

This publication is part of a series of case studies on BCtA Impact Measurement Services (BIMS), a Business Call to Action (BCtA) initiative that demonstrates how inclusive businesses can measure and apply impact data.

BIMS provides 21 participating BCtA member companies with technical expertise and technology to design and implement surveybased data collection for assessing social and environmental as well as operational performance. BIMS is implemented by BCtA with support from implementing providers Arthify and Echo Mobile.

# **Impact Measurement Case Study**

#### **EAST BALI CASHEWS**





**LOCATION:** Indonesia

**Target Beneficiaries:** 

Low-income farming families

Sector: Agriculture

**Business model:** East Bali Cashews (EBC) operates cashew-processing facilities in Bali, Indonesia, purchasing and processing locally produced cashews for sale as raw nuts or value-added products such as flavored cashews and granola. By operating a local processing facility that predominantly employs women from local farming families, EBC aims to decrease the cashew carbon footprint, increase local incomes and improve gender parity.

#### THE OBJECTIVE

EBC is measuring its social impact to assess whether its investments are being deployed in the most effective manner possible to improve the community members' lives. The data will be used to make investment decisions regarding social programming. The company will also use these findings to pursue publicity and funding opportunities.

#### **THE PROCESS**

#### $oldsymbol{1}$ assessing readiness



EBC is a progressive-stage business with medium readiness for impact measurement. The company actively seeks to improve the lives of its employees and farmer-suppliers. It is able to track this impact periodically though surveys and operational data.

2
PLANNING
AND
DESIGN

ANALYSING
DATA AND
REPORTING

3
MONITORING

**IMPACT** 

In collaboration with BIMS, EBC identified and measured:

- farmers' income levels and dependence on cashew farming;
- farming knowledge and practices; and
- employee capacities and their families' education

**82%** live below USD 2.5 per day in terms of 2005 purchasing power parity in Indonesia.

Survey data from EBC

**54%** have worked

employees indicates that:

for more than two years; **72%** of the women

employees are ready to take

**27%** send their children to

The farmer survey shows that:

more responsibilities; and

the factory preschool.

Two surveys were developed: one for employees and another for farmer-suppliers. In all, 178 employees were interviewed from across EBC's area of operations and 379 farmer-suppliers were randomly sampled from neighboring villages

#### **RESULTS**

EBC is using the impact data collected through BCtA's Impact Measurement Services (BIMS) to: (i) identify new income-generating activities for local communities; (ii) identify additional career advance opportunities for women staff; (iii) improve existing training and support services; and (iv) publicize its social contributions for marketing purposes.

### **About East Bali Cashews**

Bali's cashew-growing communities are some of the poorest in Indonesia, with deficient soil quality and a lack of employment opportunities. As a result, 80 percent of Bali's raw cashew nuts are shipped overseas for processing. Social enterprise East Bali Cashews (EBC) was founded in 2012 to establish cashew processing facilities close to farmers and purchase and process locally produced cashews for sale — either as raw nuts or as value-added products such as flavored cashews and granola. EBC specifically targets women from farmer households as employees in its processing facility. It also provides daycare and preschool facilities at the factory for the children of staff members.

While tourism is the primary source of revenue for the Balinese economy, the island's northern and eastern regions are predominantly agricultural. Smallholder farming households are dispersed over a large area and isolated from each other and commercial activity. EBC seeks to increase incomes in these communities by providing employment opportunities for local women. Its focus on rural farming communities with average incomes below USD 100 per month makes EBC an inclusive business.<sup>1</sup>

Integrated within its factory operations, EBC also operates social and environmental programmes for:

 Farmer improvement – assisting farmers in improving cashew production by providing

- training and establishing a network of cashew nut drying centres, and assisting farmers in diversifying their incomes through rosella farming, bee-keeping and other activities;
- Green energy and no wastewater using a cashew shell-powered furnace to provide eco-energy for the factory's drying oven and steaming machines, and an on-site water filtration system to repurpose wastewater for gardening; and
- Early-childhood education operating Anarkadia, a daycare and preschool programme focused on improving educational and health outcomes of employees' children.

In its initial years, EBC was supported by its founder's personal investments and support from friends and family. In 2013, the private equity firm Kohlberg Kravis Roberts and the Singapore-based Impact Investment Exchange Asia assisted EBC in: developing its financial model and business plan; assessing the most appropriate capital structure and liquidity requirements for the business; and developing an investment plan to raise new funds to support EBC's expansion. As a result of this collaboration, EBC raised USD 900,000 to grow its business. Today, it is completely self-sustaining – processing and selling 900 tons of raw cashew nuts per year, and employing 400 full-time staff (85 percent of them women).



<sup>1</sup> Inclusive businesses are commercially viable business ventures that engage people living at the base of the economic pyramid –people with less than USD 10 per day in 2015 purchasing power parity – as consumers, producers, suppliers, distributors of goods and services, and employees.

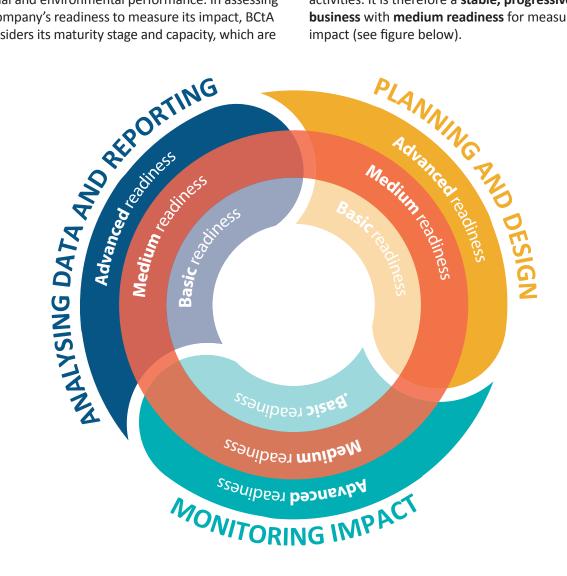
## Step 1: Assessing readiness

Effective impact measurement<sup>2</sup> begins with determining the reason for measuring impact. A wide variety of tools are available for businesses to measure, manage and report on their social and environmental impact. Approaches range from those generating quick feedback to those requiring a longer timeframe to prove systemic impact. BCtA believes it is important for companies to choose the right approach that meets their business needs given the available resources.

Assessing the company's readiness for impact measurement is a critical first step in determining what impact data to collect, how to collect them and how to use them for business development as well social and environmental performance. In assessing a company's readiness to measure its impact, BCtA considers its maturity stage and capacity, which are

determined based on the company's clarity of purpose, data-driven culture and resources available for data monitoring and collection.

EBC is a sustainable business that is growing steadily in terms of production capacity and impact. Since its inception in 2012, its revenues have grown on average of 80 percent per year. The company has also increased its social and environmental impact activities through its business operations and parallel programming. With the help of Shujog, the non-profit arm of Impact Investment Exchange, EBC undertook an impact assessment in 2013, and since then it has been regularly tracking operational data to inform its business, social and environmental activities. It is therefore a **stable**, **progressive business** with **medium readiness** for measuring its impact (see figure below).



<sup>2</sup> In this case study, 'impact measurement' refers to the measurement of social, economic and environmental performance of inclusive business.

## Step 2: Planning & design

The planning step involves developing an Impact Value Chain<sup>3</sup> that links business goals, strategies and operations to outcomes and impact related to the Sustainable Development Goals (SDGs)<sup>4</sup>. The Impact Value Chain is the basis for developing impact metrics and indicators that address the needs identified in the previous step.

The Impact Value Chain guides companies in determining what to measure and where

to collect data by mapping business goals, strategies and operations against outcomes related to the SDGs. Since 2013, EBC has grown its business and has increased its social impact activities – specifically related to improving farmers' livelihoods and the welfare of its staff. It participated with BIMS to better correlate and assess the impacts of these activities with the social goals it is seeking to achieve.

#### East Bali Cashews' Impact Value Chain



- Lack of infrastructure and local cashew processing capacities
- Low income levels due to poor soil and farming practices, and lack of alternative employment
- Low levels of education

**Decision-**

questions:

making

## Setting up and running cashew processing factory

- Year-on-year growth in processing capacity
- Year-on-year growth in employee numbers
- Frequency and duration of staff capacity development programmes

## Farmer capacity building programmes

 Number of training and other support activities implemented quarterly

#### **On-site preschooling**

 Key reasons preventing staff from enrolling children in preschool

Which commercial activities need to be expanded or curtailed to achieve social impact?

### Job opportunities for women

- Number of women employees yearon-year
- Number of women employees ready to take on more responsibility

## Cashew production by farmers

- % of farmers from communities who have been trained
- % change in cashew production (quality & quantity) year-on-year

#### Children's educational attainment

 % of staff whose preschool-age children attend preschool

Which activities are women employees and farmers interested in most?

#### Increased employee income levels

- Year-on-year change in income levels of employees
- Increased number of women in management positions

### Increased farmer income levels

- % distribution of income sources for farmers
- Change in farmers' annual income levels

#### Increased children's education attainment

 Overall preschool enrollment rates in communities

Which income sources are more profitable and sustainable for farmers?

#### **Poverty reduction**

- Year-on-year change in agricultural income levels within communities
- Overall increase in local commercial activities

#### Gender empowerment

- Yearly change in women's employment rates within communities
- Women's participation in household/ community decision making

Better education for children and increased literacy

How can EBC replicate its local production and processing model to scale up its social impact in other regions?

<sup>3</sup> The Impact Value Chain integrates multiple approaches such as the theory of change, results chain, logframe and business value chains.

<sup>4</sup> Adopted in September 2015 by all United Nations member states, the SDGs are a set of 17 global goals and 169 targets related to key development issues facing society today. Countries aim to achieve them by 2030.



## Step 3: Monitoring impact

To monitor impact, BIMS recommends that companies collect data on their operations as well as social and environmental performance on an ongoing basis. Businesses can assess data from primary and secondary sources such as invoices, inventory, customer registrations, market-research reports, social media, surveys and polls.

Identifying sources of data is critical for developing data-collection plans using the Impact Value Chain. Many companies already have data that can be used for impact measurement. BIMS suggests that companies first determine if they can analyse the data they already have. Only if this is not possible should they plan on collecting new data.

With the assistance of Shujog, EBC undertook a baseline assessment and a two-year projection of its social impact in 2013. This assessment identified the key stakeholders and beneficiaries, and calculated the social return on investment that the company could achieve by assigning monetary values to: changes in beneficiaries' economic capital (assets and income) and human capital (health and knowledge); and the company's strategy to use cashew shells as biofuel to replace diesel-powered generators. In subsequent years, EBC added specific social and environment activities, which it tracked in relation to output parameters such as number of farmers cultivating rosella, rosella yields and children attending its preschool.

Based on the Impact Value Chain developed in collaboration with BIMS, EBC surveyed its employees and cashew farmers to better

understand their needs and elicit their feedback regarding its social programmes. The surveys also measured the income levels and living standards of its employees and farmer-suppliers. Compared to the Shujog study that was made five years ago, BIMS study gives EBC more up-to-date insights.

#### **Survey implementation**

Upon completion of its Impact Value Chain, EBC managers developed and piloted both the employee survey and farmer survey over a week-long period with the help of six to eight personnel. The surveys were developed and tested using smart phones, and data from the pilot phase was used to update and refine the survey questions.

- Given the availability of staff at its factory, efforts were made to survey as many employees as possible across all job positions. In all, 178 out of 400 full-time employees were surveyed across 17 job categories.
- For the farmer survey, stratification was based on the various traders EBC purchased its cashews from. These traders are the links between EBC and farmers, and are instrumental in bringing EBC workshops and training to farmers. In Karangasem, there are about 4,500 cashew farmer families. Using random sampling, 379 farmers were surveyed based on their availability at the time of survey.

## Step 4: Analysing data and reporting

While the purpose and usability of impact data can vary for each inclusive businesses, in general the results of impact measurement can be used to answer one or more of the following questions:

- 1. Who is being impacted?
- 2. How are they being impacted?
- 3. What are the drivers contributing to or limiting this impact?
- 4. How can this impact be scaled up and linked to the SDGs?

#### Who is being impacted?

EBC was established in north-eastern Bali, which — unlike the rest of the island — is primarily dependent on agricultural income, with smallholder farmers' earnings less than USD 100 per month. Commercial activities in this region are very limited, with high illiteracy among women and a lack of opportunities for formal employment. By setting up the cashew-processing factory in the midst of this cashew-producing region, EBC wanted to create employment, increase income levels, improve education and boost commercial activity in the region.

According to the Progress out of Poverty Index for Indonesia, 82 percent of surveyed farmers live below USD 2.5 per day in terms of 2005 purchasing power parity. While employment at the factory was the main source of income for staff members' families, the farmers relied on multiple crops and animal husbandry to support their families. The survey data shows that only 2 percent of farmers depended solely on cashew production as their primary source of income.

#### How are they being impacted?

Local employment with decent working conditions, especially for women, is the most direct impact of EBCs business. All EBC staff reported receiving training specific to their jobs and aimed at furthering their capacities within the organization and outside. The staff survey showed that 89 percent of farmers recruited in the factory were women, and 72 percent of them were willing to take on more responsibilities. Approximately 27 percent of staff with preschool age children had enrolled them in the Anakardia pre-school at EBC's factory. Since EBC is keen on increasing this number, the survey probed the hurdles women faced in enrolling their children at Anakardia.

Although EBC provides preschool at subsidized rates, the majority of these staff reported that cost was a major constraint.

Purchasing cashews at fair-trade prices and assisting farmers in augmenting their income by introducing alternative income-generation activities are EBC's principal activities to benefit farmers. The farmer survey showed that 75 percent of these farmers were facing problems with insects on their cashew trees and 69 percent of them reported a decline in cashew production over the past year, even though EBC was purchasing and processing larger quantities of cashews each year. This validated the objective of EBC's Farmer Improvement Programme, which was designed to assist farmers in diversifying their income sources by introducing new crops such as rosella, and activities such as bee-keeping.

## What are the drivers contributing to or limiting this impact?

By purchasing and processing the cashews locally, EBC aims to protect local farmers from the fluctuations of international market prices. It does this by sharing with the farmers the value captured by excluding in-between traders from its global commodities supply chain. Scale is therefore the fundamental driver that will either contribute to or limit EBC's impact in terms of the number of women it can employ, the price it can offer to farmers and the social and environmental activities it can support in local communities. EBC currently purchases just 3 percent of local cashew production, indicating significant untapped potential to source and grow locally, provided that its processing capacity, distribution and sales can be scaled up.

EBC has also begun alternative businesses like the East Bali Immersion Programme to generate revenues for local communities. East Bali Immersion is an Eco Camp located 3 kilometers from the East Bali Cashews factory and offers service-learning, adventurous and cultural activities all closely connected to the local community and landscape. These programs are offered to international school groups, travel groups, corporate retreats and others. They aim at educating guests about the local community, social entrepreneurship and local food sourcing and production. While these activities are independent of its core business, they aim to develop the local economy by increasing income levels and improving livelihoods.

## How can this impact be scaled up and linked to the SDGs?

The main objective of BIMS is to support inclusive businesses in adopting impact measurement practices that help them to plan, monitor and deliver on their intended social and environmental impact – and contribute to achieving the SDGs.

Using the Impact Value Chain, EBC identified the following SDGs to be in line with its intended impact:

# SDG 1 NO POVERTY SDG 8 DECENT WORK AND ECONOMIC GROWTH

EBC employs women from low-income households and supports local cashew farmers through fair-trade pricing and creating markets for new crops and agricultural products. Most EBC employees have had no previous job experience.



## SDG 2 ZERO HUNGER

EBC supports farmers in diversifying their crops and engaging in incomegenerating agricultural activities.

# SDG 4 QUALITY EDUCATION

EBC is trying to make early-childhood education the norm in remote communities by offering daycare and pre-school to its employees' children. It also builds farmers' capacity in good farming practices.

# SDG 13 CLIMATE ACTION

The company has abandoned the use of fossil fuels to power ovens and steam cashews.

# SDG 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

EBC ensures sustainable production patterns by promoting crop diversification and use of exclusively local ingredients.

# SDG 5 GENDER EQUALITY

The company is increasing women's employment, incomes and inclusion in commercial activities. EBC has low staff turnover, with the majority of its staff employed for more than two years. In the survey, 72 percent of women staff reported being content with their current job position and willing to take on additional responsibilities.

## Lessons learned from EBC's impact measurement

# Impact measurement can be useful for understanding employees' and suppliers' conditions and needs

Impact measurement data can be used to inform activities aimed at achieving social impact. Staff survey data showed that, the majority of EBC staff were satisfied with their existing positions while receiving training from EBC to further improve their capacities. Similarly, farmer data showed that cashew is not the main source of revenue for most farmers, the majority of whom reported a decrease in cashew production. This sets the stage for EBC managers to enquire deeper about what additional activities they should undertake for staff, and the causes of this decline (e.g. climate change) in cashew production.

## Impact measurement requires continuity in terms of leadership and planning

EBC's full-time managers are completely devoted to the company's daily operations, and impact measurement has been mainly undertaken by temporary staff with support from external partners. As a social enterprise, EBC is planning to integrate social-impact measurement into full-time managers' scope of work to retain institutional knowledge on social impact over time and achieve its objectives.

# Measuring impact on an ongoing basis contributes to businesses' long-term orientation

EBC works to combat rural poverty by creating long-term employment opportunities. At the same time, it tackles poverty's root causes by providing access to educational initiatives that promote future social innovation and economic development. Although evidence of its long-term impacts is still limited, ongoing impact measurement can help EBC to monitor its social impacts over the long term. The company is currently designing long-term measurement tools and strategies to focus its business activities on achieving the maximum impact on local communities.

Business Call to Action (BCtA) aims to accelerate progress towards the Sustainable Development Goals (SDGs) by challenging companies to develop inclusive business models that engage people at the base of the economic pyramid – people with less than USD10 per day in purchasing power parity (2015) – as consumers, producers, suppliers, distributors of goods and services, and their employees

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