

### The Power of Partnerships: Developing and Maintaining Partnerships in Used Packaging in Bali Partnership between Tetra Pak and ecoBali

#### Waste and Millennium Development Goals

Basic Health Research<sup>1</sup> shows that nationally household waste is disposed by burning (52.1%) and by collection service (23.4%). Location wise, most of household waste in urban area is disposed by collection service (42.9%), meanwhile in rural area is disposed by burning (64.1%). Only 0.5% of household in urban area and 1.7% in rural area treat the waste by composting.

Government of Indonesia report on the achievement of Millennium Development Goals (MDGs)<sup>2</sup> 2010 did not provide specific recommendations for solving waste problem, but categorize it as an essential part of sanitation. The data showed reasonable improvement of access to sanitation from 25% in 1993 to 51% in 2009, but it was still below the target of 62%. Sanitation and waste which were not well managed would give serious impact to human health and the environment. Several diseases such as diarrhea, dengue fever and helminths are well associated with poor sanitation which cause the death of the children in Indonesia.



The facilitator from ecoBali is providing training on how to sort out waste for elementary students in Kerobokan, Bali. © ecoBali, 2013.

#### SUMMARY

The partnership between Tetra Pak Indonesia and ecoBali started in 2007 until 2013 with the possibility to continue. The partnership was based on the common interest to reduce used packaging. For Tetra Pak, waste reduction is a commitment of company's founder. While for ecoBali, this

partnership was in line with its mission to achieve zero-waste Bali.

ecoBali built and expanded the garbage collection network through direct collaboration with garbage stalls/resellers, applying standard packaging waste collection and compacting, and transporting the compact bales to a recycling plant in Surabaya, East Java. In addition, ecoBali also organized training sessions on environmental awareness for schools and hotels, with full support from the government of Bali. Meanwhile, Tetra Pak facilitated the ecoBali activities to the recycling plant, provided technical assistance in recycling process and promoted the environmental and recycling program to the wider community, both in Indonesia and abroad. This clear division of tasks and roles was the key to their successful partnership.

By June 2013, more than 800 teachers, 7,000 students (from 15 public schools and 7 international schools), and more than 100 employees were trained on waste separation and environment hygiene; as well as built a network of more than 50 garbage stalls and resellers. This partnership also comprised of 30 hotels to comply with the requirements for appropriate waste management based on eco-rating program criteria issued by various international and national institutions, such as Earth Check, Tri Hita Karana, and Green Globe. The total amount of waste collected were 600 tons.

## THE PARTNERS



**Tetra Pak Indonesia** ([www.tetrapak.com](http://www.tetrapak.com)) is a subsidiary of Tetra Laval company headquartered in Swiss. Tetra Pak Indonesia, established since 1975, is a multi national food and beverages processing and packaging company. "A packaging should save

more than it costs" is the credo of Tetra Pak's founder, which means that packaging product is not only about the cost, but it adds value to food safety, to save food and environment. This vision becomes the foundation of the environmental partnership programs in Tetra Pak globally and locally.

Tetra Pak's environmental program has been starting since 2004, with its goal to reduce packaging waste through educational environmental program and recycle paper packaging. For Tetra Pak, reducing packaging waste means investing in technology and strengthening the partnerships with the communities. In implementing the program, Tetra Pak has worked with various organizations from the government, industry, non-governmental organization, environmental community, student, customer, waste collection network and wider community. The environmental program is focused in four areas, namely West Java, East Java, Bali, and Jakarta.

Tetra Pak works in partnership with ecoBali, an environment organization for the Bali region. For Jakarta, West Java, and East Java regions, Tetra Pak partners with local non-governmental organizations (NGOs) where the recycle plants located. Most of the partnerships between Tetra Pak and NGOs were started with the nutrition/health program for elementary school students, and then further developed their partnership in waste sorting and recycled products. Tetra Pak provided the baling machine for its partner to compress the waste into bales that is easy to transport.



**ecoBali** ([www.eco-bali.com](http://www.eco-bali.com)) was established in 2005 in response to the urgency of waste management problems in the island of Bali. Their vision is to promote responsible management towards achieving zero waste by initial sorting process (before

the waste were disposed to final landfills); reducing waste volume disposed to the landfills by increasing recovery of waste to be recycled; and processing organic waste through composting.

ecoBali services are providing waste collection service and waste sorting at the source; recycling papers, plastics, metals, glasses, food and beverage packaging; providing training and coaching for other organizations in waste management; education and installing the composting container system in the company and household; and raising awareness for individuals, communities, and businesses about the practice of 3R (reduce, reuse, and recycle). ecoBali work area includes the southern part of Bali province including Badung, Gianyar, Denpasar and Klungkung.

Besides with Tetra Pak, ecoBali also works in partnership with other companies in tourism, recycled papers, food, and retail business in Bali. ecoBali has 20 staff with expertise in environment and education, and own waste separator and baling machine in their facility.

## INITIATING THE PARTNERSHIP

The partnership started when both organizations met at a recycling workshop in Jakarta sponsored by Swedish government of in mid 2006. After that, ecoBali then started to communicate with Tetra Pak to explore the possibility for a cooperation in Bali. At the same time, Tetra Pak was also looking for a business partner to expand their waste collection program outside Java.

After several meetings, on September 2007 Tetra Pak and ecoBali started their partnership on a project with a series of activities to introduce cricket to junior high school students in Bali. In addition to cricket competition, they distributed free milk for students, and collected and recycled Tetra Pak used cartons. That project received the Best Junior Cricket Initiative Award from the International Cricket Council (ICC) Development Program – East Asia Pacific, for combining sport, health, and environmental concerns. This project also involved other organizations, such as Ultrajaya Milk Industry and Indonesian Cricket Association and the project had already reached more than 1,000 students.<sup>3</sup>

In December 2007, they decided to have a "recycling clinic" booth to display several environment and recycling programs to the international community at the UN Climate Change Conference event in Bali. They partnered with the Ministries of the Environment and of Trade & Industry (Pulp & Paper Training Center).

## IMPLEMENTING THE PARTNERSHIP

Following those couple of activities, in 2008 Tetra Pak and ecoBali agreed to expand their partnership in a more measurable and sustainable manner. Both agreed to partner considering that (1) for Tetra Pak, reducing the waste is the founder commitment; (2) meanwhile, ecoBali sees this partnership is in line with their vision towards achieving zero-waste in Bali island.

The partnership began to develop "Tetra Pak Recycling" program to maximize the recycling process of packaging waste and raising community awareness by 3Rs (reduce, reuse, recycle). The activities focused on managing Tetra Pak used cartons from the source (before they're disposed to the landfill). The reason of this program was to get better quality of used cartons, which in turns it gave better recycled products. The program benefited the waste collectors, stalls and resellers, hotels, and schools in Badung, Gianyar, Denpasar, and Klungkung Bali.

The partnership of Tetra Pak and ecoBali was based on the sustainable business system. It built the network of garbage collectors to collect and sort used cartons. From there the used cartons were sent to ecoBali for final sorting and baling process for ease of transport. When the waste reached the recycling plant, they were processed to become recycled

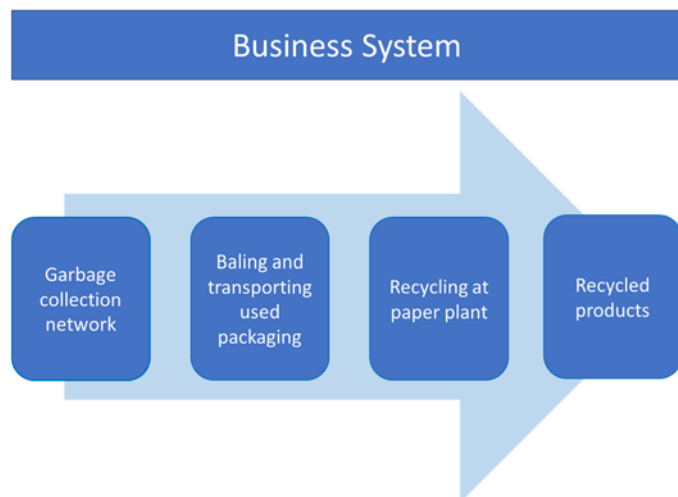


Chart 1: A sustainable business system on managing waste

paper ready for customers (Chart 1). There were times the recycled paper was sold through Tetra Pak's partners.

Tetra Pak's role was to facilitate ecoBali activities and to communicate with the recycling plant, to provide technical assistance to ecoBali with recycling process and to promote the environment and recycling program to the wider community, both in Indonesia and abroad. Tetra Pak also provided the baling machine for the partners to assist the program sustainability. Tetra Pak provided technical assistance and machines to two recycling plants in Indonesia (Bekasi and Surabaya) in order to produce the recycled product independently. The machine sorted the waste into its distinct elements such as paper/carton, aluminum and plastic that will help the production process more efficiently.

ecoBali's role was to build waste collection network through direct cooperation with two organizations, Temesi in Gianyar and Jimbaran Lestari in Jimbaran. In addition, ecoBali also built and expanded the collection network through direct collaboration with the garbage collectors/stalls/resellers, and trained them in sorting and collecting waste to meet the standard. For this activity, ecoBali trained and built the network with more than 50 stalls and resellers in all four program areas.

Along with the business development, ecoBali also conducted training sessions for elementary, junior, and senior high schools. Schools selected to participate were based on some criteria, namely they had no waste sorting program, the schools were committed to engage in long-term activities and they were located within the ecoBali's working areas.

ecoBali trained students on how to sort waste, 3Rs principle, and gave understanding that some waste could be reused and yet provided the economic benefits for society. After the training, ecoBali provided waste collection containers for each school to practice sorting. By June 2013, ecoBali had trained 800 teachers and 7,000 students from 15 public schools and 7 international schools in Badung (Canggu and Kerobokan villages).

As a popular tourist destination, Bali is struggling with heaps of waste with the increasing number of tourists coming to Bali. ecoBali saw the opportunity that hotel industry would be

an important strategic partners to reduce waste. ecoBali began to work in partnership with Bali Hotel Association (BHA) and Ubud Hotel Association (UHA) to give training session to more than hundreds of hotel's employees on waste management, such as sorting, recycling and provided container for used cartons.

To gain more support for the partnership, Tetra Pak and ecoBali were also in coordination with the Ministry of Environment (Ecoregion Management Center), provincial and local Environmental Agencies, local waste management and park agencies, and provincial bureau of education.

## RESULT AND IMPACT

The key success of the partnership rested on the successful business model. Both partners defined their roles and responsibilities based on their expertise and capacity to allow smooth delivery sustained program.

By June 2013, this partnership has reached more than 800 teachers and 7,000 students from 15 public schools (elementary, junior-, and senior-high levels), 7 international schools, and more than 100 hotel employees. They were trained on waste sorting and environmental hygiene. More than 50 garbage stalls and resellers were trained and joined the network.

This partnership was also successful in inviting 30 hotels to comply with the requirement of appropriate waste management based on eco-rating program criteria issued by various international and national institutions, namely Earth Check, Tri Hita Karana, and Green Globe. The total amount of used cartons collected were 600 tons.

## CHALLENGES AND LESSONS LEARNED

Although the total waste collected kept increasing each year i.e. 1.8 tons in 2007 until it reached 600 tons in 2013, both partners acknowledged that it only encompassed about 10% from the total of waste produced. The challenges and opportunities were to raise public awareness of the economic value of recycled waste, to strengthen the partnerships with informal sector (garbage collectors) based on long-term commitments, and to raise public awareness for responsible waste disposal at the household level.

The wide gap between the packaging waste produced and the demands of recycling plant made business value or economic viability of this program low. To overcome the issues, Tetra Pak partnered with medium scale recycling plant and provided technical assistance in re-pulping technology. This encouraged the plant to increase the production of recycled paper, which was in line with Tetra Pak commitment to measure the program success based on the absorption capacity of the packaging waste. This absorption rate was reported to its headquarter on a monthly basis.

Tetra Pak made a study about the impact and benefits of Waste Bank<sup>i</sup> program as one of the program sustainability solution. In most cases, Waste Bank could not stay long and neither provided much profit for garbage collectors/stalls/resellers, the main beneficiaries of Tetra Pak.



Students of SDN 4 Kerobokan are collecting and compacting carton packaging waste at their school. © ecoBali, 2013

## FUTURE PLANS

Tetra Pak continues to look for new partners (NGOs, companies or universities) in other regions to represent Tetra Pak in each region for used cartons program. The partners are expected to communicate to each other, shared lessons learned and best practices to government and other organizations or even with the beneficiaries (garbage collectors/stalls/resellers). Meanwhile, ecoBali plans to recycle the aluminium foil into corrugated roof and composting container for sale.

Tetra Pak and ecoBali would expand their reach to include household as their target in addition to students and hotel industry. In 2013, Tetra Pak developed a partnership with a retailer Hypermart Jakarta, and Bintaro Housing Tangerang to develop packaging waste collection point for surrounding community.

## Foot Notes

- i. Garbage collector is a person who picked trash/junk or waste from house to house. Stall is a person who collect the trash or junk from the collectors for resale. Reseller is the same as a stall, but has bigger business scale.
- ii. Waste bank is a place or a collection site of non-organic waste deposited by the community, and organized by a manager from the community. The manager will make the transaction with the collector.

## Reference

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## About This Case Study

This is one in a series of case studies based on presentations by partners at HBRI Partnership Forum. HBRI Partnership Forum is an activity of CCPHI, a project funded by the Ford Foundation.

This case study is based on presentation made by Mignonne Maramis Akiyama, Director of Communication and Environment – Tetra Pak Indonesia and Paola Cannucciari, Director and co-founder of ecoBali at the 22<sup>nd</sup> session of HBRI Partnerships Forum. Dian Rosdiana prepared the study in consultations with Tetra Pak Indonesia and ecoBali.

For further information on the CCPHI Project and Partnership Forum please contact **Dian Rosdiana**, Executive Director at [dian.rosdiana@ccphi.org](mailto:dian.rosdiana@ccphi.org), **Anita Kastubi**, CCPHI Communication Officer at [anita.kastubi@ccphi.org](mailto:anita.kastubi@ccphi.org) or visit us at [www.ccphi.org](http://www.ccphi.org); Facebook: [CCPHI](https://www.facebook.com/CCPHI); Twitter: [@CCPHI](https://twitter.com/CCPHI); LinkedIn: [CCPHI](https://www.linkedin.com/company/ccphi)