

SR3 INVENT sustainable projects and businesses in Ecuador



Ways to minimize the impact of agricultural and industrial recyclable by-products and increase visibility through environmental marketing.

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Abstract

SR3 INVENT advises, accompanies and designs businesses and solutions for companies to minimize the negative impact of agricultural and industrial recyclable waste.

Problem statement

Some of our clients are facing problems such as an absence of an integral management of their recyclable industrial or agricultural waste, and are confronted with financial hardship, image loss, fines for non-compliance and danger of production line shut-downs. Another client segment is already investing in environmental initiatives but aware of their deficits in environmental marketing, and is thus seeking to create communities within their interest groups and national/international visibility campaigns for their projects.

Company description

SR3 INVENT (<http://sr3invent.com/>) is a company conformed by Ecuadorian and Swiss partners located in Quito, Ecuador, which is dedicated to the development of sustainable projects and businesses. We ensure the corporate social benefit of our customers by strengthening their business through working with their stakeholders. Among the services offered are: environmental impact reduction studies, management of environmental projects, development of sustainable environmental initiatives through applied management models and others, according to customer requirements, such as environmental marketing and international visibility. Within our own business line, we established

the Resource Recovery and Reuse (RRR) Project "BOMBASOIL", pellets made of chicken manure enriched with nutrients (depending on the type of crop that is used). This product was created to demonstrate an effective solution of sustainable sanitation

for the treatment of chicken manure. The BOMBASOIL addresses the issue of improper chicken manure and poultry litter usage - in addition to altering the nutritional balance in the soil - causing the loss of nutrients by washing out (leaching and runoff) (Gerber et al., 2005).

"Our philosophy is to promote sustainable sanitation through reusable resources and alternative technologies - seeing the conservation of the environment as engine for economic reactivation and generation of awareness in the population". Belen Vallejo, SR3 INVENT Director.

Mission: We design sustainable sanitation businesses in Ecuador through alliances to increase the corporate benefit of our customers with the goal to promote environmental conservation.

Vision: To be the leading company in Ecuador in sustainable sanitation projects and businesses focused on a corporate benefit.

Key facts of BOMBASOIL pellets:

- BOMBASOIL are pellets made from chicken manure that can be used as soil enhancer
- In our first pilot we have a capacity of 60 kgs of pellets from 150 kg of manure per hour
- Initial target costumers are urban gardeners. Later, with increased production and reduced production costs, the product will also be more competitive for plantations, flower production, etc.



Figure 1. BOMBASOIL “Machinery”

Core values: The three core values of SR3 Invent are integrity and transparency, active environmental and social responsibility and closeness and commitment to the environmental performance of our clients.

Products and services:

- Design and development of environmental marketing projects, and creation of communities within their interest groups: strengthening the clients’ socio-environmental relations, connecting environmental initiatives with the relevant communities where our client wants to have a positive impact.
- Creation of new products, projects and businesses for the client based on social and financial welfare.
- International representation and visibility: showcase and distribute Ecuadorian projects and initiatives

at international conferences such as World Water Forum or the Water Week Stockholm

- Technical support in Ecuador for international companies and NGO’s which want to develop and implement sustainable projects in the water and sanitation sector.
- Environmental impact reduction studies: studies of environmental impact and mitigation measures
- Environmental projects or initiatives management: managing and assessing the clients’ projects per hour or as PMaaS.
- Implementation of reuse measures for agricultural and industrial recyclable waste: implementing RRR-projects for our clients using their recyclable wastes and turning them into innovative products. Our own initiative BOMBASOIL consists of drying and milling poultry manure and processing to a pellet which can be used as soil enhancer, losing less nutrients through leaching due to rain and avoiding contamination of watersheds. Tests will be run to enhance the pellets with additives such as micro organisms or other elements (capacity: up to 60kgs of pellets per hour / input : aprox. 150 kgs of manure per hour / commercial units: bags of 2 and 5 kgs / target market: urban gardeners (until production can be increased and production costs can be reduced to make the product more competitive for plantations, flower production etc.) / distribution through supermarkets.



Figure 2. BOMBASOIL Process



Figure 3. BOMBASOIL V1



Figure 4. SR3 INVENT Partners

Company history

From September 2013 to June 2014, Belen Vallejo attended the cewas start-up program in Willisau/Switzerland. After the program and with a clear vision of the BOMBASOIL project, they founded the association “Yaku and You” in Switzerland. The aim is to promote water sanitation in the Andean Region. Founding members are Belen Vallejo, Stefan Breitenmoser, Karla Schlie, Alfons Breitenmoser and Leonellha Barreto. After moving to Ecuador, “Consultora SR3 Cia. Ltda.” was founded by Belen Vallejo with husband Stefan Breitenmoser as CEO in order to enter the consulting sector in Ecuador.

In July 2017, Belen Vallejo, Stefan Breitenmoser and Alfredo Lopez founded “SR3 Invent Cia. Ltda.” in Quito as equal partners with clearly defined responsibilities.

Building a viable business model

The start-up course of cewas helped Belen Vallejo to bring her ideas to paper and to develop a sustainable business model for her RRR project (pellets made from chicken manure). Cewas supported the idea of founding the association “Yaku and You” which now has its home under the roof of cewas in Willisau/Switzerland. In 2015, already in the process of further developing and promoting the project in Ecuador, “Yaku and You” received financial project support over US\$ 10,000 from Chocolats Halba in Switzerland made possible by the support of cewas. In 2017, we realized that in order to be sustainable we need to redesign the company, defining new services and values for our clients. In June 2017, the consulting company Estay Consulting supported us to identify our core services and define a company strategy for SR3 Invent Cia. Ltda. Elaborating a service portfolio turned our company into a service provider, no longer depending on external funding for our RRR Project BOMBASOIL. BOMBASOIL is based on a business model of receiving capital from investors or funding from NGO’s in order to increase production capacity and multiplication, while the business model of SR3 Invent consists of selling our defined services.

Challenges of starting/growing a business

The main challenges were the transformation of a project idea promoted through an association into an implemented project, securing income and growth through selling valuable services and a clear long-term company strategy.

Lessons learned as a start-up entrepreneur

Perseverance, patience, discipline and the will to redesign the project (and sometimes even personnel redesign) is as important as always staying in the learning lane. We were confronted with so many unfamiliar aspects, such as company strategy, legal or organizational structure, finance and marketing. It is important for us to get external support from experts and mentors in their fields or building alliances where it is necessary, and we are continuously working to extend our network.

Entrepreneurial success stories

In 2016, we were involved in an environmental review of 55 water and sanitation projects around Ecuador that gave us a general idea of the opportunities in the sector. In 2017, BOMBASOIL was nominated in “The Latin America Green Awards”, and ranked 25 out of 55 in the water category. We are getting continuous positive feedback and invitations to present our products and services to a wide range of potential clients, from small and medium-sized businesses such as farmers’ associations, ecolodges, the dairy products industry and the financial sectors to decentralized government. A highlight within our service of environmental marketing and institutional strengthening was the representation of the recently founded Water and Sustainable Development Fund of the Imbabura Province (FONADERI) (www.imbabura.gob.ec) at this year’s biggest water related event, the World Water Forum 8 in Brasilia, which only takes place every 3 years in a different host city. At this event, we were also informing about our own project BOMBASOIL, a pellet with a package that contains information to raise awareness about water and sanitation issues. Successfully produced earlier this year for the first time in Ecuador, we presented the product physically on a total of three occasions where we got to expose those Ecuadorian initiatives within the Swiss Booth. Our gratitude goes out to all the facilitators, especially cewas and SDC Switzerland.

DESCRIPCIÓN DEL PROYECTO

Ecuador es un país productor de huevos y pollos de engorde. Un sub-producto de este proceso es el estiércol acumulado durante el ciclo de producción, aproximadamente 120 mil toneladas anuales de gallinaza. En el país es una costumbre la utilización de gallinaza para mejorar el suelo, sin embargo, el uso indebido de la gallinaza y pollinaza –a más de alterar el balance nutricional en el suelo puede ocasionar la pérdida de nutrientes por lavado.

Estos procesos resultan en la contaminación del agua, suelo y del aire, y se reflejan en niveles bajos de producción de cultivos en los que se utilizan la gallinaza y pollinaza. SR3 es un emprendimiento social que nace en Ecuador en el 2015, con apoyo de la asociación Yaku and You de Suiza, y desarrolla la iniciativa de pelletizar (compresión) la gallinaza, lo que permite que se puedan añadir otros elementos nutricionales al pellet, para enriquecerlo, facilitando también su transporte y almacenamiento.

INNOVACIÓN

La integralidad al fusionar la agricultura y el cuidado del ambiente lo cual genera una fuente de ingresos adicionales.

ALCANCE
Nacional

Sector Operativo: Privado
Microempresario

POSTULANTE
Consultora SR3 Cia. Ltda /
Asociación Yaku and You
belem.vallejo@sr3consultora.com

RANKING GENERAL 324

RANKING AGUA 25

Figure 5. „BOMBASOIL in the Latin America Green Awards 2017“

Reference

Gerber, C. Opio and H. Steinfeld. (2007): Poultry production and the environment – a review. Animal Production and Health Division 6-9, Food and Agriculture Organization of the United Nations, Italy.

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