should be 15-20 denars"* - she suggests.

The weather conditions do not affect their decision whether to go to work, even though she has problems with high blood pressure and heart disease, and her husband suffers from asthma and bronchitis. *"Especially during the winter time, the sicknesses we are struggling with makes our work difficult, but despite the conditions, if it is raining or is cold, we go out. We have to. We need something to eat during the day. Although this thing is nasty, we must work it"* - explains Vildana.

The difficult financial situation forces her to beg for money, and the family budget is bigger during the summer. Then the whole family goes to Struga or Ohrid, where, according to Vildana, they go to work on the landfill. *"It is very good there. B. or A. will come and we sell them the bottles"* - says Vildana.

They have never had problems with the police, but some of the citizens are rude to them. *"What are you looking for, you will break everything, they shout"* - she explains.

Vildana never in her life had been employed, but she longs for it and she would accept to be a waste picker. She would be happy with a salary of 7-8,000 denars, and it would be of great help if the citizens select the waste at their home and leave it in front of their doors so she can pick it.

"That would be really nice and is not difficult. Whatever the job, I just want to be employed. I would like to have both pension and health insurance, that's all. And I'm not afraid that I will lose social assistance. Those 2,400 denars are not enough for anything. You will buy flour, oil, potatoes, soap, washing powder and that is all" - says Vildana.

However, she emphasizes that it would be useful for her to receive weekly wages. *"We are very poor, so it's best to get a weekly payment. Monthly option is the best, but we can not endure that long"* - she explains.

2.2.1 THE INFORMAL WASTE PICKER PERCEPTIONS, NEEDS AND ATTITUDES TOWARDS THE JOB DESCRIPTION OF THE SNOW-BALLING SAMPLE

In order to see the perspective of informal pickers in regards to their work, current problems and barriers, and their ideas for improvement, the analysis encompassed interviews with 70 informal pickers from Skopje, Kumanovo and Shtip selected based on a snow-balling sample. Interviews in Skopje were conducted with informal pickers living in an improvised settlement under the fortress Kale and in the municipality of Shuto Orizari. In Kumanovo, the analysis targeted informal pickers living in Sredorek, Proevci and Banovo trlo, while in Shtip there wasn't a specific location where the informal pickers concentrated. All of the interviewed respondents are Roma, 30 are women and 40 are men. Around 16 percent of the respondents are 18 years and below, 20 percent are between 19-29 years, around 37 percent are between 30-45 years, around 26 percent are between 46-64 years and one respondent did not state his age. Majority of the respondents have no education (around 54 percent), around 27 percent have incomplete primary school, around 11 percent have finished primary school, only two respondents had finished secondary school and one is currently attending a night school. Two respondents did not give an answer to the question. Majority of respondents are married (70 percent), 10 percent are widowed, only one respondent is divorced, one is a single parent, one is a legal guardian of a child and one is living in a partnership community with their five children. Those single are children under 19 years. Majority of the respondents with children have between three and five children (60 percent), around 42 percent have more than 6 children and 15 percent have one or two children. Majority of the respondents are owners of the houses (around 61 percent), around 27 percent do not own the place where they currently live, in few cases, it is under the process of legalisation, and around six percent are renting. Four respondents did not give an answer to the question. Majority of the respondents have access to water, electricity and sewage infrastructure (around 69 percent), around 25 percent lack some or all of these utilities, and four respondents did not give an answer to the question. In regards to the number of beneficiaries of social assistance, 42 persons received some kind of state-supported social assistance, in the majority of cases, assistance for long-term unemployment and a third child, and only a few are receiving disability or child assistance. The

social transfers are between 1200 denars up to 13000 denars, depending on the category and the time period of receiving the assistance. 28 respondents do not receive social assistance, some due to a missed registration period, and few because they forgot to report an additional income to the Centre for social work, either from foreign bank transfers (possibly from family or relatives living abroad) or through a short-term working engagement. All of them have state-supported health insurance.

REASONS TO GET ENGAGED IN INFORMAL WASTE PICKING, ORGANISATION OF THE WORK AND EXPERIENCED BARRIERS

For all of the respondents, being involved in informal waste picking is a way to satisfy their existential needs. Most of them are in the “business” for more than 10 years, some even more than 20 years. They either have started as children and continued when they formed their own family or simply were drawn in because of poverty. Women in most cases have joined their husbands and in numerous cases, their children are either solo pickers or accompany them in the daily picking. Only three out of 11 respondents under 18 years are included in the educational process (regular or night elementary school). The rest have never been to school or dropped out to financially support their family.

“Out of poverty”, this is why I started with picking plastic bottles, said a 13-year-old boy from Kumanovo. “I did not have anything to do. You need money and there are no other opportunities, at the end, this is all it is left”, said Bajram from Skopje. They are critical that with their level of education and professional skills it is difficult to get a job. “I started to do it because I’m illiterate, I live from social assistance and there is no other job for me” – said a 34-year-old man from Kumanovo.

Four of the respondents have been asylum seekers in Germany, Austria, Italy, and France. After months and years in these countries, they are returned to Macedonia and face additional problems such as terminated social assistance, one family lost their house, and two of the respondents face problems with their personal documents. They either have lost or cannot provide certificates for the children born when in an asylum.

In Kumanovo, the informal pickers focus on plastic bottles, iron, and cobalt. They do not collect glass and in rare cases electronic waste or cardboard paper. In Shtip and Skopje, informal pickers also collect cardboard paper or electronic waste. Within their daily routine, regardless of the city, these workers wake early in the morning and start with work around five or six o’clock or in the dawn. They employ some internal organization of the work. They either go in one shift, up till the afternoon or divide the work in two shifts, the first until noon or 1 pm and the second after 5 pm. In between they take care of the family and prepare food and the children for school. *“We divide into two shifts on daily basis with my kids and we fill in three big bags. I go in the morning, and the kids go in the afternoon” - said Sadik from Shuto Orizari. Or the older kids are organised one by one, in four hours shifts. If they do not work together with a family member, they prefer to work alone, without the need to share their collectables with others.*

Summer is a more preferred season for collecting waste. The quantity of plastic bottles is higher, and the weather conditions are more in their favour. Winter and rainy days are particularly difficult. If the weather is too cold or rainy, they decide rather not to go on their daily collecting routines. *“If I get sick, who will take care of my family,” asked Ali from Kumanovo.*

Most of them also collect other recyclables from the garbage bins, such as clothes and food. They focus on food cans and pates so that they can sustain throughout the day or feed their family. Only a few of them re-sell the goods at the flea market. Few of them also engage in other manual jobs such as throwing garbage for a small fee, cutting woods, or going on an picking season for sour berries, apples or grapes during the summer. But none of the respondents had another permanent job, three had temporary engagement with selling the street magazine “Lice v lice” and only two had a family member with a formal employment. They are not keen on the continuous use of protective equipment. Although all of them acknowledge that this job poses a high risk to their health, only infrequently they buy masks and/or hygiene gloves.

Their collecting strategy is different. Majority of them cruise around the city centre during the working days and collect more waste compared to the weekends. Only some create a strategy such as going to the villages, or in the case of Kumanovo, to the Albanian areas where usually there are not many pickers and more plastic waste. Others plan how to empty the littering bins before the pub-

lic communal enterprises do so. *"We wake up very early in the morning and we try to get the plastic bottles before "komunalcite" (the workers at the public communal enterprise) get there. If we miss them, we will not find anything. I know their schedule"*- describes Samuil from Kumanovo. Similar is noted by Sadik from Shuto Orizari. *"When it is raining I focus on cardboard paper because it is heavier. The boss knows that I cannot give it dry, so our earnings are better"* – explained Suhamet from Shuto Orizari.

They prefer to live close to the city centre or the areas where they resort to work. This is particularly important for those without motor vehicles, and in the case of the informal settlement under the fortress Kale may be the reason why they keep returning to the site despite the evictions. Respondents in Shtip also note that they go to the nearby land-fills to collect more waste or migrate to Struga in the summer. They argue that there are at least 15 people on the landfill each day. *"I slept for few days at the landfill in Sveti Nikole and I collected waste that would usually take me 20 days"*, said Ali from Shtip.

The informal pickers in Kumanovo on average make 300-400 denars on daily basis. Some earn 100 denars due to middle-men that mitigate between informal pickers and junkyards. The most diligent earn up to 500-600 denars per day, if they manage to fill in two big bags of plastic bottles or if their children assist them. *"In a week, I manage to fill in 10 big bags of plastic bottles. There are around 30-35 kilos in one bag. Hence, I earn 300 to 400 denars per day"* – noted a 34-year-old man from Kumanovo. Their monthly earning is between 6000- 10000 denars per person. In contrast to Kumanovo, the average daily earning in Shtip is between 400-650 denars. *"I get 17 denars per kilo plastic. One big bag has around 40 kilos and I earn around 650 denars from one bag"* - said Muhredin from Shtip. The prospects for better earnings grow greater in Skopje. *"I manage to collect 100 up to 150 kilos waste per day. I see that there is no other job, so I must do this. I collect alone and I have a motor with a cart"* - said a 50-year old man from Shuto Orizari. A basic family income in Skopje per day is estimated at 500 denars. Only most diligent ones earn up to 1000 denars per day, for four big bags. A single picker collects 20 bags in around two weeks, which makes the monthly earning around 10000 denars. It usually takes around five hours to fill up one big sack with plastic bottles in Skopje. Their "standard" for plastic bottles is a full big bag (jumbo bag) with a weight of around 40-45 kilos. They go to the junkyard with jumbo bags and only in cases when they are penniless, they sell smaller bags of plastic bottles. The lack of transport vehicles makes them more susceptible to exploitation by middlemen.

When the profit from the specific recyclables is compared, those working with iron are better off. *"I usually make 500 denars or 1000 denars, but it may happen to earn 100 EUR"* – said Bajram from Skopje. Also, those engaged with only one buyer may get better prices. Dzengis from Shtip is collaborating with one buyer and he gets rewarded with 12 denars per kilo of plastic bottles compared to Ahmet who gets 10 denars per kilo.

The perception of time and money wise for this group is very relative. They are not in a position to accurately state their average monthly income or the average time they invest in this activity. They do regard it as an 8-hour job and since they spend the earned income on daily basis, it is difficult to attain clear records of their income. Despite the fact that few members of one family are engaged in waste picking and the monthly income per person can achieve 10000 denars, given that we speak of large families, it seems to be insufficient to cover all family costs and get out of poverty.

For many respondents, the immediate need is a possession of means to transport the recyclables. Around a quarter of the respondents do not use any means of transport during their work but carry the bags on their backs. This is in particular prevalent in Kumanovo. Also around a quarter have only pushing carts and around 31 percent have bicycle cart. Some (10 percent) have an improvised cart that needs to be pushed, like a modified baby push-chair. One respondent uses a cart pulled by a horse for transportation of the load; one uses his car and one his bike. *"I made my own cart. With the same cart I have been working for eight years, it can be better, but this one also does the job. Now it's better to have a bicycle cart like those in Skopje. If I had such a thing, I will collect more iron"* – said a 34-year-old man from Kumanovo. One respondent from Shtip explained how his means for transportation of the load evolved over the course of time. *"I started with a horse. Then I bought a bike, a motorcycle, and finally, I bought a car"* - said Dzengis from Shtip. Great manipu-

lation arises from the junkyard owners or middlemen who charge additional transport costs, as the respondents note, around 250-300 denar per transaction.

In almost all cases there are middlemen who mitigate between informal pickers and registered junkyards. *"There is one guy with a truck, we phone him and he comes, loads the goods and pays us in cash"* - said Valentina, who lives in the informal settlement under Kale. The middlemen in Skopje earn around 600 denars and the minimum collected waste should be 20 big bags per picker. Among those living in the improvised settlement under Kale, a big bag of plastic bottles is sold between 200-270 denars, in contrast to the prices in Shuto Orizari, Kumanovo and Shtip. In their direct communication with the middlemen or the junkyards, they report fair and professional treatment. They report being paid on time, almost exclusively in cash since for those who are beneficiaries of social payment, this could endanger their status. In some cases, they wait few days for the payment, but usually, they don't get tricked and receive their compensation. None of the respondents reported any other assistance from the middlemen or the junkyards, for example, in buying a cart or some protective equipment. Few pickers noted that there are cases when they ask the junkyards for advance payment and some of the owners are willing to help them.

Informal pickers spend their income on food and beverages, on daily basis. They don't save for the future. Therefore they find it difficult to accustom to the monthly payment. Those at middle age or older are struggling with health issues, such as diabetes, heart problems, mental issues or mild physical disability and need continuous medical therapy. *"I do not use the insulin shots as prescribed by my doctor. If I do, I need to eat some bread. If I do not eat, I may fall into a coma"* - said Hanume from Kumanovo.

All of the respondents argue that it is an army of people who engage in collecting recyclables every day in all three cities. Most of them are Roma, but they also meet Macedonians. While it is expected that limited resource would cause friction between pickers hopping around the city all day, none of the respondents noted any disagreements or violence with other pickers. *"We are all in the same trouble. There is nothing to argue about"* - said Hanume from Kumanovo.

The prices within and between the cities are different. In Kumanovo, one big bag is 200-300 denars, in Shtip it is estimated to around 400-500 denars, and in Skopje between 220-600 denars. A middleman in Skopje earns around 80 denars per big bag. A denar or two makes a difference for the pickers and they sell the material to anybody who offers higher prices. They are unfamiliar with how the prices are set and the reasons why they fluctuate. In their mind, it depends on the owners and the relationship they have established, such as loyalty and honesty or the method of payment. *"If I get paid through a bank transfer the iron costs nine denars per kilo while in cash, it is estimated at eight denars per kilo. The same for the plastic bottles, 15 denars through a bank transfer, and 10 denars in cash"* - said a 34-year old man from Kumanovo.

In one case in Shtip, an informal picker with his family opened an informal business of retailing plastic bottles and iron waste. They both collect waste and buy recyclables from other six or seven families, mainly operating at the landfill. They use their facility to collect the waste, select it based on the type and colour, press it, afterward they sell it to a registered legal buyer. They pay their suppliers in cash while their retailing income is based on an invoice. In their example, the difference in prices is notable: *"I earn 1,000 denars per day because we pay five denars per kilo for plastic"* - said an 18-year-old man from Shtip. In another case, informal picker also acts as both waste picker and middle-man. *"The iron is ten denars, I buy it for seven denars, with two, three denars difference. I buy the plastic for 12 denars but sell it for 17 denars. I need to have a profit"* - said Adam from Shtip who earns around 1000 denars per day.

The informal pickers are aware that they are exploited by both the middlemen and the junkyard owners. They are aware of the difference in the prices they get and the retail prices of the junkyards, meaning that someone is earning through their labour. Yet, it is the only way for them to get food on the table so they comply with this injustice. They think that the prices should be higher for at least 10-20 percent, so that they are able to make more dissent living for their extended families. For many, earning 100 denars more on a daily basis makes a difference.

Only one respondent from Shtip noted that he gets his payment through a bank transfer. The first time he received the payment he was not aware of the legal obligation to report the monthly income

and his social benefit was terminated. Afterwards, he continued to receive money through a wire transfer since he can negotiate better prices. *"I make between 300 and 500 denars or about 17 denars per kilo plastic. And at that price they also deduct the tax of 6.5 percent"* - said Rulija from Shtip.

Informal waste picking apparently is not exclusively a man's job. A significant proportion of the respondents (43 percent) are women, and 10 of the female respondents are at age of 50 and more. Although there is a prevailing patriarchal culture among the Roma men expecting their wives to be engendered in the house, lots of women are active in waste picking. And usually, they are more family oriented when the spending of the family budget is planned.

The effects on children engaged in informal waste picking are particularly detrimental. The elder children have the obligation to take care of their smaller siblings and lack the opportunity to be in school and have a worry-free childhood. Children and their parents report that they are subject to discrimination and improper behaviour; people tend to yell, lecture, moralise or even behave aggressively when they see them littering the bins. At school, when they go dirty or unprepared for the classes kids are ashamed and bullied by their peers. *"Our life is very nasty. I go to school without a backpack, I fold my books in a plastic bag and some people yell at me: Gypsy! I cry sometimes. From those bottles I eat, I make money"* - said a 13-year-old boy from Kumanovo.

The current fear of the informal pickers in Skopje is the instalment of a system with underground containers for the collection of waste. *"That is terrible for us. It would mean that the state will collect everything and we would not have any benefit"*- said Gjula from Skopje.

Likes and dislikes of the job, and envisioning oneself as a recognised waste picker

Only a few of the respondents from all targeted cities are satisfied with the job. In general, this was more prevalent among those that served as some kind of a middleman between field collectors and the junkyards. All respondents consider the working conditions as difficult, inhumane and dangerous for their personal health and the health of their families. *"This is an honest but despised job. This is a shame. You'll get infected"* - said a 48-year-old man from Kumanovo. For others, this is poorly paid and very hard job. *"I do not like anything. This is not a job. It's filthy"* – said Vildana from Shtip.

Only ten of the respondents have previous job experiences, such as manual work, bakery, crafts, pipe-repairing and only three currently have a temporary working engagement. Only one worked in a junkyard or in the public communal enterprise. *"I used to work in waste, but I was not employed. The manager paid me in cash. I worked with iron for 6,000 denars. I worked for six months; I could not stand it anymore. It is very hard work with a small salary. This was back in 2005. The first month I earned 6.000 denars and the manager promised that I would get an increase to 8.000, then to 9.000, and 10,000 denars. And I hoped to get a bigger salary and stayed six months, but I never got that pay raise. For this kind of work, I think I should be paid 15,000, not 6,000 denars"*- said a 34-year-old man from Kumanovo.

Informal pickers are critical of their capacities and work experience and see this job as their only source of cash necessary to survive through the day. *"We survive each day because of the plastic bottles or the paper"* - said Sadik from Shuto Orizari. *"When you don't have other opportunities where to work, you collect bottles"* - said Tezgula from Shtip. They prefer this job than engaging in criminal activities. *"If we refrain from waste picking, we would have to steal. With children, with a family, and without any income, what are my options?"* - asked Ramize from Skopje. Few see the prospects of being employed as pickers in the future, mainly under the condition of a better salary and paid contributions on salary. *"I work this since I was little. Why would this be a problem for me?"* – asked a 13-year-old boy from Kumanovo. *"If I am paid better, I will work this job. It is not a good thing but I will still do it. I do not like that we don't have a pension security, it is important to have a salary, but also I would need a pension in my old days"*– said Nazli from Kumanovo. Informal pickers would prefer if the households pre-select the plastic, iron and other materials before throwing the waste into the collective bins. But they argue that rarely anyone does this, except in cases when they knew each other. *"This would be much easier for me. But how can I tell them to do it? If the state makes it, that's another thing. This would also improve the hygiene in the city"* - said a 47-year-old man from Kumanovo. *"That would be really nice. I would go to collect the waste like that, why not. It's not hard"* - said Vildana from Shtip.

Only a few see this job as prosperous or find positive aspects, such as freedom to organise the working schedule, work without a boss and flexibility to fit the personal and family needs. Informal pickers rarely recognise these aspects of the job, possibly due to the stigma of being dirty and smelly. *"I do not have a boss, I am calm, I go out when I want to"* - said a 27-year-old man from Shtip. Some think that this could be a proper job but there is a need for state intervention. *"It can be a job, why not. The state should take over this activity, the state should organise us, establish a company and employ us"* - said Safet from Shuto Orizari. As formal pickers, they expect their minimum salary to be between 12000 and 20000 denars. Due to the labour intensive work, some expect a salary of 30000 or 60000 denars. They would prefer to get the money on a monthly level, but some are critical that it would be difficult to organise the family budget on a monthly basis and prefer weekly or bi-weekly payments. Yet, the majority is determined that this is not a good job and would not like to see them in the future engaged in the same activity. *"No, I will not work as a waste collector not even if it is pre-selected by the households. Why can't we work as you do?"* - asked Tevilja from Kumanovo. *"I would prefer a state job with a salary around 15000 denars"* - said Birsad from Skopje.

When asked if they would like to work, the majority of informal pickers are affirmative. Among the working-age population, there are those who don't feel capable of sustaining a job. *"I want to, but I can not, I'm no good"* - said 40-year-old women from Kumanovo. *"I would like a regular salary, a good salary, why not. I can work, but my hands and legs hurt"* - said Sadik from Kumanovo. Being employed for them is something different than waste picking. *"Why would I collect waste if I have a job?"* - asked Hanume from Kumanovo. *"It is impossible to live well with this work. There is no satisfaction. I do it for the children, not for me. I like to find a job, in a garment shop or as a cleaner. There is nothing nice about waste picking. I can get an infection and bring a disease at home. It is important that we have a monthly salary, to have a pension when we are older"* - said Fatima from Shtip. *"If I'm employed, I will refrain from waste picking. And I will work hard if I get a state job"* - said Djafer from Skopje. Only one respondent was clear that he did not want any formal employment. *"I don't want to die for somebody. I don't want to blow my head off, nor argue with some managers"* - said Adam from Shtip. It is an impression that few of the informal pickers understand how the process of selection of waste works, hence, many would not engage in this job even if waste pre-selection in the households is organised.

When confronted with the idea of losing the social benefits if being employed, some informal pickers are reluctant. *"So it would be better to work informal and get the state social assistance. If I get a state job, they will terminate my social assistance. But if I work in a private company, I would like to keep the social assistance and get honoraria because the social assistance is something stable. If something bad goes with the job, I will still have some income"* - said a 34-year-old man from Kumanovo. *"To tell you honestly now I would not change anything. I have my disability pension of 12000 denars for a lifetime and I am earning well with waste picking. If I get employed in a state job, they will cancel my help and later I will not get it again. Hence I'm not doing anything. It simply does not pay off"* - said Bajram from Shuto Orizari. Yet, others are realistic that the social assistance is insufficient for those with large families to survive through the month. Thus, they contend that it would be better to get employed rather than to depend on the small and irregular social benefit. *"I would be better off with a salary of 10000 denars than to depend on a 3000 denars social assistance. No, I'm not afraid to lose the social assistance. It barely covers something like flour, oil, potatoes"* - said Vildana from Shtip. *"It will not be difficult for me, and you know why? I receive 2400 denars for a family with three members. We will die of hunger if I wait only for the social assistance"* - explained Sadik from Skopje.

Their basic fear is a future without a secured pension. *"I need a salary, so my retirement would be secured"* - said Ali from Shtip. *"It's important to work so that I have a pension latter. I dream of the postman to bring me my pension. Now I don't have any savings, I do not know how will I live in my old age"* - said Bajram from Skopje.

This even more so rationalises the idea of their formalization. In such way, they would have the better working conditions, and the most important, a secured pension for their retirement. But they fear the lack of trust and solidarity among themselves to self-organise.

Informal pickers would be happy if they are supplied with protective working equipment (such as

mask, gloves and working suits) so that they can perform the work with less negative impact on their health. A contribution in the transportation means, in particular, is important for those working without bicycles or motorcycles and would make their work easier. This would save them from paying transport costs to middle-men and will make them more efficient.

None of the interviewed informal pickers had ever been registered by the public communal enterprises, the institutions or the municipality for their work. They are an invisible workforce. The general public usually behaves well with them. They assist them with clothes, food or old home equipment. But it is not rare to get some offensive remarks. *"I'm trying to be nice. I try to explain how important this job is for me. I ask for their understanding and I even clean around the garbage bins. Some understand but sometimes I am afraid"* – said a 47-year-old man from Kumanovo. *"There are no fights, but people are bothered when we scream in the streets. I understand them and I try to talk with them"* - said a 28-year-old man from Shuto Orizari. *"We sometimes have a problem with the police. Sometimes people call the police and they bother us. I have five or six fines. They want us to pay 50 euros"* – said Bajram from Kale.

POTENTIAL FOR LEADERSHIP, TRAINING NEEDS AND LOOKING FORWARD TO THE FUTURE

In general, informal pickers lack creative thinking on how this job can be transformed or extended to lead to self-employment or a joint investment with other pickers. They doubt their capacities to open a business for collecting recyclables; they lack initial financial resources for investment as well as skills to manage such a business company. Only a few have been thinking in a direction of expanding their activities as junkyard owners or re-sellers. *"It will be good for me, I will not collect from the littering bins, I will not sleep in the cold. I will have a job, I will work, I will have my family"*- said Ridvan from Kumanovo. Yet, the majority of them have never thought of the latter being possible. They neither have an idea how to start nor who are those individuals or institutions that can be of help. *"How can I have my own company? That would be good but it is very difficult. It's hard"* - said Hanume from Kumanovo. Others locate the problems in the lack of motivation for self-organisation and solidarity. *"No, no one wants to do so. Everybody is only looking for themselves, nobody is interested if you have food on the table"* - said Sadik from Kumanovo. *"I have thought of opening my junkyard. But I need money. First, I need 200-300 Euros just to open the company. Then I need money for the daily operation. Where can I find the money? I would partner with anybody but I don't know who"*- said Bajram from Skopje. *"No, it's hard. I do not have money. I'm illiterate"* - said Ahmet from Shtip. *"I just want a state job. And a house. It's tough to be your own boss"*-said Isin from Skopje. Women are particularly afraid of running a business. Given their disadvantaged position, the lack of literacy and the responsibilities tied to the house and the care for the extended family, being a manager seems very unrealistic to them. *"No, no. I do not know people, nor do I know how to do that"* – said a 37-year-old woman from Kumanovo. *"To open a business I need an education, and we do not have a school education, knowledge, you need to manage the business every day, you have to pay, you need a good memory. I prepare one child for school, then another one and, afterward I clean the house. When do I have the time to work?!"* - asked Fatima from Shtip.

Only a few respondents have a previous job training that could be utilised. They have either acquired some negotiation skills or a work ethics. Others have some skills in order to get professional reorientation and start a new career. It is interesting that even those in economically most productive age, for example, with 48 years think of themselves as old and not fully productive. *"Now at 38 years is hard to get employed. If I was employed in my twenties I would have had 20 years of experience. But now it is very hard"* - said Ali from Kumanovo.

Some of the informal pickers see themselves as leaders in this field. *"Yes, I can lead the people"* - said Bajram from Skopje. *"It's easy to organise. There should be a norm. Because, if the boss invests, there must be a profit. Unlike the state job where people can procrastinate, here they will have to fulfil some standards. But they will have a health insurance, pension security insurance for their retirement. I would do it. If I had the money, I would do it"* - said Safer from Shuto Orizari.

Their look at the future is more food on the table, work and retirement fund, a continuation of school, state job, stable income, and housing. *"We eat, we are not hungry, but we do not have a roof over our heads"*- said Valentina from Skopje.

CONCLUSION

Informal waste pickers are in general persons with lack of educational qualifications, skills, and previous working experience and as such, they face barriers to participation in the conventional labour market. They usually come from large families, with more than two children, and although, it is generally perceived that all of them are beneficiaries of state-supported social assistance, this is not always the case. They get engaged in informal waste picking because of poverty and as individuals or part of a family activity, including their minor children who often are excluded from the educational process. This only enhances the perpetual cycle of poverty, at an individual and family level. Their only satisfaction from being in this job is the possibility to put food on the table each day for the family. The everyday living detaches them from making any plans for the future, makes them unaware of the monthly income they have or the efforts and time they spend in doing this activity. For them, this activity is so routinized that they seem to never have been thinking of getting out of the job or finding a way to improve the work conditions or productivity. Many of them are manipulated by middlemen who seem to earn well on the back of these hidden workers.

Their dream is to find another job and they see themselves as waste pickers only with a well-paid salary and social and health benefits. Majority of them fear of more structural organisation of the work, lack creative thinking on new possibilities offered by the job and only a few are ready to open up a business in waste recycling or see themselves as leaders who can organise the people around them.

This is not an exclusively male profession. Women on equal basis participate in this activity, but given the contextual background, they are more fearful of being an independent worker or a leader in this business.

Job and decent salary, housing, education for the children, kindergarten, retirement fund are some of their visions for the future.

2.2.2 THE EXPERTS' PERSPECTIVE ON THE ROLE OF THE STAKEHOLDERS, COMMON PROBLEMS AND SOLUTIONS

THIS IS HOW YOU WILL FEED EIGHT CHILDREN, YOU GYPSY?



A minor boy from Kumanovo dreams of a better future: "Then I will be fine, I will not "walk in the cans", I will not sleep in the cold, I will not walk in the rain. I will have a job, I will go to work, I will return from work, I will have my own family. I will not wander to collect without a cart, I will not fall into the mud even if I drag, I will not slip through the rainy streets even pulling. And no one will laugh at me, insult me" - tells his dream, the 13-year old informal waste picker, Ridvan.

The 13-year-old Ridvan, an eighth-grade schoolboy from the village of Proevci near Kumanovo, is one of the eight children in his family. Both parents are ill and unable to financially support the family, so Ridvan has accepted the role to take care of them all. The brothers assist him in the waste picking, and sometimes their mother comes along. The family receives a social assistance of about 2,000 denars.

Instead of a backpack, he carries the school books in a plastic bag, and in his wording, the children find it hard to accept him. "At school, they call me - Gypsy. So what? I am a Gypsy, but I'm a human too. Sometimes I cry. Even when I work, they insult me, they chase me, and when I see such people, I leave the plastic bottles in the bin and I run" – explains Ridvan.

He says it is difficult to balance the work and school

responsibilities, but hunger triggers him to find time for everything. "Should I go to school or should I pick bottles? We are hungry. I even collect the stale bread from the bins to have something to eat. It is very difficult without a cart. I drag the waste on my back. I tie a bag of bottles with a string and I drag it. We live from the garbage bins" - tells the boy who from time to time also cleans and throws garbage for the neighbours in order to provide additional income for the family.

He says that together with his mother and brothers, they manage to collect a big bag of plastic bottles every day, half in the morning and the other half in the evening. "I get up early in the morning and up to 12 pm I'm a waste picker. Afterwards, I go to school. As soon as I get back, I get the bag and cruse for bottles again. When I am in the morning

shift at school, I pick waste only in the afternoon” - explains Ridvan.

Ridvan is picking waste since when he was 10. Poverty dragged him to informal recycling. He picks both plastic bottles and iron and gets compensated five denars per kilo for the iron and four or five denars for the plastic. “Even though I work, it is not always sufficient, so we go to bed hungry. We do have money to heat up the house so we sleep in the cold” – says Ridvan.

He explains that they keep the collected waste in the backyard, and then they pay 200 or 300 denars for a tractor that carries the waste to the junkyards. Sometimes, in need, together with his brothers, they pull the collected waste to the junkyards. This requires a walk of two hours. They get paid in cash but sometimes need to wait for a few days, and these are the most difficult times. For

one big bag of plastic bottles, he receives 200-300 denars and he is not satisfied with the sum.

He also emphasizes that they often eat a wasted food from the bins, and they resell the waste. Primarily they use the money for food and medications for the parents.

He is aware that he is a minor and that he should not work. When he becomes an adult, he wants to open a junkyard. “Then I will be good. I will not dive in the bins, I will not sleep in the cold, I will not walk in the rain. I will have a job, I will go to work, I will return from work, I will have my own family. I will not wander to collect without a cart, I will not fall into the mud even if I drag, I will not slip through the rainy streets even pulling. And no one will laugh at me, insult me and tell me: Is this the way to feed eight children, do you Gypsy?” - says Ridvan.

DESCRIPTION OF SAMPLE

In order to get a full perspective of the roles of the stakeholders, the common problems and solutions for the inclusion of the informal sector as a credible partner in the waste management system, interviews were conducted with experts with a long professional experience in this field, in the public, private and the civil sector. Their perceptions, attitudes, and opinions in regards to how to approach the process of formalisation of the informal waste pickers, what kind of support is necessary, what are the roles of each of the stakeholders of the systems of waste management and their proposals for future actions are systematised under several sub-headings.

DATA AND INDICATORS IN WASTE MANAGEMENT

The consulted experts agree that it is difficult to define/determine the exact number of informal pickers in the country. Firstly, this specific group is neither registered by any institution (Centers for social work, State Statistical Office) nor targeted by any systemic measures (active labour market policies, measures to decrease informal economy). Secondly, the country and its institutions lack an adequate measuring system to determine the amount of the generated, collected and treated waste. Hence, it is impossible to indirectly conclude or indicate the number of persons or families included in or affected by the informal waste picking. The collective package waste operators in the country have partial data generated by (i) their clients and (ii) the amount of waste they recycle, but this is only a fraction of the total generated and collected waste in the country.

Hence, for years, the studies operate with an estimation of 3000 to 5000 informal pickers in the country, out of which, the majority are based in Skopje. These figures originate from 2007/2008 and the experts indicate that the current numbers could be higher (given the economic situation in the country) and are influenced by the retail price of the waste (e.g. when the retail prices are higher, the number of informal pickers is increasing, and vice versa). Proper mapping of informal pickers is necessary for two reasons. On one side, it would allow an appropriate design of a system of formalisation of the pickers (how many people need to be targeted; their level of education and skills; previous work experience; working habits, etc.) and appropriate internal organisation of the system (how many kilos of waste can one picker access and be expected to collect). It is not the same if we organise a collecting system based on 100 tones or 300 tones of generated waste for a specific location or city.

The experts are conclusive that in this target group are dominant persons with a low level of education, or even without any education, with a low level of skills or any previous working experience. The experts argue that while the majority of them are Roma, other ethnic groups, such as Macedonians, are also engaged. The difference is that Roma pickers are more vocal of their “occupation”, while the Macedonians remain hidden profiles in this job portfolio.

The experts agree that informal waste picking is a family business, where children are involved in large part. Usually, they are extended or large families with many children. The age of the pickers

varies between 7-60 years. Exclusion from the education system is particularly stressed by the experts as a serious social indicator that needs to turn on the alarm of the institutions. Despite the obligatory primary and secondary education and the envisaged penalty measures, the drop-out rate is still rather high, and many children from these families have never been enrolled in school.

All these indicators imply that informal waste picking is not solely an environmental problem or cosmetics of our urban image, but rather a deep social problem. The institutions acknowledge the cross-cutting of this issue in the jurisdictions and obligations among different public stakeholders and agree that more coherent approach and political will is needed to holistically address the issue.

RESTRICTIVE OR FLEXIBLE LEGAL FRAMEWORK TOWARDS INFORMAL PICKERS

Experts and institutions encompass both ideas for more restrictive or more flexible legal framework in regards to the operation of the informal pickers. Institutions tend to protect the position of the public communal enterprises and their comfortable position to be the preferred actor in waste collection, but they also acknowledged that informal waste picking is a multifaceted problem. Beyond its environmental consequences, this is also a problem with deep social consequences, such as exclusion from the formal labour market, living in deep poverty, exclusion from education, lack of access to other services such as kindergarten, active labour market measures. The legal and policy framework should be restrictive towards children being engaged in informal waste picking instead of being part of the educational process and set minimum standards for operation/work-related behaviour of the pickers so that the created system of formalisation is not undermined from within. Rules and obligations of the involved pickers are necessary so that the system is sustained. We will come back at this issue of the “culture” of the informal pickers, as it is recognised to hinder the success of any initiative for formalisation and inclusion of the informal pickers in the waste management system.

The definition of individual collector, introduced almost 10 years ago may have suited in such context, but today it lacks to engender the subtleties between categories of individuals performing such role. There are differences between those selling waste from a spring storage cleaning and those who do it as the only available source to bring food to the table, day by day. The latter category is a vulnerable person, in position to be easily manipulated, people who subject themselves to economic exploitation since they rationalise that being in the informal sector with a low income is their only available job. There is an impression that the definition is coined for a different time and different purposes, out of which none was focused on strengthening this group to become a credible actor in the waste management system. The limitations of the Law on Social Protection in regards to extra income of beneficiaries of social assistance, the mandatory payment through a bank transfer of waste collection income, in addition to the “culture” of informal pickers, had legitimised the unfair treatment by both, institutions and business.

The experts argue that the extent of operation of the informal waste picking, accounting for around 70-90 percent of the generated waste in the bigger cities, gives them credibility to be involved in the “refreshing” of the waste management system in the country (a flexible institutional framework). And this happens despite the fact, as one expert argues, of the contradictory nature of the current waste management system. To begin with, in the current framework, it is illegal to collect communal waste (plastic bottles or paper) that is stored in the littering bins, owned by the public communal enterprise, entitled to collect communal waste on a specific territory. This means that the environmental contribution of this work is mainly done through the illegal activities of the informal pickers. The argumentation of their formal recognition is necessary so that they are able to step out of the “hidden figures” in the waste sector or “modern day’s slaves”. *“Why do they attain only one percent of the profit? They do the hardest part of the job, and get the smallest piece of the cake”* – argued one expert who was involved in previous projects on the formalisation of the sector.

The legal framework needs to be flexible to accommodate the needs of this group, and allow the process of waste picking to continue, unrestrained from the public waste infrastructure, and to allow greater involvement of the private sector in this sphere. The experts are univocal that there is a need to evaluate the efficiency of the public communal collecting system and bring innovation in how the waste collection, recycling, and monitoring are performed and how this public service is paid /funded. The involvement of the Municipal Councils and the local administration is necessary for envisioning any changes in the statutory position of the public communal enterprises, or how

the communal collection service is performed and paid on their territory. Since the fear of losing the state-supported social assistance is prevalent among the informal pickers, the institutions should show political will and be flexible in accommodating the institutional framework to the need of this target group. They recommend “a grace period” through which the state supported social assistance would not be terminated until the picker is stable in the employment and able to compensate for the loss of the social assistance without jeopardising the existence of the family. The experts argue that a period of two years with continual decreasing of the percentage of received social assistance is a reasonable measure to motivate this group to engage formally in the labour market and attain a formal job. They estimated that this measure could have other beneficial impacts, such as loosening the pressure on children to get engaged in the waste collection, motivate lifestyle changes, and build self-confidence that an exit from deep poverty is possible.

Understandably, the position of the public communal enterprises is more in line with the option for more restrictive measures for terminating these activities or asks for subsidising of the involvement of the informal pickers in their operational system. While the experts report on some successful public communal enterprises that collect high amount of waste (as the case with the Municipality of Prilep, where the process of collection and recycling is based on efficient and well-organised management, and only insignificantly involves the informal pickers), they are doubtful if such a strategy would bring a wider social benefit, and the intended positive impact. They fear that the position of the public communal enterprises could be mistreated for political purposes, as shown in the history.

FINDING A FUNCTIONAL MODEL OF FORMALISATION OF INFORMAL WASTE PICKING

The consulted experts annotate on two important steps in approaching the most functional model of formalisation of informal pickers. Firstly, it is important to think in smaller steps, without unrealistic expectations and goals. Secondly, a project-based ad-hock approach should be avoided. So far, the experience is based on foreign supported, project-based interventions, where the motivation of the public institutions sustained only during the project duration. These interventions failed to produce sustainable solutions as they did not motivate the public institutions to take over the activities after the end of the projects (these institutions did not recognise the value of the problem and their role in the solution), and did not increase the capacities of informal pickers to self-organise. The experts are congruent that any supported organisation or self-organisation need to stream from the informal pickers themselves. They need to recognise this need and recognise a leader(s) within their community who can facilitate their relations with the outside actors -institutions and organisations. As the representative from a public institution noted *“They have always been on the margins of the society, misused and discriminated. Thus, we need to invest efforts in building trust that the formulation initiatives are for their benefits and not some project activity”*.

There are many good practices from around the globe, and even from our closest surrounding, like in Serbia, to be used as a positive example of formalisation into syndicates, but still, there are no ready-to implement models. The differences in context mean that we need to seriously take into consideration our specific conditions of the level of education, skills and professional orientation of the informal pickers and to go through a process of “trial and error”.

The issue of informal waste picking, despite its multifaceted character, has not been a politically relevant one. In practice, public institutions, ministries or local governments have shown political will on a more declarative rather than a substantial level in resolving the issue. The experts point out that other stakeholders, such as the collective packaging waste operators, which are powerful actors in the waste management scheme, need to take a more active social role, and trigger the legal and policy changes.

Any chosen legal mode of operation, like a traditional company, social enterprise, cooperative, social business or other, is less important at the moment, as long as the social dimension is dominant in how the entity is structured and operates. The momentum can be more fitted for social enterprises. In addition to the drafted Law on Social Enterprises, the Ministry of Labour and Social Policy is working to adapt and re-design the active labour market measures to more coherently accommodate this group or entities. For example, the requirement for a minimum level of education may be

withdrawn so that informal pickers can be eligible to apply for active labour market measures. Given their level of education and general social exclusion, it would take a lot more than just adapting the criteria to attract this marginalised group. The level of information and awareness of these measures is low and requires well-planned advocacy campaigning and promotional activities.

At the same time, experts point out that it is difficult to encompass all informal pickers in the newly established formal system. There would always be “solo-players”, and it is important to make people believe in the system and support its continuation.

THE “CULTURE” OF INFORMAL PICKING WASTE

All of the consulted experts pointed out that the culture of informal waste picking is the biggest challenge in designing a functional model of formalisation. It certainly is not irreparable, but understanding the mindset of those involved in informal waste picking sets some ground base of how to design the system, divide organisation, share responsibility, and hold accountability. In general, they are described as a freelance group that is difficult to frame into a system. The experts describe this group as unreliable and untrustworthy. And these aspects need to be taken into consideration, at least in the planning of the short-term effects. They lack awareness of the benefits of building associations and cooperatives in advocating for their position and rights in the waste management system. They also nurture lack of trust in alliances with public and private institutions and organisations. Their social assistance is in many cases their only communication with the institutions, and the current system of social protection is more focused on decreasing the number of beneficiaries than to align a person’s needs with the opportunities within the system.

The culture of informal waste picking is not only about the habits of the pickers, but also about the competition, a division of territories, safeguarding of a certain space, lack of solidarity and distrust. It is also about the education on how to handle the waste, in particular, the electronic waste, how to be protected at the workspace, and to be aware of the occupational risks, how to adjust their working habits, take responsibility and be (held) accountable for the actions.

This also means developing a culture of cooperation and solidarity, mentoring for personal development and tracking new schemes of communication between the informal pickers and households, door-to-door services, using technology to connect stakeholders, smartphone apps for online payment of services provided by the informal pickers, etc.

INDIVIDUAL MENTORING SUPPORT AND NOT ONLY PROFESSIONAL ORIENTATION

All consulted experts content that it is not enough to provide employment opportunity for informal pickers and leave them to struggle with the system, the managers, the peers and family pressure. They need to be couched at an individual level and managed with support, at least for an initial period of one year, until they feel confident to continue on their own. As one of the experts noted, “They know the job very well, but they lack a working ethics”. And this is in particular important if the idea of a formal system is to change the current spontaneous and untrustworthy relationship into a partnering one, with a reliable and confident worker. This is the entry point for the future professional re-orientation of the current informal pickers, and an opportunity to acquiring other skills.

The experts are in doubt if the informal pickers are capable of sustaining in the system without external support, in particular in the initial stages of the process. In their view, the group needs to be couched for teamwork, financial literacy, planning of the family budget, solidarity, developing business logic, life counting skills, etc. Such mentoring schemes need to be organised in parallel with the professional orientation of the worker and supported through a delegation of a public service provider role to the civil society sector.

Professional re-orientation, stimulation measures for business, organisations and institutions, and expansion of recycling jobs

The consulted experts are congruent that any form of formalisation of the pickers could not be created to absorb about 5000 individuals. The pilot projects in 2007 and 2011 included 19 pickers and 19 sectors in two municipalities in Skopje, Centar and Karposh. The city of Skopje could absorb around 50 pickers, but not 2500 individuals, as the previous analysis estimated. Hence, it is important to think of how to build an individual approach that recognises the potentials of the people

involved in this work. The experts point out that professional re-orientation need to take place, and shift many of these individuals into another job profile. Anyhow, a majority of them would rather change the job than to remain as an informal picker, so they need the push to be able to aspire to such a goal.

The experts also annotate the need to think of expanding and developing the recycling process with new fractions, baling of plastic bottles, to acquire specific transport vehicles, to patent products. The people and/or organisations and institutions supporting the formalisation with knowledge need to be visionary in how this could bring more green jobs in different cycles of the service and value chain process, and not only at the level of collection of the waste. Yet, as one expert notes, it is important to plan this in advance so that the involved workers are ready to meet the objectives of the new developmental practices.

The consulted experts agree that it is necessary to create supporting schemes for entities (private or public) interested in employing informal pickers. Certainly, with precocious and minimising the possibilities for misuse of these schemes for profit. It is necessary that the middlemen are out of work and that the legal and policy solutions are flexible to address the needs and fears of this group. As one expert put it, *“Both the business and the public sector need to have an open heart and be flexible, if we aim at results. We need a sincere approach and continuous and devoted work”*.

There are external risks for this job. The efficient primary selection by the households and the commercial sector, and the installation of the underground waste collection system, in addition to the regionalisation of the waste in the country, may put these people out of job. Therefore, this group should lobby for inclusion in the current process of changes in the waste management infrastructure and to defend their position.

Public-private partnerships are a necessary instrument in addressing these points. The local governments are the crucial partners in making these changes happen. While we should not underestimate the influence of the politics on how business “works” in the country, yet, we need to be aware that waste is a business, and if organised in synchronisation between all institutions, it can thoroughly re-design the system.

And finally, we need to change the culture of implementing projects and interventions. It is necessary to monitor the progress, evaluate the impact of the interventions or institutions, to be fair of the challenges and barriers so that the future is a bit brighter than when we started. The experts acknowledge that it is necessary to establish a system of monitoring of the work of all actors included in the waste management, in particular, of the public communal enterprises, so that adaptations are made as the process unfolds. The monitoring, including controlling inspections and sanctions, should secure the implementation of the standards and procedures. It is important to note that the conditions today are in favour of operationalising some previous know-how in a more sustainable system of formalisation of pickers. There is a political will of both the public communal enterprises, the ministries, the civil society sector and the non-profit collective and profit-oriented waste operators to pace up the process.

CONCLUSION

The consulted experts are conclusive that, given the scale of work of the informal waste pickers, and the deficiencies in the public waste collection sector, it is a positive step to approach to formalisation and organisation of the informal waste pickers. They argue that the current legal framework makes the operation of the informal pickers illegal. Hence, it is necessary to think of new modes of access to the material in a legal way and to think of increasing the competition within the waste collection sector and redesigning the system of payment for waste collection service on a local level. The experiences of the past have taught us that it is not enough to give these people an opportunity to earn more, but it is necessary to work with them on their “culture” of informal waste picking. They accentuate that this group needs targeted focus on the working ethics, fulfilling work obligations, loyalty and conduct based on agreed principles, and accountability. In their views, this is more a job for psychologists and social workers, rather than for the institutions included in the waste management.

They share their views on the political irrelevance of this issue for the political elites and the government, despite the declarative political will to resolve this issue. Their actions lack substantial

engagement and coherence.

In their views, besides the work of formalisation of this group, it is necessary to think of the technical support in organising and managing their operating system, as well as to think of the professional re-orientation that could shift many of these individuals into other job profile. It is good to think of upscaling their work and entering other sites of the recycling process, track new schemes of communication between the informal pickers and households and door-to-door services, funding schemes for different entities to employ this target group and start SEs or social business in the field, and mentoring support to individuals and organisations engaged in this process. Above all, it is necessary to build a culture of solidarity and social recognition of the valuable job informal pickers do in the society.

2.2.3 “JUNKYARD” OWNERS AND RECYCLING COMPANIES PERSPECTIVE ON INFORMAL WASTE PICKING

A FEAR OF THE UNCERTAINTIES IN THE SYSTEM



I used to look for a job all the time, I was asking around but nothing. At the end, I gave up. I used to go to the employment agency, but there was not any position for me available. And I truly want a state job, so that I can have some savings as I get older. Till now, I would have found a job for few months and they would pay 9.000 denars, and then I was fired. Then, all over again, I have to go running after the documents that are required for social benefits and that takes at least 8 months. What have I done then?- asks Sebastijan, an informal waste picker with a real plan for collecting waste and in future envisions himself as the owner of a junkyard shop.

Even though Sebastijan has his own substandard dwelling in Shuto Orizari, together with his wife they have decided to live in the slum under the Kale, as a better location for their work. Waste collection is their only source of income, and their positioning under Kale ensures easier access to waste plastic and iron. Here, they have access to the water sewage system, while the access to electricity is only possible in the evening as they are stealing it from the public lights, and they have no access to the sewage system. Sebastijan is 49 years old, he has 4 children and 5 nephews, of whom 3 already have their own family, while the youngest one on the age of 11 still lives with him and represent his right hand in waste collecting. He used to be employed in “Komunalec” and right after he lost his job, he lives with a social benefit in the amount of 3.500 denars. The absence of employment is evidently mixed with the fear that he will lose the social benefits that he currently receives from the State. “I used to look for a job all the time, I was asking around but nothing. At the end, I gave up. I used to go to the employment agency, but there was not any job for me. And I truly want a state job, so that I can have some savings as I grow older. Till now, I would have found a job for few months and they would pay 9.000 denars, and then I was fired. Then, all over again, I have to go running after the documents that are required for social benefits and that takes at least 8 months. What have I done then?”- asks Sebastijan. He has been in the waste picking for 10 years now. What he notices is that lately, the number of informal waste pickers is increasing. On average, he works 8 hours per day and tries to take a rest whenever he

feels tired as he survived two heart attacks. “Pick waste, take a rest, go out again, come back and continue like that all day- explains Sebastijan, and all this is possible as the city is pretty nearby” – says Sebastijan.

He and his son both have carts attached to a bicycle and this significantly relieves their job. As soon as they collect a sufficient amount of waste they will call a truck and the waste is sold to few purchasers. “I sell the waste to the purchaser that will give me the best price”- he says and adds that for the sold waste he gets paid immediately in cash. He explains that whenever they are in a crisis he will ask for advance payment from the purchasers and then work out for the money received.

On daily basis together with his son, they manage to fill in four big bags with plastic. For this quantity, they are paid in total 1.000 denars or 250 denars per beg. On the market, the greatest interest is in plastic. Recently he noticed that the interest for paper is increasing, but he is not collecting paper as he doesn't have storage, and as he explains the purchase price is still very low. “100 kilos of paper is 400 denars. That is not money. And there is so much work to collect it...” - says Sebastijan.

He is satisfied with the money they are earning and suggests that it would be even better if he can earn at least 300 denars per beg. “But the purchaser has his own calculations and it needs to pay off for him as well. So I should have calculation and he as well. He spends fuel, there are employees and they need to get paid, and then the machines, they need to be bought... They use electricity. It is all about the calcu-

lation” - thinks loudly Sebastijan.

He complains about problems with the police and till now he received few penalties as he is conducting an illegal work. “You are not allowed to do this, you are not allowed to do that. Where you are going, you are making a mess through the city, this is not allowed. We are asked to pay fines. But I pay nothing to them. How to pay”- says Sebastijan.

In order to be even more successful in his job, he says that he needs a motor vehicle so he can be faster. If he gets the opportunity to be employed as waste picker his condition would be to have a monthly sala-

ry in the amount of 500 euros. He also thought about the option to have his own business for waste picking, he has done the calculations and recognizes persons with whom he can cooperate.

He desires a better home, not as the one he left in Shutka and doesn't have the basic living conditions. “I want to live like everybody else. To see the life, to live modestly, but nicely. To travel with my kids, to go on a vacation. To go to visit people, to have guests at home. And I think about work all the time. Because if I don't go to work, today we won't be even able to buy bread”- ends Sebastijan his story.

In order to confirm and triangulate data gathered in the interviews with the informal waste pickers, interviews were conducted with two formal junkyard owners from Kumanovo, three informal junkyard owner from Shtip, and one recycling company from Skopje registered as a protected company.

The basic motivation for engagement in this sector for the small junkyards was the profit. Both registered and informal junkyard owners indicate that this is an economically viable sector. They have employed personnel, but none of them employs informal pickers. Their access to recyclables is mainly through the individual waste pickers, and in some part, of the households. The smaller junkyards sell their collectables to the larger companies in the sector, who further manage the waste, either by exporting or by recycling. Usually, they maintain professional relationships with the informal pickers, and on rare occasions, they help them with protective equipment or provide free transport for the waste. In general, the transport is not included in the “customer care” package of the junkyards. The registered companies complain of a disloyal competition by the informal junkyards that cruise around the cities during the day and buy the material for a denar or two more. Although the prices of the recyclables are influenced globally, they do try to keep some motivation for the informal picker to sell the waste to them. In such way, they maintain a stable relationship with several regular collectors who sell their material to them. They also complain of the high taxes and, in particular, of the mandatory payment through a bank transfer. *“Even if someone collected 10 kilos of iron that costs 80 denars, and still I need to pay him through an account. In that case, I spend additional 30 denars for bank fee. And someone for 80 denars needs to wait in a bank; but they need it here and now, to buy bread. In my mind, this is not a solution. Hence, everybody is avoiding it. I think that there should be a threshold of 1000 or 3000 denars for us so to be able to pay in cash”* – argued one owner of a small junkyard. *“Everyone wants to be paid immediately for the work. There is no mercy here, he is struggling and he needs money. They do not have a bank account and do not want to be paid in such way. And don't ask me how I manage to pay in cash, it's very hard”* – argued also another owner of a junkyard.

In general, the smaller junkyards are not interested in expanding their activities by employing waste collectors or finding other schemes of accessing the waste. *“I'm fine this way. I will give them something extra to motivate them to sell the waste to me, but I don't think that employment is what this group wants”* – said one owner of a small junkyard.

Only some of them are more interested in innovations and using recyclables to further support the economy, such as using plastic to power up the power plant in Negotino or to scale up their line of recycling.

In the view of the owners of junkyards and recycling industries, the local governments need to be engaged more substantially in adapting the waste regulation to the current needs of the business and the people engaged in this sector. “Informal pickers need cultivators. One cultivator costs 2,000 Euros and that would be an investment of 20,000 Euros. With 10 persons and such equipment, I can make a small change. They will be registered; they can function without hindrance; will carry the same equipment with a logo; will not be harassed by inspections, police. Lastly, they themselves have to agree on keeping a small part of their income to pay health insurance and retirement fund” – argued one owner of a junkyard. But do content that this target group is difficult to work with and in their views, only a few would support a formalisation of the activities. Some of them are critical of the role played by the collective manager of packaging waste and their funding priorities. In their view,

these entities should be more socially responsible towards the informal pickers and partner with institutions, CSOs and other stakeholders to improve the working conditions in the informal waste picking sector. Also, they share a critical view on the efficiency of the public communal entities and in their view the lack of diligence of the latter allows the informal sector to flourish. *“If it wasn’t for the informal pickers, we would not have anything to recycle”* – argued one owner.

They agree that there should be more stimulus measures for companies engaged in this business to rethink their social role. There should be some form of employment available for this group that will be subsidized by the state or they should be absorbed by the public communal enterprises. And the provisions of the Law on Concession should be applied transparently and unbiased. They argue that the Ministry of Labour and Social Policy should be engaged in resolving the problem of informal pickers. *“We need to conduct a joint analysis with MLSP, together to offer, to develop something. At the moment, we make regular payments, we pay tax on personal income, but this does not solve the social problem of individuals”*- argued one owner. If it stays as now, the business with waste will only be a “race for profits” and will continue to be profitable only because of the cheap labour force.

Conclusion

Small and larger managers in the system of waste storing, treatment and recycling agree that their operation mainly sustains based on the work done by the informal waste collectors. They confirm some of the established “truths” of this problem in regards to the culture of informal pickers, the difficulties in sustaining them in conventional, regular employment and the need to more structural work with this group. Yet, they attain that a solution is needed and that the institutions should have a more active role in discussing and debating potential alternatives. Stimulation measures, subsidised employment could encourage conventional or protective companies to engage in employment of informal pickers, yet, not everybody is motivated to change the current practices. They also argue for the important role of the municipalities and in particular of the need for more transparent and efficient public waste collection system.

3. POSSIBLE SCENARIOS FOR FORMALISATION OF INFORMAL PICKERS IN THE WASTE MANAGEMENT SYSTEM

Through the analysis of the waste management system in legal and policy terms, and the data gathered through the field work, five potential scenarios for formalisation and inclusion of the informal pickers in the waste management system are developed. In order to look deeper into the proposed solutions, it is necessary to contrast the positive and negative aspects of each potential case.

Scenario 1: Self-organisation of the informal pickers in association, cooperative, social enterprise or another legal form of representation

PURPOSE: Partial or full outsourcing of waste collection of secondary materials and communal waste to informal pickers' association

There is a lack of capacities among the informal waste pickers to engage in a process of establishing a self-representative legal entity. But in ideal context, this scenario would create a legitimate representing entity of the needs and interest of this target group. The organisational forms of cooperatives or social enterprises are potential alternatives. With the drafting of the Law on Social Enterprises in Macedonia, it is the perfect momentum to seize up the opportunity. There are a lot of challenges on the way of establishing a successful organisation such as development of schemes for door-to-door selective collection of recyclables; legislative changes so that access to the public infrastructure is legal; advocating for schemes of division of waste sorting between public companies and the representatives of informal pickers, such as bio-degradable and solid communal waste; advocacy for distribution of communal tax between the stakeholders included in the waste collection; preferential status of this entity in local bidding procedures; establishing of internal system of operation, control and accountability; deriving a solution on equity in payment; deriving a solution for compensation for months with decreased waste collection; development of individual mentoring schemes; thinking about the future development of the waste collecting activities undertaken by the members of the entity. Beyond involvement in collecting waste, this entity can develop new schemes of re-use of products with expired dates (opening new collecting schemes based on separate collection) in congruence with the existing legal frameworks and operating standards (such as medical waste), which are clearly recognised in the *Waste Management Strategy (2008-2020)*²⁵.

POSITIVE ASPECTS: It addresses the negative impacts of informal waste picking, such as child labour and exclusion of children from formal education; it improves the working conditions, occupational health, and safety; it addresses the needs of social security for the futures (retirement fund for the workers); allows the workers to use wider set of services entitled to employed persons, and restricts uncontrolled pollution. We need to be critical of the skills and opportunities of informal pickers for self-organisation and formalisation. There needs to be an initial assistance in developing the operating procedures and standards, operational management, mitigating the conflicts arising from the work.

NEGATIVE ASPECTS: It will lack an opportunity to include all informal pickers. According to the experts, the waste collection market is unable to absorb all currently involved individuals. Majority of them need to be re-directed to another employment sector. Also, there will be individual informal pickers who will choose to remain outside of the system and, given the previous experience, may jeopardise its operation. The need for self-organisation is not widely recognised and the system may fail to be established on basis of solidarity.

FINANCIAL INSTRUMENTS: Introduction of waste tax to be piloted in one or two municipalities, at a level of two percent of the amount of communal service paid by households and private entities so that a new fund can be created that will support the activities related to selection, collection, and recycling of waste. In particular, this fund can be used to support the activities of the informal workers, and their formalisation through schemes of micro-grants. The collective waste packaging managers can fi-

²⁵ Government of the Republic of Macedonia (2008) Waste Management Strategy of the Republic of Macedonia (2008 - 2020), pp.54.

nancially support the development of the mentoring schemes and support the workers with equipment. In addition, innovation funds, European or other external funds can be used to finance development of new product lines and services (such as smartphone app for payment of service or communication with the households).

Scenario 2: Collective waste packaging managers to create SE with focus on informal pickers

PURPOSE: Direct inclusion of informal waste pickers in the waste management system without the creation of additional bodies in the service chain.

The current legal framework does not allow collective waste packaging managers to collect waste. Instead, they cooperate with delegate public, private and natural persons with appropriate permits for collection and transportation of waste. The experiences from the region, such as Bulgaria where collective waste packaging managers are licensed to collect communal waste, as noted by one of the experts, are not favourable. It has not increased the inclusion of the informal sector and it compelled collective waste packaging managers to subcontract the collection phase to smaller entities. These smaller entities are unable to absorb all potential informal workers and ended in a situation of “war”. In the context of Macedonia, collective waste packaging managers can collaborate with more efficient entities beyond the public communal enterprises, if the entities find new ways to access the material in a legal manner or if legal framework allows the introduction of formal representation of informal pickers active in the communal waste collection.

POSITIVE ASPECTS: If the legal framework is changed to facilitate the role of collective waste packaging managers as collectors, we can expect transfer of large know-how and innovation in the waste management sector; wide support and valorisation of the informal workers and new green jobs; smoother communication with the public and other entities such as home condominiums given the positive image of collective managers and their public recognition.

NEGATIVE ASPECTS: Collective waste packaging managers need to be motivated to such operation. Again, they would not be able to absorb all of the potential workers in the informal waste sector and by increasing their role in the system may trigger other actors to disloyal competition.

FINANCIAL INSTRUMENTS: Stimulative measures and subsidised employment measures by the state; external donations.

Scenario 3: Organised “junkyards” and recycling companies to create social business focused on employment of informal pickers

PURPOSE: Absorption of the informal waste pickers as a primary actor in the service chain.

For this scenario, it is important to look at the impact of the Law on Employment of People with Disabilities (44/2000) introduced in 2000. The Law aimed to encourage the establishment of protected companies that will stimulate the employment of persons with disabilities. The Law provides opportunities for people with disabilities, but in practice more often there is an abuse of employment contracts and subsidies than alleviation of poverty and social inclusion among this group. The considerable state financial allocations in personal income tax, social and health benefits, disability tax for the employer, the employee-person with disability and other employees of the protected company did not produce the expected results. Authors²⁶ report that in many cases the most attractive component of these funds was their non-repayable characteristic and this is what motivated companies to engage in such venture. They report that there was an abuse of finances, persons with disabilities were employed only fictively and the companies were terminated after the funds were spent. The profit distribution of the protected companies is not regulated by law.

POSITIVE ASPECTS: Absorption of informal waste pickers in their so-called “natural” environment. These companies depend on the activity of informal workers and simulations and state subsidies can motivate them to engage in opening a social business targeting employment opportunities for this

²⁶ Grujevski, n.d. cited in: Lelkes, O. Ilijevski, K. and Iloska, A. (2017) Nurturing social enterprises in active labour market policies framework for inclusive local growth in Macedonia, Policy document, pp. 24.

group. Using these funds they can compensate for the increased burden (administrative and managerial) towards the business but given the know-how, they can more directly engage in the development of new lines of recycling and production based on these materials. It would create new green jobs in the respective field beyond the collection of waste.

NEGATIVE ASPECTS: Similar disadvantages can appear as with the Law on Employment of Persons with Disabilities. These actors, primarily motivated by profit can provide employment opportunities for informal pickers but it is susceptible if we can avoid manipulation and economic exploitation of informal workers for a minimum wage. In the current context, companies in Macedonia are more overburden by survival than innovation; hence, the inclusion of informal pickers as part of the “junkyards” will not bring improved working conditions or an upscaling of the productivity. It is more rational to expect that the scaling up of the enterprise guided by profits to improve the quality of the services delivered and/or to enlarge the fulfilment of the needs addressed²⁷ but this is considerably different from managerial culture among the existing “junkyards” or recycling companies.

FINANCIAL INSTRUMENTS: Stimulation measures and subsidised employment measures by the state; funds for innovations in the business.

Scenario 4: Civil-society organisations to create SEs with focus on inclusion of informal pickers in the waste management system

PURPOSE: Combining know-how, values and entrepreneurial in locating informal pickers as part of the most viable generators of social economy in the country.

The Law on Associations and Foundations (51/10 and 135/11) allows mission-related economic activities of the organisations as long as the gained income is used for the established non-profit purposes. Also, the Law on Social Protection (148/13), the Law on Free Legal Assistance (161/09; 185/11; 27/14; 104/15) and the Law on Public Procurement (24/12; 136/2007; 130/2008; 97/2010; 53/2011; 185/2011; 15/2013) allow the civil society sector to provide services. Having in mind the governance principles under the law, the not-for-profit nature of the activities and the legally established asset lock, the legal framework sets the basis for CSOs to develop as social enterprises²⁸. The social economy in Macedonia is largely promoted and developed by the civil society sector, and the know-how should be capitalised in innovative interventions with a social mission.

POSITIVE ASPECTS: CSOs have direct access to marginalised communities and well-established relationship with them. Due to their extensive experience, CSOs are deeply familiar with the needs of the communities they serve and aware of the existing gaps in public policies that prevent the full implementation of their human rights. Moreover, the recently initiated process for decentralisation of social services opens a new space for establishment and development of SEs. With this solution, it is possible to enter in the higher levels of the service and value chain, including collection, sorting, processing, and marketing of the different final products. Literature shows that employment, created by social enterprises, has outstripped employment created by conventional business²⁹. Social enterprises were pioneers in tackling social exclusion of various groups, especially in promoting their work integration through various models of Work Integration Social Enterprises³⁰. With the right support, the social economy can contribute in a more efficient way to the enlargement of the labour market and the creation of new possibilities for low qualified workers.

NEGATIVE ASPECTS: There is a lack of mindset among CSOs to do business. CSOs are more project- than business oriented. They face a lack of human capacities and strategic focus. They are not investment ready and are with very limited capacities to grow and scale up. CSOs do not have internal procedures that govern their internal processes, including decision making. There is an absence of

²⁷ European Commission, Directorate-General for Employment, Social Affairs and Inclusion (2016): Social Enterprises and their eco-systems: developments in Europe. Authors: Carlo Borzaga and Giulia Galera.

²⁸ Kusnikova, N. and Mirchevski, V. (2016) “Legal framework for social entrepreneurship and related challenges of the SEs in Macedonia”, in Ilijevski, K., Iloska, A., Kusnikova, N. and Mirchevski, V. (auth) Challenges and Opportunities for Employment of Marginalized Groups by Social Enterprises, Skopje: PUBLIC, pp. 17.

²⁹ Lester, S. (2003) The Resilient Sector, Washington, D.C: Brookings Institution Press.

³⁰ Defourny, J. and Nyssens, M. (2010) “Conceptions of Social Enterprise and Social Entrepreneurship in Europe and the United States: Convergences and Divergences”, Journal of Social Entrepreneurship, 1(1): 32-53.

available structure to support the social enterprise development such as access to training and capacity building opportunities, access to markets and access to finances (social investments are not even a topic in the country, while an adding social clause in the Law on Public Procurement has just started).

FINANCIAL INSTRUMENTS: Introduction of waste tax to be piloted in one municipality, at a level of two percent of the amount of communal service paid by households and private entities so that a fund can be created supporting activities related to selection, collection, and recycling of waste. In particular, this fund can be used to support the activities of the informal workers, and their formalisation through schemes of micro-grants. The collective waste packaging managers can financially support the development of mentoring schemes and provide supporting equipment. Innovation funds, European funds or other external donations can be used to finance development of new product lines and services (such as smartphone app for payment of service or communication with the households).

This is a recommended scenario for the following reasons: 1) the majority of CSOs are governed by their values, not by profit. 2) due to their extensive portfolios and their humanistic orientation in the work with marginalised groups, it is less probable that the disadvantaged people will be abused for the benefits of the management.

Scenario 5: Employment in the public communal enterprises as waste collectors based on creation of new operational unit

PURPOSE: Absorption of the informal waste pickers in the primary actors of the waste management chain.

All previous attempts to formalise the informal waste sector were facilitated through the public enterprises with the obligation to provide communal waste collection in a certain municipality. These entities have the human and technical capacities that rarely other entity poses, they have tested and established collection system that is improved with the years through trial and error and they have the basic interest in improving their performance.

POSITIVE ASPECTS: There is knowledge of previous practices that can be utilised and put into a new context. The public communal enterprise from Skopje has the first-hand experience in direct work with informal pickers. They have awareness of the barriers that hindered previous attempts to become standardised practice. In addition, they are aware of the necessary mentorship work need for the informal pickers (training and life coaching). If know-how is combined with the human and technical capacities of the public entities and proper mentoring schemes guide the workers, the impact could be more sustainable than previously achieved.

NEGATIVE ASPECTS: The public communal enterprises are facing over employment and without secured subsidy or external donation it is difficult to expect their involvement in such venture. In their view, there is a limited scope of involvement of informal pickers in the public waste collection system. For example, in the city of Skopje, this number is limited to maximum 50 persons and even less in the smaller cities. Then, there is a danger of jeopardising the invested efforts in a similar fashion as with the previous projects. Moreover, these entities lack transparency and are perceived as inefficient and misused in the political bargains, as a result, these workers can easily be a target for political manipulation.

ANY SELECTED SCENARIO SHOULD BE COUPLED WITH THE FOLLOWING ELEMENTS:

- ◆ Introduction of a Mentoring program which will be based on the case management methodology (individual approach and development of a program that will be aligned with the needs of the individual marginalised person). It is very important to access the current capacity of the marginalised person, his/her values, and needs, including the external factors that affect his/her process of re-integration and professional orientation. Based on these factors the individual program will be developed. The program should be obligatory and followed by a system for monitoring and evaluation in order to access its impact and ensure successful replication. The program needs to be licensed by competent public bodies in the country.
- ◆ Due to a large number of informal waste collectors and the limited amount of communal waste produced in the country, along with other ongoing policy initiatives such as the establishment of regional landfills that exclude the informal waste collectors, centres for professional (re)orientation should be established. These centres should respond to the demand of the labour market and reduce the structural unemployment in the country. These centres should be located in cities where large numbers of informal waste collectors are identified and they should create training programs for deficient job profiles and align the needs and capacities of the workers with the local market demand.

4. RECOMMENDATIONS: HOW TO SUPPORT THE MORE THROUGHOUT OPERATION OF INFORMAL PICKERS IN THE WASTE MANAGEMENT SYSTEM?

- new financing schemes, subsidies (such as “grace period” for social benefits for a period of one year with gradual decreasing of contribution from the state, if the picker remains in employment;
- re-designing of active labour market measures, and providing opportunities and access for this target group to engage in education, training, internship, on-site training, in particular, to support the inclusion of women in the labour market;
- financial incentives for new SEs or social businesses that employ informal pickers;
- introduction of a new tax on waste for households and companies up to two percent of the waste communal tax, with tax exemptions for households with lower social status;
- increasing the competition in the waste collection process and increasing the role of private operators in diverse segments of the waste collection (dividing segments of waste collection, such as bio-degradable and non-degradable communal waste);
- increased efforts in reorganising the operation of the public waste collection institution;
- redesigning the waste collection fee to promote fair share among stakeholders included in the communal waste collection;
- encouraging the primary selection of waste and door-to-door communication between informal pickers or their representative entity and, households and companies;
- developing mentoring and professional (re)orientation schemes for absorption in other working sectors;
- sustaining employment for families so that children can return to school and continue with education;
- a holistic approach to addressing the needs of pickers: housing and education, children, in particular, will need to have access to the resources they need to enable them to stay away from waste picking;
- supporting families that need assistance in children care, in particular to those lacking access to kindergarten;
- piloting one selected scenario, preferably supporting a CSO to create SEs with focus on inclusion of informal pickers in the waste management system in a smaller municipality with a public waste enterprise and mapped CSO whose mission is to work with marginalised groups.

HELPFUL STRATEGIES

- encouraging households to donate their recyclables to legal representatives of informal pickers (housing condominiums) and raise their awareness of the need to primarily select the waste they generate and the impact they make towards the family income of the informal pickers. Also, think of strategies to motivate people to get engaged, and how could informal pickers help the households;
- encouraging companies to donate their commercial waste directly to the entities of informal pickers, and also to think of strategies to acknowledge those acting in socially responsible manner;
- encouraging direct purchasing of materials from associations of other entities of informal pickers;
- encouraging CSOs to engage in sharing know-how and develop mentoring schemes for personal development of involved informal pickers;
- encouraging collective waste managers to engage in sharing know-how on training for informal pickers on the proper treatment of waste, materials preparation, work hazards;
- supplying machinery and work equipment (uniforms and safety gear, presses, transport vehicles, etc.) but after creating a system of operation for informal pickers.

CONCLUSION AND WAY FORWARD

The current barriers in the operations of the informal pickers on both macro and micro level need to be addressed. Changes in the legal framework on local level regulating the waste collection need to be initiated. Organisations or legal representation of informal pickers need to be recognised as partners to the public communal enterprises or other authorised entities in collecting a fraction of the communal waste generated from the households, such as non-degradable waste. Organisations or legal representation of informal pickers need to be compensated for the service, either through the same communal tax currently paid by households or by a different method of fair division of operating costs between the public communal enterprises and the legal representation of the informal pickers.

There is a need for the introduction of a legal obligation for citizens to segregate waste at the sources into bio-degradable and non-bio-degradable fractions so that the inclusion of any legal form of informal picker is rational and sustained with the objective of having an access to the waste material at the source of generation. This will ensure that an introduction of door-to-door strategy for dry waste collection is feasible. The door-to-door strategy is believed to increase the volumes of collected waste and reduces operational costs for both the public and private entities included in the waste management system, thereby cutting greenhouse gas emissions by reducing truck traffic. The door-to-door approach utilised by informal pickers, increases system efficiency, by avoiding costs and energy use for mixed waste collection and transportation, and by reducing dirt and contamination in the recyclables that arrive at the sorting sheds³¹. It has proven effective to divert significant volumes of recyclable materials from disposal, which is most needed in the context of Macedonia where large disposal sites are environmental hazards. In addition, municipal/ governmental support is needed in instituting collection hubs or transfer sites where recyclables will be sorted and prepared for further inclusion in the waste management system as well as in developing funding schemes that would allow access of these entities to capital and infrastructure facility for further development. One source for local income in this field could be through a newly introduced communal tax of two percent of the costs paid by households for supporting the activities of informal pickers (formalisation, operation, mentorship, etc.). Support from international donors is deemed necessary in piloting this system while funds from the local authorities can in later stages fill in the gaps in the provision of service. These entities should be allowed to develop and open new services and products, such as baled plastic or products from plastic, as furniture. We recently welcomed the news that public buses in London will run on spent coffee grounds³².

Regardless of the form of legal operation of the informal pickers, in SEs or cooperatives or social business or a CSO as a mediator, it is important that informal pickers themselves have understood the need for such a form. The creation of self-confidence and trust between informal sector workers is recognised as a precondition for formalisation, in particular in the building of a system that is based on solidarity. The legal representation of informal pickers needs to include them in the management and operation so that disparities in power are not jeopardising the system. Important leaders from the community need to be engaged as an advocate that would build trust between institutions and informal pickers. Finally, they should be mentored/supported in the daily operation of the entity, including envisioning development scenarios for extending services as well as in the personal development of the final pickers to attain a new job and retain within the profile of informal pickers without a stigma and with the health and social security they aspire for.

In order to treat the issue holistically, it is necessary to assist the informal sector to have access to employment and alternative livelihood opportunities, to ensure that children of informal pickers are enrolled in the formal educational curricula and have access to decent housing.

The studied population is under the risk of remaining a long-term beneficiary of social assistance or generate new cases in a need for state support. In accordance with the holistic approach to social work, the families and the individuals need to be under an “umbrella” social protection in collaboration with the Centers for Social Work. We should not be interested only in securing employment and the employability of this group but also of other detrimental social effects of poverty, vulnerability and inequality.

Finally, it seems that again we will be triggered to learn from “trial and error” in implementing any scenario but for a start, it is feasible to test it in a smaller municipality in Macedonia rather than the city of Skopje where the majority of informal waste pickers operate.

³¹ Rutkowski, E.J. and Rutkowski, W.E. (2015) “Expanding worldwide urban solid waste recycling: The Brazilian social technology in waste pickers inclusion”, *Waste Management & Research*, 33(12): 1084-1093.

³² Grub Street (2017) London Will Start Powering Public Buses With Coffee Grounds. [online]

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Appendix 1

Table 1: List of interviewed informal waste pickers

| No of respondent | Demography | City |
|------------------|---|----------|
| 1 | Ali, Male, 38 years, Roma, married with two children, unemployed | Kumanovo |
| 2 | Hanume, Female, 48 years, Roma, widow with six children, unemployed | Kumanovo |
| 3 | Ridvan, Male, 13 years, Roma, included in educational system, living with both parents and seven brothers and sisters | Kumanovo |
| 4 | Sadik, Male, Roma, widow, with one child | Kumanovo |
| 5 | Stana, Female, 43 years, Roma, married with 11 children | |
| 6 | Elvira, Female, 39 years, Roma, married with four children | Kumanovo |
| 7 | Rafael, Male, 17 years, Roma, lives with his mother and five brothers and sisters, finished 7th-grade primary school | Kumanovo |
| 8 | Sherif, Male, 36 years, Roma, married with eight children | Kumanovo |
| 9 | Trajanka, Female, 53 years, Roma, married with two children, currently lives alone with her husband | Kumanovo |
| 10 | Tevilja, Female, 40 years, Roma, married with three children | Kumanovo |
| 11 | N.N., Male, 34 years, Roma, married with one child | Kumanovo |
| 12 | N.N., Male, 47 years, Roma, married with four children | Kumanovo |
| 13 | N.N., Male, 52 years, Roma, married with five children, currently lives with his wife alone | Kumanovo |
| 14 | N.N., Female, 31 years, Roma, married with five children | Kumanovo |
| 15 | Nedzmije, Female, 60 years, Roma, widow with seven children, currently lives alone | Kumanovo |
| 16 | Nazli, Female, 39 years, Roma, married with eight children, two are married and live apart | Kumanovo |
| 17 | Dragi, Male, 15 years, Roma, lives with parents, grandmother and seven brothers and sisters, finished primary school | Kumanovo |
| 18 | Samuil, Male, 13 years, Roma, lives with parents and seven brothers and sisters, finished only 1st-grade primary school | Kumanovo |
| 19 | N.N., Female, 36 years, Roma, lives with her father and is a legal guardian of her sister's child | Kumanovo |
| 20 | N.N., Male, 48 years, Roma, married with four children | Kumanovo |
| 21 | N.N., Male, 18 years, Roma, single, finished high school | Shtip |
| 22 | Ali, Male, 33 years, Roma, married with three children | Shtip |
| 23 | Rukija, Female, 28 years, Roma, divorced with eight children | Shtip |
| 24 | Hasan, Male, 31 years, Roma, married with four children | Shtip |
| 25 | Dumush, Male, 15 years, Roma, finished 9th-grade primary school, single | Shtip |
| 26 | Adam, Male, 45 years, Roma, married with three children | Shtip |
| 27 | Elvis, Male, 36 years, Roma, married with four children | Shtip |
| 28 | Fatima, Female, 30 years, Roma, married with three children | Shtip |
| 29 | Salie, Female, 61 years, Roma, married with six children, currently lives with husband and two children | Shtip |
| 30 | Safie, Female, 31 years, Roma, married with three children | Shtip |
| 31 | Omer, Male, 17 years, Roma, never been to school, single | Shtip |
| 32 | Emidze, Female, 26 years, Roma, married with four children | Shtip |
| 33 | Muhredin, Male, 60 years, Roma, married with three children | Shtip |
| 34 | Vildana, Female, 44 years, Roma, married with five children | Shtip |
| 35 | Tezgula, Female, 32 years, Roma, married with six children | Shtip |
| 36 | Tarif, Female, 51 years, Roma, married with five children | Shtip |
| 37 | Djengis, Male, 26 years, Roma, married with four children | Shtip |
| 38 | Ahmet, Male, 29 years, Roma, married with three children | Shtip |
| 39 | N.N., Male, 27 years, Roma, married with five children | Shtip |
| 40 | N.N., Male, 60 years, Roma, widow with four children | Skopje |
| 41 | N.N., Male, 29 years, Roma, married with four children, lives also with parents | Skopje |
| 42 | N.N., Male, 24 years, Roma, married with three children, 17 members of the family | Skopje |
| 43 | N.N., Female, 58 years, Roma, widow, lives with her minor granddaughter | Skopje |
| 44 | N.N., Female, 38 years, Roma, living in partnership community with five children | Skopje |
| 45 | Nehran, Male, 28 years, Roma, married with three children | Skopje |
| 46 | Bajram, Male, 44 years, Roma, married with seven children | Skopje |

| | | |
|----|---|--------|
| 47 | Gjulka, Female, 40 years, Roma, married, lives in a three-member family | Skopje |
| 48 | Abidi, Male, 18 years, Roma, single, never been to school | Skopje |
| 49 | Amet, Male, 31 years, Roma, married with six children | Skopje |
| 50 | Valentina, Female, 29 years, Roma, married with five children | Skopje |
| 51 | Isin, Male, 19 years, Roma, single, never been to school | Skopje |
| 52 | Minara, Female, 45 years, Roma, married with three children | Skopje |
| 53 | Sevdi, Male, 16 years, Roma, single, going to night school | Skopje |
| 54 | Magbule, Female, 31 years, Roma, married with five children | Skopje |
| 55 | Gjula, Female, 50 years, Roma, widow with nine children | Skopje |
| 56 | Djulieta, Female, 18 years, Roma, married with two children, never been to school | Skopje |
| 57 | Birsad, Dz., Male, 28 years, Roma, married with four children | Skopje |
| 58 | Djafer, Male, 35 years, Roma, married with seven children | Skopje |
| 59 | Sadik, Male, 53 years, Roma, married with two children, lives in seven-member family | Skopje |
| 60 | Elvira, Female, 27 years, Roma, married with three children | Skopje |
| 61 | Djafer, L., Male, 50 years, Roma, married with four children | Skopje |
| 62 | N.N., Male, 50 years, Roma, married with four children | Skopje |
| 63 | Safet, Male, 34 years, Roma, married with four children | Skopje |
| 64 | Ramize, Female, 55 years, Roma, married with seven children but currently lives alone | Skopje |
| 65 | Bajram, Male, 43 years, Roma, married with five children | Skopje |
| 66 | Sebastijan, Male, 49 years, Roma, married with five children | Skopje |
| 67 | Bajram, Male, 36 years, Roma, married with four children | Skopje |
| 68 | Shemsade, Female, 54 years, Roma, widow with three children | Skopje |
| 69 | Erdzan, Male, 24 years, Roma, married with two children | Skopje |
| 70 | Suhamet, Male, 20 years, Roma, married with two children | Skopje |

Table 2: List of interviewed experts

| No of respondent | Name and surname | Date of interview |
|------------------|--|-------------------|
| 1 | Eleonora Nikolovska, Manager, Unit for Social Protection, City of Skopje | 30.10.2017 |
| 2 | Marjancho Dameski, Manager, "Nula otpad" | 01.11.2017 |
| 3 | Ana Karanfilova-Maznevaska, Manager, Unit for waste management, Ministry of Environmental and Physical Planning | 02.11.2017 |
| 4 | Sanela Shkrielj, Advisor, Ministry of Labour and Social Policy | 07.11.2017 |
| 5 | Blazhe Josifovski, President of "Ajde Makedonija" | 07.11.2017 |
| 6 | Igor Makaloski, Operation Manager, "Pakomak" | 07.11.2017 |
| 7 | Zurija Sait, Advisor, Ministry without Portfolio in the Government of the Republic of Macedonia, in charge of implementation of the National Strategy for Roma | 09.11.2017 |
| 8 | Dobre Bosilkovski, Manager, Public communal enterprise "Komunalna higijena" Skopje | 09.11.2017 |
| 9 | Sasho Petrushevski, Manager, Public communal enterprise "Chistota i zelenilo" Kumanovo | 10.11.2017 |
| 10 | Zoran Shapurikj, Professor on environmental issues, American College, Skopje | 14.11.2017 |
| 11 | Arijan Toska, Executive Manager of "MDC-Ti Net" | 17.11.2017 |
| 12 | Biljana Dukovska, President of "Macedonian Platform against Poverty" | 20.11.2017 |
| 13 | Zorica Meshkova, Advisor, Association of secondary materials and recyclers, as part of the Macedonian Chamber of Commerce | 22.11.2017 |

Table 3: List of interviewed managers of junkyards and recycling facilities

| No of respondent | Name and surname | Date of interview |
|------------------|--|-------------------|
| 1 | Murtizan, A., owner of informal junkyard, Shtip | 16.10.2017 |
| 2 | Demir, owner of informal junkyard, Shtip | 16.10.2017 |
| 3 | Serdzan, owner of informal junkyard, Shtip | 16.10.2017 |
| 4 | Lazar Tashevski, owner of registered junkyard, "Kusur komerc", Kumanovo | 23.10.2017 |
| 5 | Goran Stefchevski, owner of registered junkyard, Kumanovo | 23.10.2017 |
| 6 | Biljana Dimovska, Finance and administration, "Nutri vet" Protective company, Skopje | 14.11.2017 |

