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# East European recycling societies: The first steps of rural communities in Neamt County, Romania

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**This is the preprint version:**

Florin-Constantin MIHAI\* - East European recycling societies: The first steps of rural communities in Neamt County, Romania

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Romania is still facing major disparities between urban and rural areas regarding the proper waste management (WM) services (Ciuta et al., 2015; Mihai, 2015). This gap suggests that the rural WM sector needs to be a priority in current environmental policy. This paper provides an overview regarding the recycling prospects in the case of rural communities in Neamt County. Neamt County includes 5 cities and 78 communes (rural municipalities).

Since 2011, separate collection of recyclables (paper/cardboard, plastics, and organics) was implemented only in Piatra Soimului, Borlesti and Reditu localities. After the closure of rural dumpsites under the EU regulations in 2009, municipalities were required to seek licensed waste operators through direct or delegated management.

The separate collection is done by setting up the special collection containers in some points within densely populated areas. There are private operators to provide the mixed waste collection services once per week in rural areas of Neamt County (in the case of collection points) and once per month, or when containers reach the filling degree viable for transportation, in the case of dry recyclables. Between 2011 and 2012 the collection of recyclables from commercial sectors and households was performed across several communes (Fig. 1).

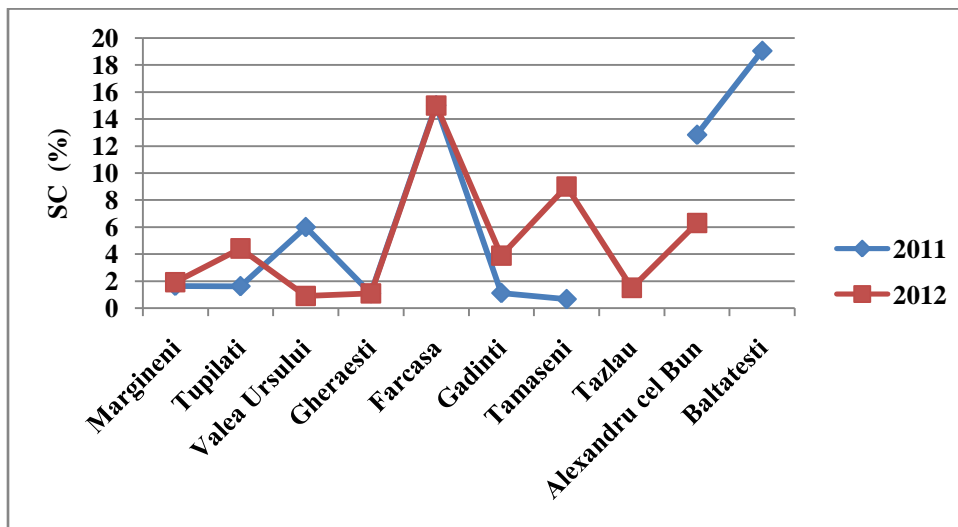


Fig. 1. Share of separate collection (SC %) of total collected household waste.

The share of separate collection (SC) reflects the approximate value of reuse and recycling, if it is taken into consideration the fact that all these recyclable fractions are marketed by waste operators to specialized companies.

The mixed collection prevails in rural areas, separate collection and recovery of recyclables are still at an early stage in most of the communes with values below 6%. The threshold of 10% SC is exceeded only by Farcasa, Baltatesti and Alexandru cel Bun communes. The recyclables collected from commercial sectors are more likely to be recovered than those derived from households, because residents do not properly segregate these fractions. Therefore, household waste is mainly disposed in landfills. In some cases, the collected mixed waste is transported to a sorting station where recyclables are extracted (metal, plastic, paper/cardboard, wood, glass) and, thereafter, marketed to specialized units from cities.

Recovery of waste may experience a significant growth in the coming years with the expansion of separate waste collection facilities in most of the rural communities within the County. The correct separate collection is a key issue of urban and rural areas in order to increase the efficiency of the WM system. Environmental education is crucial in rural areas in order to diminish the effects of waste dumping and to develop an optimal separate collection system which encourages the recycling and reuse of household waste. Nowadays, traditional WM systems still prevail in most of rural municipalities in the study area, but new separate waste collection facilities are already operational in some of them.

## References

Ciuta, S., Apostol, T., Rusu, V., 2015. Urban and rural MSW stream characterization for separate collection improvement. *Sustainability* 7, 916–931.

Mihai, F.C., 2015. Accessibility of waste collection services in Romania: a multi-scale analysis in EU context using thematic cartography. *Bollettino dell'Associazione Italiana di Cartografia* 154, 80–89.