

## RINGKASAN

Harnenti Afni Yakin, Jurusan Teknik Perencanaan Wilayah dan Kota, Fakultas Teknik Universitas Brawijaya, Juni 2016, *Kesediaan Masyarakat dalam Pengelolaan Sampah Anorganik melalui Sistem Bank Sampah di Pulau Gili Trawangan*, Dosen pembimbing: Dr. tech. Christia Mediana, ST., M.Eng dan Wawargita Permata Wijayanti, ST., MT.

Gili Trawangan merupakan Kawasan Strategis Provinsi (KSP) sebagai kepentingan pertumbuhan ekonomi di Kabupaten Lombok Utara. Pertumbuhan wisatawan di Gili Trawangan dari tahun 2010 hingga 2014 rata-rata mencapai 11,8% pertahun. Peningkatan jumlah wisatawan tersebut mengakibatkan timbunan sampah juga turut meningkat terutama sampah anorganik. Timbunan sampah anorganik di Gili Trawangan mencapai 6,202 ton/hari yang berasal dari hotel, *cafe*, tempat hiburan, *home stay*, dan restoran. Sampah anorganik merupakan jenis sampah yang sulit terurai sehingga dapat mencemari lingkungan apabila tidak dikelola dengan baik. Pencemaran lingkungan akibat sampah tersebut dapat mempengaruhi minat wisatawan untuk berkunjung ke Gili Trawangan. Penurunan jumlah wisatawan di Gili Trawangan akan berdampak buruk terhadap Pendapatan Asli Daerah (PAD) Kabupaten Lombok Utara.

Bank sampah merupakan salah satu strategi dalam menanggapi timbunan sampah anorganik di Gili Trawangan. Namun, peran bank sampah dalam mengurangi timbunan sampah belum optimal sehingga timbunan sampah di TPS saat ini mencapai ketinggian 1,5 m. Terlebih, bank sampah tersebut berjalan tanpa adanya keterlibatan masyarakat. Selain itu, adanya persaingan harga sampah antara bank sampah dengan pengepul mempengaruhi minat masyarakat untuk menabung di bank sampah. Oleh karena itu, penelitian ini dilakukan untuk mengembangkan sistem bank sampah di Gili Trawangan dengan memperhatikan efektifitas bank sampah, kemampuan adaptasi masyarakat dan lembaga terhadap sistem bank sampah dan kesediaan masyarakat dalam mengelola sampah anorganik melalui sistem bank sampah.

Metode analisis yang digunakan adalah analisis efektifitas dengan menggunakan rumus *Overall Equipment Effectiveness (OEE)*, analisis adaptabilitas dengan menggunakan skoring pada indikator perilaku masyarakat, alasan masyarakat, kesadaran pengurus bank sampah, kesadaran Forum Masyarakat Peduli Lingkungan (FMPL), kesadaran Dinas Kebersihan dan *Willingness to Accept (WTA)* dengan menggunakan metode tawar menawar (*bidding game*). Metode pengambilan data yang dilakukan adalah survei primer dan survei sekunder. Survei primer dilakukan untuk memperoleh data-data yang bersifat primer atau data yang diperoleh langsung dari lokasi penelitian. Survei primer dilakukan melalui observasi, kuisisioner dan wawancara, sedangkan survei sekunder dilakukan untuk memperoleh data sekunder dari dinas dan instansi terkait.

Hasil analisis menunjukkan bahwa pengembangan bank sampah di Gili Trawangan sulit ditingkatkan karena rendahnya kualitas bank sampah dalam menjalankan program bank sampah. Selain itu, masyarakat dan lembaga kurang mampu beradaptasi dengan sistem bank sampah. Kondisi ini mengakibatkan sistem bank sampah di Gili Trawangan tidak dapat berjalan dengan baik. Oleh karena itu, *Willingness to Accept (WTA)* dilakukan untuk mengetahui kesediaan masyarakat dalam menerima pengelolaan sampah anorganik melalui sistem bank sampah sehingga dapat meningkatkan kemampuan adaptasi masyarakat terhadap sistem bank sampah dan juga meningkatkan efektifitas bank sampah di Gili Trawangan. Hasil *Willingness to Accept (WTA)* menunjukkan bahwa harga sampah yang dapat diterima oleh masyarakat di Gili Trawangan sehingga masyarakat bersedia untuk mengelola sampah anorganik melalui sistem bank sampah yaitu sampah botol plastik dengan harga berkisar Rp. 1.500-Rp. 3.000 perkilogram, sampah gelas plastik berkisar Rp.

1.500-Rp. 3.000 perkilogram, sampah botol bir kecil berkisar Rp. 100-Rp. 500 perkilogram, sampah botol bir besar berkisar Rp. 500-Rp. 1.500 perkilogram, sampah botol kecap berkisar Rp. 300-Rp. 1.000 perkilogram, sampah kaleng aluminium berkisar Rp. 5.000-Rp. 13.000 perkilogram, sampah kardus dan kertas berkisar Rp. 1.000-Rp. 2.000 perkilogram, sampah plastik kresek/boncos berkisar Rp. 100-Rp. 500 perkilogram, sampah peralatan rumah tangga berkisar Rp. 1.000-Rp. 3.000 perkilogram dan sampah tetra pack berkisar Rp.100-Rp.600 perkilogram. Dengan demikian, bank sampah dapat mempertimbangkan harga sampah untuk mendorong motivasi masyarakat sehingga masyarakat bersedia mengelola sampah anorganik melalui sistem bank sampah.

Kata kunci: Bank sampah, efektifitas, adaptabilitas, kemauan menerima.



## SUMMARY

Harnenti Afni Yakin, Department of Urban and Regional Planning, Faculty of Engineering, University of Brawijaya, June 2016, *Community Acceptance in Inorganic Waste Management through Waste Bank in Gili Trawangan Island*. Supervisor: Dr. tech. Christia Mediana, ST., M.Eng and Wawargita Permata Wijayanti, ST., MT.

Gili Trawangan is one of the Province Strategic Areas (PSA) to boost the economic growth in North Lombok regency. It is noted that from 2010 to 2014, the number of visitors has increased averagely by 11.8% per year. This increase has resulted in waste piles escalation, mainly the inorganic waste. The escalation reaches the point of 6.202 tons/day which generated from hotels, cafes, entertainment centers, home stay, and restaurants. Inorganic waste is difficult to decompose and is potential to pollute the environment if not managed properly. Environmental pollution caused by the waste can affect the interest of tourists to visit Gili Trawangan. The decline in the number of tourists visiting GiliTrawangan would adversely affect the local revenue of North Lombok regency.

Waste bank system is one strategy in response to inorganic waste problem in Gili Trawangan. However, the expected role of the waste bank in reducing waste still hasn't met their best performance, therefore the dump height in TPS currently reaches the point of 1,5 m. Moreover, the waste bank run with no support of the community. There also price competition between waste bank and collectors affecting public participation in waste bank. Therefore, this study was conducted to develop a system of waste bank in GiliTrawangan by taking into account the effectiveness of the system, the adaptability of the people and institutions towards the the waste bank system, and willingness of community to manage inorganic waste through waste bank system.

Analytical methods in this research are effectiveness analysis with Overall Equipment Effectiveness (OEE) formula, adaptability analysis using indicator scoring by society's behavior, society's motive, the awareness of waste bank's workers, FMPL Gili Trawamangan Earth Project, and Sanitary Agency, Willingness to accept (WTA) with bidding game method. Data is collected through a primary survey and a secondary survey. The primary survey is conducted to obtain primary data obtained directly from location of the study through observation, questionnaires and interviews, while the secondary survey was conducted to obtain secondary data from relevant government offices and agencies.

Results of the analysis show that the waste bank system in Gili Trawangan is difficult to develop due to the poor quality of the waste bank programs. Moreover, the people and institutions are unable to adapt to the system of waste bank. Accordingly, the waste bank system in Gili Trawangan cannot run properly. Therefore, the WTA approach was conducted to determine the community's willingness to accept the waste bank system so as to increase adaptability of the society towards waste bank system and also to improve the effectiveness of waste bank system in GiliTrawangan. Results of the WTA reveal the expected prices of waste that can be accepted by society in Gili Trawangan. Plastic bottle should be valued between Rp. 1,500 to Rp. 3,000 per kilogram; plastic cups should range from Rp. 1,500 to Rp. 3,000 per kilogram; small beer bottles from Rp. 100 to Rp. 500 per kilogram; large beer bottles from Rp. 500 to Rp. 1,500 per kilogram; bottles of ketchup from Rp. 300 to Rp. 1,000 per kilogram; aluminum cans from Rp. 5,000 to Rp. 13,000 per kilogram; used boxes and papers from Rp. 1,000 to Rp. 2,000 per kilogram; plastic shopping bags from Rp. 100 to Rp. 500 per kilogram; rubbish of household

appliances from Rp. 1,000 to Rp. 3,000 per kilogram; and rubbish of tetra-pack from Rp. 100 to Rp. 600 per kilogram. Thus, the waste bank management may consider the prices of trash to motivate people to willingly participate in the management of the inorganic waste through waste bank system.

Keywords: Waste bank, effectiveness, adaptability, willingness to accept.

