CASE STUDY

Waste Capital Partners: Transforming Waste into Wealth

Waste Capital Partners served the Business Call to Action with a commitment to employ 10,000 formerly independent waste pickers as collectors, composters, and recyclers, tripling their income and offsetting 200,000 tons of carbon dioxide by 2017.

Waste Capital Partners’ goals by 2017:

- Create a daily direct door-to-door waste collection and segregation service for over 1 million Indian households;
- Create 10,000 jobs for waste pickers and waste processors, 80 percent of them women;
- Triple their incomes from US$1.50 to US$4.50 per day; and
- Reduce greenhouse gas emissions by 200,000 tons through composting and biomass briquetting of organic waste.

Waste Capital Partners provides environmentally friendly waste management services. Through its subsidiary Waste Ventures India (WVI), the company works with low-income communities, employing both waste pickers and processors. In communities where municipal workers already collect garbage, WVI trains the workers in early waste separation and provides efficient waste-processing services. In places where garbage is not currently collected by the municipality, WVI hires waste pickers who pick up garbage directly from households each day. WVI aims to improve the incomes

Business Model

Urban India produces more than 120,000 tons of garbage each day. In the next 15 years, this number is expected to quadruple. Only 50 percent of this trash is properly collected, and most collected garbage is dumped in the open. This decomposing waste has harmful environmental and social effects: it spreads disease, contaminates ground water and releases methane gases that contribute to global warming. Recycling is carried out by mostly female, socially marginalized waste pickers who make their living collecting and selling dry recyclable scrap—earning less than US$2 per day.

Parag Gupta
Founder of Waste Ventures

How it works

WVI’s business model provides a blueprint for a sustainable enterprise that regularly collects waste from households and contributes to environmental sustainability. To date, the company has launched operations in five Indian cities and expects to have over 40 projects by the end of 2017.

Working with local government for efficient and solid waste management

WVI recognizes the inherent challenge in municipalities’ traditional methods of monthly payments for collecting and dumping waste. At best, this model has encouraged waste management companies to dump waste rather than process it. At worst, it has enabled rampant municipal corruption, with waste management companies receiving delinquent or no payment. WVI turned this system upside down: In areas where no waste collection was previously undertaken, households pay a monthly fee of 60 Indian Rupees (US$0.98) directly to WVI in exchange for daily doorstep garbage collection in lieu of municipal payments. By working directly with households and collecting a fee for the service, WVI reduces the risk of corruption and is held accountable to customers for the quality of service it delivers.

Where municipal workers already collect waste, WVI trains municipal workers to separate the waste as they collect it from households. The ‘Community Connect’ programme raises community members’ awareness about providing source-segregated waste to assist municipal collectors.

Organized, low-cost waste processing

WVI has created an innovative partnership model for processing waste in which all capital is provided by the municipality – including the land, shed and processing machinery – under a multi-year contract. WVI is responsible for covering operational expenditures through the creation and sale of compost and recyclables. Biodegradable waste undergoes aerobic composting and recyclable materials are separated and recovered. In this manner, the municipality is assured that WVI will carry out environmental processing while WVI ensures that the infrastructure is available from the municipality before processing begins.

Using low-cost technology that also has low operating and maintenance costs ensures that waste processing remains affordable and economically viable in the long term. WVI employs community members to carry out this processing, providing training and a fair salary for their work.

Monetizing garbage

WVI bundles recyclables and sells them to large recycling shops for approximately US$117 per ton. Composted organic waste is sold to farmers for an average of US$75 per ton. WVI’s profit margin is therefore over four times greater than those of companies that simply collect and dump waste.

Since 2012, WVI has provided a professional, timely and reliable collection and processing service to more than 80,000 households. In areas where WVI conducts doorstep collection, customer satisfaction is high: WVI’s fee-for-service structure provides superior results and is less prone to corruption. In addition, WVI
has created more than 150 jobs and has directly improved the living conditions of 750 people through its innovative model of solid waste management.

The company was recently recognized by the Indian Government for its project in the municipality of Miryalaguda in the state of Andhra Pradesh.

**Business Impact**

With a new business model that mitigates dependence on government payments while reducing costs to strictly operational expenses, WVI expects its future projects to be profitable within the first 13 months of operation. Based on current capital expenditure projections, an internal rate of return of 23 percent is expected.

This is possible because WVI monetizes waste instead of allowing its value to be buried in landfills. WVI recovers up to 85 percent of household waste and makes a gross profit of US$2.62 per ton from collection. WVI than sells the recyclables to manufacturers for a gross profit per ton of US$2.47, and the compost to farmers for 64 cents per ton. The company is now looking to sell its carbon credits to corporations on the Voluntary Emissions Reduction market as it averts the formation of methane gas (23 times as harmful as CO2) in its aerobic composting process.

**Development Impact**

WVI provides cities with cleaner streets, improves the living conditions of waste pickers and mitigates climate change by reducing greenhouse gas emissions. Communities benefit from the garbage collection service through reduced waste, which is otherwise thrown in front of houses and in dumpsites across the city. This reduces health hazards from ground water contamination, improving residents’ living conditions.

WVI’s business model creates new employment for waste pickers and waste processors. By promoting the use of protective gear, WVI is also improving waste pickers’ health. In addition, WVI provides professional training and offers career development opportunities to low-income workers.

By composting organic waste, WVI reduces approximately 2,500 tons of greenhouse gases per project, per year and saves up to 80 percent of landfill space, tripling the average landfill’s lifespan. Instead of polluting the environment, nearby farmers use the processed compost as an inexpensive, organic soil conditioner, which rejuvenates soil that has been subject to chemical fertilizer overuse.

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Key Success Factors

Pilot projects to validate the revenue model and potential for social impact
In the four and a half years since WVI was established in India, it has validated its revenue model, affirmed its potential for social impact and incorporated lessons learned into new projects using a minimum viable product approach to test out business strategies.

Achieving scale through building the sector
Rather than hoard techniques or intellectual property, WVI actively encourages adoption of its model to create a critical mass of players that practice waste picker-inclusive, environmentally-friendly waste management. In fact, WVI founder Parag Gupta created a non-profit organization to build this ecosystem and the Waste Ventures Consortium is now establishing a Development Impact Bond for waste to align development finance with outcome-based investment.

Creating benefits for all stakeholders
WVI’s business model increases profits for businesses, carries less risk for municipalities, improves the living conditions of waste pickers and households, and benefits the environment.

Next Steps and Spin Off Effects

WVI is the core business model for Waste Capital Partners. With an Indian market of over US$2 billion, the challenge lies in achieving rapid scale to meet the demand for better waste services.

The company’s model of solid and inclusive waste management has recently been adopted by the state government of Andhra Pradesh. In the state of Telangana, WVI was mandated to take over operations in 44 municipalities and provide training in solid waste collection and processing across all municipalities.

While WVI’s model has been designed for global replication, it is currently only implemented in India. However, other South Asian national governments – as well as investors – have expressed an interest in exporting the model. In fact, WVI has already aligned government partnerships and investors to begin operating in another country before the end of 2014.

In the future, WVI will continue to encourage the replication of its model by other players, who can adapt it to other developing countries’ contexts. WVI’s long-term vision includes influencing government policies to facilitate implementation of its business model across emerging markets.

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