Milan Pact Awards 2025	**BANDUNG**						
Country	Indonesia						
Population	2,591,763						
Title of practice	Circular Economy of Buruan SAE						
Subtitle	Maggot Culture as an Innovative Driver of Circularity and Food Waste Reduction in Buruan SAE Model in the city of Bandung						
MUFPP Recommended Action	35. Raise awareness of food loss and waste through targeted events and campaigns; identify focal points such as educational institutions, community markets, company shops and other solidarity or circular economy initiatives. - FOOD WASTE						
Starting year	2024	**Ending year (if any)**			☐already submitted in the past		
Actors and stakeholders' involvement	**Municipal departments**	**Other public institutions**	**NGOs CSOs**	**Research centres**	**Private sectors**	**International organizations**	**Other**
	2	1	1	3	1	1	30
Budget	The overall budget for Maggot Culture as an Innovative Driver of Circularity and Food Waste Reduction in Buruan SAE Model is approximately € 52,347.836. Bandung City's municipal administration was in charge of funding the practice.						
Brief description	Bandung faces the challenge of managing increasing volumes of waste of 1594 ton a day in total (48,5% is organic), a problem exacerbated in urban centres. The Bandung City Food and Agriculture Service, through the Buruan SAE program (which includes organic waste processing as one of its eight components), and the Bandung City Environmental Service are addressing this by promoting maggot cultivation. Its ongoing process is fully supported by Mayor of Bandung City and is becoming one of performance indicator of his 100 days mayoral leadership. The city provides maggot facilities at 51 Buruan SAE sites, encouraging groups to use maggots as animal feed to 149 maggot hangars extended by Bandung City Environmental Service. The primary objectives of integrating maggot culture into Buruan SAE are to reduce organic waste of 450 tonnes per month, produce valuable resources (fresh maggots of 31 tonnes per month and dry maggot 1 ton per month), and foster collaboration within the Buruan SAE groups. Beneficiaries include the Buruan SAE groups (who gain a new product and waste management solution), local livestock and fish cultivators (who gain access to feed), and the municipality (through reduced waste burden). Key outcomes include the significant reduction of organic waste processed by Buruan SAE groups and the production of maggots and kasgot (used for planting media), demonstrating the practice's effectiveness in waste reduction and resource recovery.						
Innovation	Bandung's integration of maggot culture into the Buruan SAE program presents an innovative approach to tackling urban organic waste while simultaneously addressing the need for sustainable animal feed. This practice moves beyond traditional waste disposal methods by viewing organic waste as a resource for producing high-protein feed and valuable fertilizer (kasgot). By establishing maggot hangars within the Buruan SAE network, the city fosters a circular economy model, where waste from one process becomes an input for another. This is particularly innovative in its localized application, empowering urban communities to manage their waste and contribute to local food production. Moreover, the maggot cultivation initiative innovatively links urban waste management with urban agriculture. The use of maggot-derived products within the Buruan SAE system creates a closed-loop system that enhances resource efficiency and reduces external input dependencies. While maggot cultivation itself is not a novel technology, its systematic integration into an urban agriculture program like Buruan SAE, driven by municipal support and community collaboration, demonstrates an innovative and context-specific solution to Bandung's food system challenges.						

Impact	The social impact of maggot culture in the Buruan SAE model is primarily seen in its contribution to community empowerment and improved food security. By engaging Buruan SAE groups in organic waste processing and maggot cultivation, the initiative fosters a sense of ownership and responsibility for local waste management. This can lead to increased social cohesion and skills development within the community. Furthermore, the availability of locally produced, affordable maggot feed can enhance the productivity of urban agriculture activities within Buruan SAE, potentially improving access to nutritious food sources for participating households. The environmental impact of this practice is significant in terms of waste reduction and resource recovery. Maggot cultivation provides an efficient method for diverting large quantities of organic waste from landfills, thereby reducing methane emissions and the associated environmental burden. The production of kasgot contributes to environmental sustainability by providing a natural alternative to chemical fertilizers. Economically, while the direct financial impact of fresh maggot sales might be modest with 31 tonnes per month, the reduction in waste disposal costs and the creation of a local feed source represent significant economic benefits for the city and the Buruan SAE program. The city processes and reduces 450 tons of organic waste monthly for maggot farming, with the produced maggots valued at € 8,420.40 per month.
Inclusion	The integration of maggot culture within Bandung's Buruan SAE model addresses several food system fields of action. Primarily, it tackles waste management by diverting organic waste from landfills and transforming it into a valuable resource. It also intersects with food production by providing an alternative source of animal feed for livestock and fisheries within the Buruan SAE system, and agriculture through the production of kasgot for use as a planting medium. This multi-faceted approach demonstrates a holistic view of the food system, recognizing the interconnectedness of its various components. The success of this practice relies on the involvement of a broad range of actors and stakeholders. Collaboration occurs between 2 Municipal departments (Bandung City Food and Agriculture Service, Bandung City Environmental Service), 1 Other Public institution, 1 NGO, 3 CSO Research centres and Academia, 1 Private sector entity, 1 International organization (MUFPP), and 51 Buruan SAE Community groups. This diverse stakeholder network ensures territorial inclusion and multi-level governance by incorporating perspectives and actions from various levels, from city-wide planning to local community implementation within the Buruan SAE framework.