



Tropentag, September 9-11, 2020, virtual conference

“Food and nutrition security and its resilience
to global crises”

Regarding Environmental Issues, Are Inhabitants of Bandung Interested in Municipal Solid Waste Management?

DENISA BEŇOVÁ¹, KRYŠTOF MAREŠ¹, TATIANA IVANOVA¹, YAYAN SATYAKTI², TEREZA PILAŘOVÁ³

¹*Czech University of Life Sciences Prague, Fac. of Tropical AgriSciences, Dept. of Sustainable Technologies, Czech Republic*

²*Padjadjaran University, Center for Economics and Development Studies, Dept. of Economics, Indonesia*

³*Czech University of Life Sciences Prague, Fac. of Tropical AgriSciences, Dept. of Economics and Development, Czech Republic*

Abstract

The research conducted via questionnaire survey was aimed to evaluate an interest of inhabitants in the proper municipal solid waste management (MSWM) in Bandung, Indonesia. Nowadays, increasing waste pollution becomes a serious topic in developing countries and accumulation of municipal solid waste is turning out to be unsustainable in these areas. Aspects as population health, environment and agricultural production face huge threat from a side of an improper MSWM. The government of Indonesia has implemented laws and regulations dedicated to MSWM in the past years. Unfortunately, these are not well communicated to the public sector that has been determine as one of the key factors to successful, functional and sustainable MSWM in previous studies. Two main indicators were used to investigate a public approach and perception on the MSWM: public interest in MSWM in connection to the environmental issues, and willingness of inhabitants to pay for appropriate MSWM services. Binary probit model showed that age, educational level, locality and satisfaction with MSWM practices played significant role in respondents' interest in MSWM, which is a decisive factor in the public perception of MSWM. The results of Chi-square analysis confirmed that age, level of education and average monthly income were strongly associated with a willingness of inhabitants to pay a different sum as the tax for appropriate MSWM services. In addition, the results of descriptive statistics found other interesting specifics of MSWM in Bandung city. These results showed that 97% of respondents are not satisfied with MSWM practices, also over 83% respondents consider MSWM services in Bandung as insufficient. Awareness about important public waste operations like waste handling and recycling is at a low level. On the other hand, over 67% of respondents are interested in MSWM in connection to environmental issues and are familiar with 3R concept. The complex of results brings a new perspective on the public perception and approach to the MSWM that should be considered in the planning and implementation of the sustainable MSWM, since this issue has not been deeply examined in Bandung yet and results show an imperceptible engagement of public sector in MSWM decision-making.

Keywords: Binary probit model, chi-square test, pollution, public awareness, questionnaire survey, waste generation, willingness to pay

Contact Address: Denisa Beňová, Czech University of Life Sciences Prague, Fac. of Tropical AgriSciences, Dept. of Sustainable Technologies, Kamýcká 129, 16521 Prague 6 - Suchdol, Czech Republic, e-mail: benova@ftz.czu.cz