



# Economic and Social Assessment of Informal Waste Collectors in Serbia



Шведска  
Sverige

Hilfe zur Selbsthilfe

**Help**



**Research Results:**

**“ECONOMIC AND SOCIAL ASSESSMENT OF  
INFORMAL WASTE COLLECTORS IN SERBIA”**

**Publisher:**

**“Help - HilfezurSelbsthilfe” e.V.  
Mission to the Republic of Serbia  
Učiteljska 52, 11000 Beograd  
[www.help-serbia.org.rs](http://www.help-serbia.org.rs)**

**Author:**

**Centre for social and applied research  
Faculty of Political Sciences  
University of Belgrade**

**This publication has been produced with  
the financial assistance of the Swedish  
International Development Cooperation Agency Sida.**

**The contents of this publication are the sole responsibility of  
the author and can in no way be taken to reflect the views of the Donor.**

**Belgrade, 2017.**



# **Analytical Report**

## **Economic and Social Assessment of Informal Waste Collectors in Serbia**

December 2017

## Introduction

The assessment includes estimation and evaluation based on the empirical evidence and it is made to achieve two main goals. The first goal was **the estimation of the overall situation about the waste management and waste collectors** in the referent municipalities, specifically, and the second goal was to propose, based on the analysis, **the action/measures that could contribute to the inclusion of informal waste collectors into the formal employment sector**. In order to do so, we clearly defined the main and specific research questions.

### **GENERAL QUESTION1: What are the characteristics, experiences and socio-economic conditions of waste collectors in 23 municipalities in Serbia?**

#### SPECIFIC QUESTIONS:

1. How many persons/families are involved in waste collections in each municipality?
2. What is a gender structure, and/or what is a gender division of work in regard to waste collection?
3. What are the demographic and other characteristics of collectors?
4. What kind of waste they collect (structure of waste which is the object of collection)?
5. Where do collectors find waste?
6. What is their overall experience in collecting waste (including main problems they face)?
7. What are the techniques of waste collection?
8. What do collectors do with waste (the issue of disposal included)?
9. How much do they earn weekly/monthly by collecting waste (including the estimation of seasonal variations)?
10. What are the economic, social and living conditions of collectors?
11. What is the health condition of collectors, including health risks estimation acquainted with the collection process?
12. What kind of communication and cooperation (if any) do collectors have with private firms, agencies and/or public institution representatives?
13. Are collectors motivated to transform their collection business into formal sector (if yes, what would the preconditions and estimated obstacles be)?
14. Are there any additional gender-sensitive peculiarities regarding waste collection?

Our second targeted group of respondents was the representatives of the municipalities who were involved in the ecological and/or social inclusion issues, as well as the state representatives, i.e. the employed in the Government bodies and agencies. Having in mind their experience regarding waste management, we assumed that they could provide us with some significant insights.

### **GENERAL QUESTION2: What are the experiences and estimations of the municipality and state representatives regarding waste collection and waste management?**

#### **SPECIFIC QUESTIONS:**

1. What are the strategies of waste management at the municipal level?
2. What are the characteristics and main obstacles regarding waste management?
3. Is there any communication/cooperation with waste collectors in the municipality?
4. How do the state and municipal representatives see the possibility of introducing waste collectors into the formal employment sector?
5. Is there any state strategy, and what lessons can we learn from it?

The research was conducted in 23 municipalities in Serbia: Alibunar, Arilje, Babušnica, Bela Palanka, Čačak, Čajetina, Dimitrovgrad, Ivanjica, Pirot, Požega, Šid, Sremska Mitrovica, Užice, Vladičin Han, Vranje, Bogatić, Kovin, Pančevo, Šabac and Opovo<sup>1</sup>. Since there is no solid evidence of IWC and their distribution, the sampling strategy was not a matter of choice, i.e. we had to use **non-probability sampling strategy**. More specifically, we used **a snowball sampling**.

### **Main characteristics of the waste system**

In general, waste disposal is organized at the municipal level by the Public Utility Company (PUC)<sup>2</sup>, which is the cornerstone of the entire system. Additionally, in most of the municipalities waste separation and disposal are often done in an unorganized manner by private collectors, private landfills and private

---

<sup>1</sup> Municipalities were chosen by certain criteria which are not part of the research design

<sup>2</sup> In each municipality, we have a PUC as a part of traditional structure of waste management. This company is organized in the same manner in each municipality and it is under the authority of local government.

companies which conduct separation and recycling (Pančevo<sup>3</sup> is an exception). The main problem is the fact that there is no organized strategy of waste management, which leads to different practices – although to almost the same problems in all the municipalities. It can generally be said that **there is a traditional waste collection system which needs to be significantly improved**. The system, as such is mostly based on a rather unorganized partnership between the public and private sector.

We also found that there is a number of **wild landfills** in almost all the municipalities<sup>4</sup>. They arise for two reasons. This happens, due to the lack of regular sanitary regulated landfill, in a certain settlement and area; as well as due to the carelessness of citizens. Citizens throw their waste almost anywhere they want, which is a particularly noticeable problem in villages and mountain areas.

The lack of waste separation was emphasized by interviewees in almost all the municipalities. Since the only organized way of waste disposal is the traditional model done by the PUC, under which any kind of material is disposed into containers, the separation of waste disposed in containers is a hard task. Almost all the interviewees stressed the **importance of primary waste separation**, although this model is organized only in few municipalities, and it is even not developed on the entire territory of the municipality, but mostly in the wider city center.

Furthermore, the issue of **low awareness of citizens** was mentioned in almost all the municipalities. It was stressed that even in the situation where containers and modes of disposal existed; people disposed their waste in an inappropriate manner. This is why the issue of rising awareness was underlined so many times during the interviews.

The main problem for private firms working with waste collection and separation are **strict standards and rules**, on one side, and low purchase price of waste which result in zero or **very low profitability of the business**, on the other side. Therefore, as the company representatives said, they perform hard job under strict laws and regulations, but generating small profit. Additionally, those entrepreneurs owning their own landfill face a problem of waste being stolen from their landfills<sup>5</sup>.

---

<sup>3</sup> In many aspects, Pančevo is a special case. This municipality is very progressive and organized while talking about waste management and it might be useful to realize a case study of Pačevo, separately.

<sup>4</sup> Word 'dump' could be more appropriate for the wild landfills.

<sup>5</sup> It was not said openly, but they assume that it is done by Roma informal collectors.

What should also be emphasized when it comes to informal collectors is the fact that **there are many citizens in almost all the municipalities which deliver some SRM to the private companies** registered for collection, separation and recycling. Hence, many people deliver their own waste during the year, but they are not collectors. It is noticeable that the number of Roma and other private independent collectors is smaller in the municipalities in which private companies who collect SRM are active.

Another problem is that in many cases there is **no documentation of the origin of the collected SRM** due to the absence of the regulations on the informal collection<sup>6</sup>. In practice, it happened that the **delivered SRM had been stolen from somewhere**, which produced additional expenses and financial loss to private entrepreneurs who paid the SRM to a collector, but could not sell it. They simply delivered the stolen SRM, which they paid for, to the inspection services and authorities.

It is also noted that some rather **stable agreements regarding the collection of SRM exist between registered collecting companies and private firms**. This is particularly the case when SRM is a regular output of the production process, such as in the wood industry which delivers sawdust to recycling companies. In these cases, a private company which collects SRM goes to a production company, not *vice versa*.

Independent collectors, **mostly Roma**, are unevenly present in the referent municipalities. **They mostly work without any kind of license or permission**. Besides, the amount of deliveries which they collect is **relatively small**. They have two sources of collection. The first are **landfills, dumps, and containers**. They usually look for **metal** there, since it is the most profitable SRM. One of the noted problems is that they sometimes **make fire on the dump in order to reach the metal** as fast as possible. The second source is the collection from households, which is a less present collection practice, as claimed in most of the interviews. The reason for this is the fact that there are one or a few registered companies for SRM collection in most of the municipalities, hence citizens occasionally deliver SRM in person to them.

When it comes to independent collectors, another important aspect of their waste collection is that **they use their own personal vehicles of different kind, usually of small capacity, for these purposes**. This practice in many cases results in the collectors' **temporary disposal of SRM in their own yards**, until a significant amount of waste is collected to be sold later. Such

---

<sup>6</sup> It should be noted that developed countries faces the same problem in this regard

collectors' practice produces many ecological problems, but it **primarily represents a risk to their own health and the health of their family members.**

Another problem in regard to informal independent collectors is the fact that **they use containers of the PUC as a source of the SRM.** The important note is that, once delivered into containers, the SRM belongs to the PUC. In other words, they "steal" the disposed SRM from the containers of the PUC in order to deliver/sell the collected SRM to the very same PUC.

Regarding the one's **possibility to register a business based on independent SRM collection, most interviewees stressed that this was not an acceptable solution,** mainly because **this business would not be financially sustainable on an individual basis.** Additionally, it is claimed that the legislation in the ecological area is very rigid and complex for independent collectors. Moreover, it is claimed that the paperwork itself is complex and expensive. In sum, according to the interviewees, it could be said that **the only solution would be the establishment of some kind of association of informal collectors at the municipal level.** This association could receive support from the municipality and it could be organized in such a way to enable the members to share the resources they obtained from the municipality. This is particularly the case when it comes to the common space for the disposal and organized purchase of collected SRM. The main advantage of such possible solution would be a better control and waste management, which would certainly represent an important benefit from the ecological point of view. Additionally, a number of individuals, mostly Roma, would be involved into the formal sector, meaning that the issue of inclusion would also be improved.

In sum, main findings regarding waste management in the referent municipalities can be summarized in the following lines:

1. A traditional system of waste disposal needs improvements
2. Many dumps which need a sustainable sanitary solution
3. Low awareness among the citizens
4. Better organization needed to improve efficiency
5. No separation at the primary level
6. Difficulties in separation at the secondary level
7. Inadequate rules and regulations
8. Low profitability for entrepreneurs
9. Problem of territorial coverage, i.e. the existence of wild landfills
10. Absence of licensing of independent collectors (informal sector)
11. Independent collectors' low transportation capacities



12. Informal collectors mostly use landfills, dumps and containers as a source of SRM
13. Informal collectors have direct cooperation with private firms registered for the collection of SRM
14. Informal collectors do not have almost any cooperation with municipal public structures
15. Informal collectors sometimes use their own yards as dumps, where the SRM is collected by some registered enterprise
16. It is estimated that informal collectors earn small amount of money for the collection
17. Collecting SRM is risky for the health of informal collectors and their family members

## Informal Waste Collectors Situation and Perspective

The overall income of the IWC's households varies between 2.000 and 100.000 dinars per month. So, this is a rather huge variation with mean value of 20.093 dinars and median 17.000 dinars. However, if we divide the income with a number of household members, we can see that the mean value is 5.352 dinars, and median 3.750 dinars per month. Finally, we get a more accurate picture if we produce four categories of income per household member, as presented in. In more than 45% of cases, the income is less than 3.500 dinars per household member, which is a clear indicator of a very low material status of the respondents. Only in 8.3% of cases, the *per capita* income is more than 10.000 dinars, which can be estimated as rather "reasonable". However, even if it is 10.000 dinars per member monthly, the spending level of 333 dinars per family member a day can easily be calculated. This calculus should be reduced for the household regular expenses (heating, electricity, water supply, etc.). If the same calculus is to be applied onto those who earn less than 3,500 dinars per person monthly, we would find that their living resource is 116 dinars per person daily, once again, without calculating additional common household expenses. Thus, **when speaking about independent collectors of SRM, we are dealing with almost extremely poor people.**

As for the nature of this job, interviews clearly show that collecting the material is a hard job followed by many problems and uncertainty. Hence, one of the main phrases which appeared during the interviews was: "You never know what to expect". This finding is consistent with the results of a survey research when respondents were asked about the satisfaction with their job. It is clear that they are not happy and satisfied with the job of collection of SRM. Therefore, collecting SRM is not a sort of choice for them; **in most of the cases,**

**collection of SRM for IWCs is a survival strategy.** They simply do this job in order to provide minimum financial resources for living.

There are two, rather regular, patterns of starting to collect SRM. First, it is a kind of **family business**. In other words, many started collecting waste when they were kids with older family members. Second, it is the outcome of **losing a regular job** they used to have. After being left without regular income in the formal sector, they were forced to start collecting SRM. The survey research also confirmed that **collection of SRM is a kind of family survival strategy**. In almost a half of the cases, the father of respondents did the same job, while more than 70% of children were included in collection of SRM. The wife is also engaged in so many cases. In other words, **if there were a suggestion that collection of SRM should be switched into the formal sector, such a suggestion would have to take into account that this would affect the whole families**. The issue of child labor should be considered and addressed as a particularly sensitive one in this regard.

**Informal collectors are experienced in doing this job.** In average, they collect raw material 12.2 years (median = 10 years). Categorizing them, we can see that only 28% of them have been doing this job for less than 6 years. If we simply divide the number of years collecting with a total number of years of life, we can see that the respondents have in average spent 31% of their life by doing this job.

We found that almost half of informal collectors do this job every day, with more than 30% of them collecting almost every day. Therefore, it can be said that **in most of the cases collecting raw material is a regular and a main job for our respondents**. However, there is a gender discrepancy in this regard since male collectors do this job more regularly comparing to female ones.

Regarding the working hours, we identify that **most of respondents collect SRM between 4 and 9 hours every day**. However, we note that more than 18% of them work more than 10 hours each day

**One of the main problems in the process of collection of SRM was transportation.** We estimate what kind of a strategy is used for collecting and transporting SRM. The most usual way is by using a manual trolley<sup>7</sup>. Also, a bicycle and a car with a trunk are also used in many cases. Hence, it could be said that the collection and transportation of the SRM is done at a very rudimentary level. Also, it is clear that such a way of transportation limits the amount of collected SRM.

---

<sup>7</sup> Handcart or pushcart

**Independent collectors collect iron and metal in most of the cases.** The policy makers said that this material was the most profitable. A plastic is somehow collected more frequently than paper and cardboard. Those who do not collect any of these items specified that they collected car batteries and glass, which, however, were not so frequent SRM.

Considering the quantity of collected SRM, we found quite large variations in each category of SRM. The results of weekly collection show that, **as for collecting paper and cardboard, more than 70% of collectors collect less than 160 kilograms, and only 13% collect more than 384 kilograms per week.**

On the other hand, the estimation tells us that the **most usual amount of collected iron and metal (2/3 of the cases) is less than 175 kilograms a week**, while only 11.5% of collectors deliver more than 465 kilograms. Finally, again **around 70% of collectors deliver less than 78 kilograms of plastics weekly**, while less than 10% collect more than 187 kilograms of this raw material.

In sum, a **total amount of the collected SRM is in average relatively small for each category of SRM.** If reported correctly,<sup>8</sup> **it is questionable if a reasonable amount of SRM, needed for substantive business, at all exists in the field.** For example, if 200 kilograms of metal is collected a week, that would be less than 3.000 dinars earned, which is around 12.000 dinars of monthly pay. This estimation is supported by the **income reported by the respondents, which is 3.634 dinars in average** (median=2.500). According to the data, 43% of collectors earn less than 2.000 dinars a week, which is indeed a small amount according to any reasonable criteria. Additionally, we note that female collectors weekly earn less money than male collectors.

Speaking about **the main factors that affected the SRM collection income** we got almost the same answer both in the interviews and in the questionnaires. Therefore, the **main factor is the amount of SRM that can be found.** It was said that the amount had decreased in last few years<sup>9</sup>, and that in the future would be rather uncertain if this trend continued. In this regard, the collectors said that **providing the source of the SRM** for the collectors would be one of the biggest help they could get. Besides, strong **competition** among collectors was noticed, which makes finding "new spots" where SRM can be collected one of the main operative tasks of collectors.

---

<sup>8</sup> We can assume the estimated amount by the collectors is for "many reasons" diminished when reporting.

<sup>9</sup> No one explained why it is decreased, apart from the competition argument.

**Finding sources of SRM is one of the most important aspects of the collection job.** The interviewees emphasized many times that they needed to continually look for new spots and places, and that every “good spot” was often exposed to competition. According to the data, **the most usual sources of SRM are landfills, dumps and containers, followed by.** Hence, one of the reasons for which the weather conditions are so important is the fact that **bad weather heavily influences the work on the dumps and landfills.** Moreover, during the interviews with public and private representatives, **three important aspects of collecting SRM on landfills and containers were stressed.** First, this is **an illegal** thing to do, and collectors are occasionally exposed to penalties. Second, collectors sometimes **make fire on dumps in order to reach metal** as soon as possible, which is a problematic practice from the ecological and health point of view. Third, collecting from containers **is practically “stealing”,** since containers and their contents belong to the PUC.

It is interesting to note that those who collect from households **in most cases take SRM from different people.** In other words, they constantly circulate and communicate in different areas looking for SRM, which increases potential risks when encountering new people. Additionally, we found that in most cases with this kind of collection **they pay for SRM in cash at once.** The problem with collection in households is twofold. First, collectors are often more **exposed to verbal and sometimes physical violence,** and second, they have to invest money (buying SRM), which is not the case when they collect on the landfills/dumps and from containers.

According to interviews, there are some unpleasant situations that can be identified as typical. The first one is **verbal violence,** in most cases cursing, insulting and swearing. This happens to **female Roma collectors particularly,** and insults are often on the gender basis, containing sexual harassment. Second, time **physical violence** take place from time to time, and even though it is not so brutal, it is very humiliating. An example from the interview was that youngsters grabbed a female Roma collector of SRM and dumped her into a container. Third, occasionally informal collectors face **physical injury,** particularly in cases when they work on landfills and dumps. However, there are no gender differences regarding violence according to statistics. Forth, in some cases **informal collectors face problems with police.** They are usually asked to show permission for collecting SRM, which they do not have, or the proof of the origin of the SRM, which they do not have either, and eventually, the police seize everything they collected that day. Thanks to statistics based on the survey research, we now have some more accurate estimation on unpleasant situations occurring. It seems to be that verbal violence takes place in ¼ of the cases, while physical violence is rarer. It should be noted that **violent behavior toward collectors happens more frequently in Western Serbia and**

**Vojvodina than in South-East Serbia.** In regard to the treatment of collectors by household owners who deliver the SRM, it seems that they act unpleasantly towards collectors in every tenth case.

In most of the cases, **collectors and their wives/kids do not wear proper clothing during the collection of SRM.** On the other hand, they use gloves in 2/3 of cases. Keeping in mind that they operate with dirty and sometimes hazardous material, this certainly represents a problem which might jeopardize their health.

According to data, **injures happen from time to time.** We found that in almost 30% of the cases informal collectors got small injuries (usually scratches). In addition, every **fifth collector reported that he or she had some severe injury** during his or her overall collecting experience. We note that **injuries are more frequent among those who collect metal and plastics** than among those who collect paper and cardboard, which is a quiet reasonable finding. However, there is no significant difference between men and women in regard to injuries.

**In most of cases, collectors deliver collected SRM to landfills and/or companies which collect and recycle the material.** There is no pattern in this regard, and the practice simply varies from municipality to municipality. In principle, if they have any kind of choice, collectors deliver the SRM to the spots where they can get the best price.

In majority of the cases, informal **collectors do not have problems with payment after delivering SRM.** Additionally, in most of the cases, **collectors separate SRM which is being delivered.**

It is reported that in most of the cases **redeemers act correctly towards primary collectors,** or at least, collectors have no objection to the redeemers' attitude. Additionally, men and women report on almost the same treatment by redeemers.

One of the problems is **the lack of contact between informal collectors and municipal/state representatives.** According to the interviews, this contact does not exist or is very weak. Due to the lack of such communication, there are fewer possibilities for the discussion and possible improvement of the IWCs' situation. Among those 10% who had some communication with state/municipality representatives, it is reported that the communication took place with the National Employment Service, Centre for Social Welfare, Coordinator for Roma issues, local municipality representatives, and offices for ecological issues. Specifying the contents of communication, interviewees

reported that in most of the cases the discussion was about the possible support they could get.

Speaking about the pressure and treatment by other sides, the respondents in the research reported they faced a rather **low level of pressure**. Comparatively, pressure and treatment is somehow more frequent when speaking about the police. According to those who reported pressure, there were a few things coming from all three identified sides. Hence, in most of the cases, **the pressure was faced due to the lack of licensing, firing dumps, disrespecting communal rules, not allowing the usage of landfills, as a source of SRM, delivering fines for irregular transportation of SRM.**

In most of the cases, **informal collectors neither had any kind of permission for collecting nor did they pay any kind of tax**. As stressed earlier, they operate under totally unregulated conditions.

One of the questions in the interview, and a few questions in the questionnaire were about the possibility of registering the business based on SRM collection. We emphasize that **municipal and private sector representatives expressed their opinion that this would not be possible at the individual level**. As noted earlier, they suggest the **establishment of the business based on an association of informal collectors** if possible. As for the collectors' opinion, there are different attitudes regarding the question of registering their own firm. **One (the largest) category of the respondents was strictly against this idea, claiming that it would not be financially sustainable**. The second category was simply reluctant; they did not know what to think. The third category claimed that they were considering this possibility intensively, while the fourth category said that this would be possible if they received any financial support. However, in most of cases they did have some plans for future improvements they could make. These plans were usually about some kind of investment, and in most of cases, the respondents specified that the investment would be about **improving the transportation/vehicles**.

Nevertheless, when **asked explicitly about the possibility to open their own firm, the respondents gave rather divided answers**. Many of them are simply saying that this business would not be profitable if registered, and also, many of them are willing to open their own firm if they get support.

The main reason **for not opening the firm so far** is the **financial investment that is needed**. Besides, the respondents perceived the procedure as too complicated. In addition, some collectors shared the opinion that their expenses could overcome their earnings if they registered a firm.

The main question, however, is: **would they open the firm if received support?** We encountered a positive response in many cases, but, obviously, such a response was to a large extent conditioned by a size and type of support.

Regarding the support needed for opening a firm, the interviewed collectors identified the following:

- providing a vehicle;
- providing a storage place or a landfill for the SRM;
- providing a stabile arrangement for delivering/selling SRM;
- providing better access to sources of SRM;
- providing support for the paperwork.

The evidences on the opinion towards changing the job are complementary to those about the future plans. Namely, **one third of collectors usually think about changing the job, while one quarter of respondents considers that possibility occasionally.** Others would rather continue doing their current job.

In the majority of cases, our respondents **would accept doing the collection job in some other (not their own) firm.** Therefore, it appears to be that the employment in other firm dealing with collection is not a problem for them in most of the cases.

Finally, during the interviews we asked two additional questions. The first question was about the peculiarities regarding the gender issues. According to the narratives, **women face additional burden.** Namely, they are traditionally responsible for children and housework, i.e. after collecting the SRM, they have to do the housework since it is their “natural” responsibility.

Regarding the **idea for the establishment of a regional landfill where only registered collectors could deliver SRM, we encountered different opinions.** Some informal collectors claimed that it would be a better solution, while others perceived it as the worst solution. In general, they insisted on the **purchase price.** If the price were fair and stabile, this could be a good solution for them. However, if this solution were based on the absence of completion among purchase places with a low purchase price, it would be a bad solution. In other words, if they were forced to deliver SRM to only one regional landfill without a possibility of delivering it to someone else, and additionally, if the purchase price were unfair at that regional landfill, that could be a huge problem. Additionally, it is noted that the location of a regional landfill could also be a problem since it could increase the travel expenses.

So, in conclusion, **the main findings regarding informal (mostly Roma) informal collectors** would be:

1. Absence of licensing of independent collectors (informal sector)
2. Hard unregulated working conditions
3. Small available amount of SRM in general
4. Low capacities of transportation of independent collectors
5. Informal collectors mostly use landfills, dumps and containers as a source of SRM
6. Informal collectors have direct cooperation with private firms registered for the collection of SRM
7. Informal collectors do not have almost any kind of cooperation with municipal public structures
8. Informal collectors sometimes use their own yards as dump fields, from which the SRM is collected by a registered enterprise
9. It is estimated that informal collectors earn small amount of money for the collection
10. Collecting of SRM is risky for the health for the IWC's and their family members
11. Roma collectors face verbal and occasionally even physical violence
12. Two kinds of support would be crucial for the informal collectors: assistance given to improve transportation (vehicle) and support regarding the access to raw material

It is to be said that there are no huge discrepancies among the municipalities, particularly when it comes to informal collectors. **In most of the municipalities, independent collectors face the same problems.** We stressed those problems in the above-given analysis, which portrays the situation in general, so in this very section, we will stress only the most prominent aspects with some additional description. On the other hand, if the differences among collectors exist, they are not the effect of municipalities, but they are the effect of the specific situation concerning informal collectors. For example, those who own a motor vehicle report on the problem of gas price as the biggest cost/problem, regardless in which municipality they live and operate. On the other hand, those who work with handbags and bicycles do not have transportation costs, but they are limited with the quantity of the SRM that they can collect, and additionally, they are exposed to risk in traffic; and again, it has nothing to do with the municipalities, but with their model of transportation.

Finally we present in the Table 1 **some differences among municipalities.**



Table 3 Municipal overview based on the frequency and magnitude of the main aspects

	Waste management system	Problem with unsanitary dumps	Communication between actors	Number of informal collectors	Problem of mistreatment of IWCs by the majority	Problem of treatment of IWCs by the police and inspection	Gender differences/issues	Competition problems among collectors	Establishing own business	The idea of regional landfill
<b>Alibunar</b>	Advanced	Big problem	Bad	High	No	No	No	Small	No	No
<b>Arilje</b>	Improved	Big problem	Average	Ambiguous estimation	No	Problem	Yes	High	No	No
<b>Babušnica</b>	Traditional	Not reported	Not existing	Ambiguous estimation	No	No	No	No	Yes	No
<b>Bela Palanka</b>	Traditional	Not reported	Bad	High	No	Problem	No	High	Condition	No
<b>Bogatić</b>	Bad	Huge problem	Not existing	Average	Problem	Problem	No	Small	Yes	No
<b>Čačak</b>	Advanced	Problem	Average	Average	Problem	Problem	No	High	Yes/No	No
<b>Čajetina</b>	Improved	No	Good	No collectors	N/A	N/A	N/A	N/A	No	?
<b>Dimitrovgrad</b>	Improved	Not reported	Average	Small	No	Problem	No	No	Yes/No	No
<b>Ivanjica</b>	Traditional	Not reported	Average	Small	Big problem	No	No	No	Condition	No
<b>Kosjerić</b>	Bad	Problem	Bad	No collectors	N/A	N/A	N/A	N/A	N/A	N/A
<b>Kovin</b>	Solid	Problem	Average	Average	Big problem	No	No	High	Condition	No
<b>Lučani</b>	Solid	Not reported	Average	Small	N/A	N/A	N/A	N/A	N/A	N/A
<b>Opovo</b>	Solid	Problem	Average	Small	No	No	No	No	No	?
<b>Pančevo</b>	Superior	No	Good	High	Problem	No	No	Huge	Condition	No
<b>Pirot</b>	Improved	No	Good	High	No	No	No	Huge	Condition	?
<b>Požega</b>	Solid	Problem	Average	Average	No	No	No	High	Condition	Yes if...
<b>Šabac</b>	Solid	No	Average	High	Problem	No	No	Huge	Condition	No
<b>Šid</b>	Solid	Problem	Average	Average	No	No	No	High	Condition	No
<b>Sremska Mitrovica</b>	Improved	No	Good	High	Big problem	Problem	No	Huge	Condition	Yes
<b>Užice</b>	Traditional	Problem	Average	Small	No	No	No	No	No	No
<b>Vladičin Han</b>	Bad	Problem	Bad	High	No	Not at all	No	Huge	Condition	No
<b>Vranje</b>	Traditional	Problem	Bad	High	No	Problem	No	Huge	Condition	No

## RECCOMENDATIONS

According to municipal and private firm representatives, the best solution in terms of legalization of the business of the collection of the SRM would be **establishing some kind of association among informal SRM collectors**. If we are to consider this possibility from the legal and operational point of view, we present the recommendations in the following pages.

### *1. The issue of laws and regulations regarding establishing the association of the SRM collectors*

For the purpose of improving the situation of SRM collectors, the best approach would be **to establish an association /organization of secondary raw material collectors**<sup>10</sup>. Legal basis for the establishment of the Association is the Law on Associations from 2009.<sup>11</sup> Such an association would have the character of a non-profit organization, that is, an association whose goal is not gaining profit. According to this Law, the association is a voluntary, non-governmental and non-profit organization based on the freedom of association of several natural or legal persons established for the purpose of achieving and promoting a particular or general goal or interest which is not prohibited by the Constitution or by the Law. Association may be established by at least three founders, with at least one of the founders having a permanent residence, or seat in the territory of the Republic of Serbia. Registration of the association is voluntary, but the association acquires the status of a legal entity only by registration in the registry managed by the Business Register Agency. According to this Law, establishment of an association is very easy, as well as the registration. Basic act of the association is the statute. Association is founded upon the adoption of the founding act and the statute. Statute is the highest act of association and it determines the objectives of the association. Basic body of the association is the Assembly of the association. Association also has one or more persons authorized to represent the association. Other bodies of the association may also be envisaged by the Statute. Association/organization of SRM collectors could directly carry out an economic or other activity by means of which it earns profit in accordance with the law regulating the classification of activities. Statute would also determine the relations of internal and external communication between members and association with other sides, such as municipalities, cities, state bodies and other economic entities.

---

<sup>10</sup> It is clear that this would be a difficult task since it would be necessary to change the Law on Waste, due to the fact that currently municipal waste belongs to local/regional PUC

<sup>11</sup> Law on Associations, "Official Gazette of RS" No. 51/2009, 99/2011.

## ***2. To strengthen the Syndicate of SRM collectors– the Syndicate of Waste Collectors of the Republic of Serbia***

Syndicate of Waste collectors of the Republic of Serbia (hereinafter: SWCRS) was established and registered on September 5, 2011. President of this syndicate is Šaban Sailjević. Current legal basis for the establishment and work of the syndicate is the 2005 Labor Law, which has been amended several times.<sup>12</sup> This syndicate is primarily concerned with improving the legal status and position of informal secondary raw materials collectors. According to the previous and current legal regulations, registration of syndicates in the Register is performed in the ministry competent for labor and employment. **Work of the SWCRS need to be further strengthened.** Syndicate does not have its own website. In the first years after the establishment, there were more statements in media made by the Syndicate president, but in time, there were fewer and fewer, and in general, very little is known about the work of this syndicate. Syndicate can play a stronger role in linking secondary raw material collectors, who in Serbia, according to the assessment of this Syndicate, number approximately 40,000.

## ***3. To improve entrepreneurial activity of SRM collectorsthrough the adoption of Law on Social Entrepreneurship<sup>13</sup>***

Position of an entrepreneur as an economic entity is regulated by Law on Business Companies.<sup>14</sup> Above articles of the Law regulate basic questions of entrepreneurs, such as: defining the term, time period of registration, property and liability for obligations, business name, activity, management, status of employees or the engaged by an entrepreneur, cessation of activity, loss of entrepreneurial property, etc. However, entrepreneurial activity, registration, payment of taxes, etc., in the way it is now regulated, represents everything that refuses collectors to register themselves as businesses. **One possible solution for them is social entrepreneurship.** Informal secondary raw materials collectors fall into the socially most vulnerable segments of population. The largest group of informal secondary raw materials collectors consists of mostly Roma population, who are a discriminated and vulnerable social group. Unfortunately, there is still no Law on Social Entrepreneurship in the Republic of Serbia. Proposal of the law has been in the parliamentary procedure for more than 3 years, but there is obviously no political will to adopt it. Law on Social Entrepreneurship would define certain goals of social entrepreneurship, beneficiaries, concept and manner of work of a social enterprise, as well as

---

<sup>12</sup> Labor Law, "Official Gazette of RS" No. 24/05, 61/05, 54/09, 32/13, 75/14, 13/1.

<sup>13</sup> This possible measure is also questionable since the Law should be changed, and also, the issue of sustainability should be profoundly considered.

<sup>14</sup> Law on Business Companies, "Official Gazette of RS" No. 36/11, 99/11 and 83/14, Art. 83/92.

possible ways to further stimulate social entrepreneurship and employment in a social enterprise. Social enterprise, according to the Proposal of Law on Social Entrepreneurship, can be established not only in the form of a company, but also as entrepreneurs, citizens' associations, cooperatives and in some other form. This means that the adoption of this Law is also important for the development of entrepreneurship in the field of secondary raw material collection, for the association/organization of informal secondary raw materials collectors, as well as for other forms of potential associations of informal collectors, such as cooperatives.

#### ***4. To improve the status and, legal position and to strengthen the importance of current cooperatives of informal secondary raw materials collectors***

Legal basis for the establishment of cooperatives in the Republic of Serbia is Law on Cooperatives from 2015.<sup>15</sup> This law has replaced the earlier one from 1996, which was subsequently amended several times. Since 2012, several cooperatives of secondary raw materials collectors have been established in Serbia according to the new models of cooperation between collectors with NGOs, local self-governments and companies. Law regulates the legal status of cooperatives, their establishment, management and bodies of cooperative, acquisition and termination of the status of cooperatives, books of cooperatives, assets and operations of funds, distribution of profits, etc. However, **in order to make the work of these cooperatives become more successful, it is reasonable to establish new and more flexible relations among cooperatives of informal secondary raw materials collectors.** For this to be achieved, it is necessary to **adopt Law on Social Entrepreneurship**, which would further improve the position of such cooperatives, therefore provide results in further establishment of cooperatives of informal secondary raw materials collectors.

#### ***5. To strengthen the recognition of informal secondary raw materials collectors in the nomenclature of jobs in the Republic of Serbia***

In the nomenclature of jobs in the Republic of Serbia, as a profession, under the code 961202, there is also a recognized work of secondary raw materials collectors. For the purpose of population census, the Statistical Office of the Republic of Serbia has published a classification of occupations according to the ISCO-08 standard, in which this profession is recognized. **Strengthening the recognition of this profession could contribute to further improvement of association, entrepreneurship and cooperatives** in this field.

---

<sup>15</sup> Law on Cooperatives, "Official Gazette of RS" No. 112/2015.

***6. To harmonize waste management regulations and improve the relationship with local self-government units that treat municipal waste as a potential and real source of income for the budget of municipality or city***

According to the positive legal regulations in the area of waste management and the competencies of local self-government, that is, from the Law on Waste Management,<sup>16</sup> there are certain problems arising, which are caused by the misdemeanor punishment of secondary raw material collectors in certain municipalities/cities in Serbia. Today, municipal waste is considered a public property of a municipality or city. Municipal waste, especially in public-private partnership processes, can be a significant source of income for local self-government units. In that sense, collection of secondary raw materials from a container is treated as a communal minor offense, due to which several informal secondary raw materials collectors have been fined, especially in the City of Novi Sad. Therefore, in the dialogue with competent line ministries, municipalities and cities, as well as the Syndicate of Waste Collectors and other actors, a model should be found in which, when it comes to municipal waste, **secondary raw materials collectors are treated equally<sup>17</sup> in all the municipalities and cities in the Republic of Serbia, as important actors in the chain of collecting and sorting of municipal waste.**

---

<sup>16</sup> Law on Waste Management, "Official Gazette of RS", No. 88/2010, 14/2016.

<sup>17</sup> This thesis assumes the situation IF, and only IF IWC's are registered.