

FROM WASTE TO WEALTH

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Sector: Renewable Energy - Briquette



Jean Bosco Nzeyimana

CHALLENGE

Rwanda is a densely populated country, even in rural areas. Residents of Nyamagabe district spend a considerable portion of their time looking for wood fuel. Their energy poverty is worsened by receding forests, calling for a sustainable source of fuel. On the other hand is the ardent need to dispose of household waste in an environmentally sound manner. Briquette production is a genius solution in using what people want to dispose of to produce what they need.

CLIENT

Habona Limited is an enterprise owned and run by Jean Bosco Nzeyimana, a 22 year old entrepreneur. He grew up in Nyamagabe, experiencing a lack of wood fuel. After researching on the internet, he discovered various ways he could ease the fuel burden back home. One was a biogas plant that his village could share, but he was unable to raise the money to build it. He set the biogas idea on the back burner and embarked on a more reachable solution - briquettes. He began making some from home and gave them for free to women in his village. Soon he could not satisfy the demand. The district approached him to take up a waste disposal facility that had been set up and carry out manufacture of briquettes. The district office invested in briquette making machines and he went straight to work sorting the waste to produce briquettes and - in addition - fertiliser for sale. The non-biodegradable waste is sold to recycling companies.

METHOD / SNV INTERVENTION

SNV met Jean Bosco after his enterprise had already taken off and was receiving media publicity for his innovation in creating fuel and fertilizer from waste. His business was doing well but he was having a hard time motivating his workers. OYE stepped in and coached Jean Bosco and his staff. The process began with a SWOT analysis that revealed a lack of ownership on the part of the workers. To resolve this, they all received basic business training. SNV/OYE provided guidance in the development of the company's new business plan in order to professionalize and expand its capacity of youth (on-the-job training, employment and self-employment).

OUTCOME

Jean Bosco is currently providing employment for 30 permanent employees and 20 casual workers, 26 of them youth trained by OYE in basic life and business skills.

He is currently producing tons of fertilizer from treated bio-degradable solid waste which he sells at between Rwf40,000 - 60,000 per 5 ton truck.

Thanks to the SWOT analysis and training, Habona employees have embraced the enterprise and work as a unit to keep the business profitable.

Jean Bosco has diversified into agribusiness, by planting fruit and vegetables seedlings using the fertilizer from his plant and selling to villagers.

The land surrounding the factory has been cleared and turned into demonstration plots in order to provide evidence to potential customers that the fertilizer is productive and does not present risk of contamination.

IMPACT

Jean Bosco has improved the lives of his family members through providing employment and supplying them with clean fuel.

He sells a kilo of briquettes at Rwf200 to nearby schools, homes and local brick makers. He has also completed his bachelor's degree in business administration.

He has received large orders for briquettes but is unable to fill them because of his low production capacity and the frequent breakdown of the briquette making machines. OYE will further accompany him in establishing linkages with financial service providers, in order to enable investments in larger and more durable machinery.

TESTIMONIALS

"There is demand for the product. I have visited other provinces and my eyes have opened up to new opportunities. SNV recently sent PUM experts here to brainstorm the possibility of waste collection and briquette production at Kigeme refugee camp. I believe my dream of employing 3,000 people, and having a branch in every province is within reach, then people can stop cutting trees for fuel. I plan to install a biogas plant that uses the waste to power my machines," said Jean Bosco.

SUSTAINABILITY

1. Jean Bosco has already established a ready market for his product.
2. He is drafting a proposal to engage the district in a public, private partnership which frees him to seek funding for expansion.
3. He has designed a more efficient briquette maker and commissioned a local artisan to fabricate it. It will have a production capacity of 500kg per hour.
4. He has also designed a cooking stove that will use briquettes without breaking them because their fuel efficiency lies in their compressed form.
5. Habona will open up its own recycling plant in January to process the bottles and plastics gathered.
6. He also plans to begin an eco-tourism centre within the facility to put the recycled plastic to creative ornamental use and create more jobs for locals.
7. He is educating villagers on environmental conservation and recycling through his tree and vegetable nursery.
8. The facility also taps rainwater and stores it in tanks, ensuring the factory never lacks water for the compression stage of production.
9. Jean Bosco pays for the collection of waste from Nyamagabe's collection points, thus controlling a large factor of production.
10. Habona has already acquired and repaid two bank loans, inspiring more confidence in potential lenders.
11. Since Nyamagabe is a high coffee and cassava producing area, Jean Bosco is trying out briquette production with coffee husks and cassava peelings, further gaining control of raw materials.

LESSONS LEARNED

1. OYE sees opportunities to leverage Habona Ltd as a centre for practical business training, mentorship and coaching of youth.

2. Waste is created on a daily basis, the ability to turn it into energy is key to a profitable business model with important environmental advantages.
3. The involvement of the district requires attention and lobbying in order to further contribute to the growth of the enterprise.

