



2030 Agenda meets Urban Climate Action!

The Food Shifters (Belgrade, Serbia): A Voluntary Scheme for Urban Food Waste Management in the City of Belgrade

Background

Around 770.000t of food is wasted or lost in Serbia annually, causing serious environmental problems while socio-economic development potentials are missed out on. Expert estimations are that about 90 percent of the total waste still ends up in landfills, wasting valuable resources despite poverty and resource scarcity in the country. Serbia's waste is disposed either at non-sanitary municipal landfills or at one of the approx. 4,000 illegal dumpsites, leading to harmful impacts on the climate through massive GHG-emissions. According to estimates, diverting food wastage from landfills can save 580kg CO₂e per each tonne of organic waste. However, awareness of the problem is very low among relevant actors. Food that is still usable for consumption and could be reused instead ends up in landfills – this is true for food from the agricultural value chain as well as and especially from the urban retail sector such as hotels, restaurants and catering business.

Urban Food Waste Management

Cities in Serbia like Belgrade lack adequate food waste management systems, which would include systematic monitoring of food waste generation along the value and distribution chain compared with solutions for waste prevention, reuse and redistribution. Such food waste management could not only reduce GHG-emissions, but also facilitate the reuse of valuable natural resources for socio-economic benefits, i.e. increased food security among vulnerable inhabitants of the city especially women victims of violence. Establishing effective solutions for the sustainable management of urban food (waste) therefore is an important aspect for sustainable development and in working towards the goals set forth in the 2030 Agenda. To be effective, integrated solutions for food waste management are required, which involve all relevant stake-

holders across different sectors and break silo-policy making regarding the management of resources.



Belgrade,
Serbia

Project Intervention

The measure plans to introduce a voluntary scheme for main food waste generators in the city of Belgrade to help them prevent food waste and redistribute food products in order to reduce GHG-emissions, relieve urban landfills and make food accessible and affordable to the urban poor.

Digital Solutions

The scheme is based on the participatory development of digital solutions: the establishment of an IT-platform will support identification, mapping and monitoring of main food waste generators in the city as well as assess the respective waste amounts, composition and reduction potentials for GHG-emissions, but also identify possibilities for less generation of food waste through implementation of prevention measures. Based on this data, digital applications will provide real-time information to retailers, restaurants, hotels, etc. as well as to organisations and waste management operators, based on which collection routes can then be planned. The applications are accompanied by information on food waste prevention and climate impacts to raise awareness and citizen involvement. Moreover, capacity building of small and medium enterprises will help them to prevent food waste and hence reduce the level of landfilling and corresponding GHG-emissions by encouraging businesses to derive targets and develop action plans for food waste management. The experiences made with the interventions will be used to generate recommendations and guidelines for a revision of municipal and national planning

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documents for sustainable food waste management with gender sensitive aspects such as gender responsive budgeting.

Expected Results

The project supports the municipality of Belgrade in achieving the 2030 Agenda through a multi-stakeholder cooperation approach. It interlinks the environmental and socio-economic aspects of sustainable urban development to work towards SDG 11 (Sustainable Cities and Communities) and SDG 13 (Climate Action). Reducing the quantity of land-filled waste by food waste prevention leads to a reduction of overall GHG-emissions of the city. The new waste management scheme for Belgrade furthermore will reduce collection fees of operators and improves the operation of small and medium enterprises. The digital applications contribute to a systemic solution of organic waste management, while supporting citizens' involvement and raising awareness among stakeholders, thereby contributing to SDG 12 (Responsible Consumption and Production). Moreover, the project contributes to SDG 2 (Zero Hunger) and SDG 5 (Gender Equality), as vulnerable groups, such as the urban poor, with special attention paid to women, get easier access to food surplus redistribution from the retail sector. The Ministry of Environmental Protection and other implementing partners will share the results and benefits of the project with other Serbian municipalities and use the lessons-learned for policy formulation on sustainable food waste management. The Centre for Excellence for Circular Economy and Climate Change, which includes universities, professionals, institutions, businesses as well as city networks, provides a good basis for the upscaling of developed solutions.

Implementation Partners

The Ministry of Environmental Protection and UNDP Serbia provide complementary awareness programs and financial contributions, while the private waste operator EsoTron Ltd. contributes with experience for developing the voluntary scheme. The municipality of Savski venac (pilot municipality) of the City of Belgrade ensures communication among and alignment with other relevant city departments. Together with the Chamber of Commerce, they will bring together the main actors of food value chains as well as retailers, restaurants, hotels, catering business, and public institutions like hospitals and kindergartens. Meanwhile, the Centre for Excellence for Circular Economy and Climate Change network of waste management experts is responsible for the development and implementation of the methodology. The non-profit organisation OsnaZen provides support to vulnerable groups, i.e. female victims of violence looking for psychological support, shelter and food, and will support food redistribution from the food waste generators and development of food redistribution models. The GIZ project *Climate Sensitive Waste Management* is responsible for the overall implementation of the project.

Funding

The project implementation takes place from July 2019 to February 2021 (non-cost extension due to COVID-19 outbreak). BMZ is funding the measure through the Sector Project *CityRegions2030* with EUR 100,000; additional EUR 50,000 are contributed by UNDP Serbia.

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