



# CASE STUDY

## Waste Paper Recycling Social Enterprise (pulp egg tray)

The Waste Paper Recycling Unit (WPRU) is an innovative green social enterprise dedicated to manufacturing pulp egg trays with certain percentage of profits ploughed back to youth development projects in Bhutan. With the vision to conserve Bhutan's natural environment, the social enterprise upcycles wastepaper into pulp egg trays for poultry farms. On the social front, it offers employment opportunities to youth and generates fund for youth development projects in Bhutan.

The Bhutan Youth Development Fund (YDF) launched the green enterprise in 2015 in Thimphu (Bjemina), with an establishment funding from the GEF-Small Grant Program (SGP) implemented by UNDP in collaboration with the Royal Government of Bhutan and the Goodwill Community Foundation, USA. The WPRU is located at Bjemina industrial estate area leased by the Ministry of Economic Affairs.

In the last six years, the green enterprise has upcycled over 270 metric tonnes of wastepaper and manufactured more than 4 million egg trays (valued at Nu. 13.2 million) for poultry farmers in Bhutan. As a social enterprise guided by the principles of the triple bottom-line — people, planet, and prosperity — it is adding social and environmental benefits to the goal of turning profit by:

**People** (social): *creating* inclusive employment for young, early school-leavers and those recovering from substance abuse disorder as production associates. Through our local distributor, pulp egg trays go to poultry farms and farmers at a competitive price.



**Planet (environment):** *collecting and upcycling* wastepaper into pulp egg trays, through conscious, sustainable ways with minimum ecological footprint. According to rough estimates prepared by a local expert, the annual environmental value of the enterprise is **142 tonnes of Green House Gas (GHG) emission** avoided and sink protected, **985 trees saved** and **2,027 litres of water saved** due to upcycling of waste papers.

**Prosperity/Profit (economy):** *boosting local economy* by substituting import of egg trays from India; and *generating surplus* for self-sufficiency and fulfilling the organization's overall youth development efforts like education scholarship, drug rehabilitation, and so forth.

Like any entrepreneurial venture, and as the country's first egg tray manufacturer, the social enterprise has had challenging times. Drying of egg trays has always been the challenge due to high moisture content in the pulp and lack of efficient drying mechanisms. Generating huge surplus is difficult because pulp egg tray is a low economic value product and the enterprise is a not-for-profit venture — the dual economic and social foci of social enterprises. The ability to scale-up becomes challenging then.

Today, the enterprise produces, on average, 15,000 egg trays and upcycles 1250 kgs per week. The waste papers are donated by various government and corporate offices and other organizations. Waste papers are also bought from Greenerway, schools, and private garbage vendors in Thimphu. At the speed of over 50 metric tonnes of wastepaper Upcycled, in the next ten years, the enterprise will be saving 9,850 trees as well as 1,419.5 tonnes of GHG emission avoided and sink protected.

Paper waste generation in Bhutan will continue with growing population and consumption. So is the poultry farming due to increase demand in eggs and growth of the poultry farms. The future of the green economy is hopeful as YDF ventures into replicating this egg tray project and **achieve the goal of saving 10,000 trees and 1,500 tonnes of GHG emission in ten years.**

Around the world, social enterprises are fast emerging as an entity of the alternative economy. When the traditional economic systems of a country or market-based solutions fall short to ensure well-being in the society, social enterprises can spearhead disrupting models to solve growing social problems. Bhutan's Gross National Happiness development framework and carbon-negative status quo is a fertile ground for such kind of business models to test and grow. To have an enabling ecosystem, Bhutan can still emulate countries with proper support mechanisms and structured policies for social enterprises.

For more information: [www.bhutanyouth.org](http://www.bhutanyouth.org) or email on [socialenterprises@bhutanyouth.org](mailto:socialenterprises@bhutanyouth.org)

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