

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 survey-based data collection for assessing their social and environmental as well as operational performance. BIMS is implemented by BCtA with support from implementing providers Arthify and Echo Mobile.

**80** percent of partner farmers surveyed live below USD 2.50 per day in terms of 2005 purchasing power parity in Benin. As a result of the Linking to the Future initiative,

> 93 percent of them have received training from Tolaro;

**38** percent of farmers reported increased production and

**54** percent reported increased

74 percent are now members of cooperatives; and **24** percent have received

> Staff retention rates are high, with an average tenure of four years for full-time staff.

fair-trade certification.

Tolaro sampled participants (receiving training and technical support from Tolaro) in its Linking to the Future initiative and non-participant farmers (not receiving training from or selling cashews to Tolaro). 722 farmers (361/group) were surveyed in all. A one-time survey of 75 factory employees was also conducted and the company developed forms to track factory operations.

# **Impact Measurement Case Study**

### **TOLARO GLOBAL**





**LOCATION:** Benin

**Sector:** Agriculture

**Target Beneficiaries:** Low-income communities and farmers

Business model: Tolaro Global operates raw cashew nut processing facilities in Parakou, Benin, and exports the processed cashews to Europe and North America. It works closely with farmers, providing them with inputs and technical support to increase their cashew yields as well as developing farmer cooperatives. It also generates employment through its processing factory and is actively involved in strengthening Benin's cashew industry.

### THE OBJECTIVE

Tolaro aims to create a sustainable and competitive ecosystem for cashew harvesting, processing and export in Benin. It engaged BIMS to collect social-impact data in order to assess its activities related to cashew farmers and supporting factory employees. These data will be used to improve its operations and develop future programmes in collaboration with clients and investors.

### THE PROCESS

### 1 ASSESSING READINESS Tolaro is a progressive-stage business with



medium readiness for measuring impact. With BIMS, Tolaro surveyed two groups of cashew farmers and its full-time employees to assess changes in socio-economic status, inputs provided and impacts.

Key social-impact metrics included: farmers' income levels and sources of revenue; the usefulness of PLANNING different training modules; **DESIGN** 

**ANALYSING DATA AND** REPORTING

employees' financial needs: and

cashews;

key challenges faced

by farmers harvesting

job satisfaction.

### **MONITORING IMPACT**

### RESULTS

Tolaro Global is using the impact data to make decisions related to: (i) assisting farmers in improving the quantity and quality of cashew production, and gaining market access; and (ii) improving the work culture and livelihoods of its staff.

# **About Tolaro Global**

West Africa is the largest cashew-producing region in the world. In Benin, 200,000 farmers grow cashews that are among the highest quality in the region. The cashew sector holds enormous social and economic potential for Benin and its smallholder farmers. However, cashew nut yields in Benin are remarkably low, at just 300kg/hectare versus a potential 680kg/hectare. In addition, 90 percent of West Africa's cashew crop is exported for processing to countries like Vietnam and India.¹ Due to a lack of local cashew-processing facilities in Benin, farmers receive low prices for their raw cashew nuts.

In 2011, Tolaro began addressing these problems by setting up a cashew-processing factory in Benin and working with cashew farmers directly – grouping them into cooperatives and providing training and technical support in best cashew farming practices. This focus on rural farmers with average incomes less than USD 100 per month makes Tolaro an inclusive business.<sup>2</sup>

In 2016, the company processed 2,500 tons of cashews and had 600 employees including full-time and daily workers, of which approximately 50 percent were women. In 2012, it was the first cashew-processing company in Africa to receive the African Cashew Alliance Seal, which conforms with international standards of quality, labour and food safety. Specializing in the production of white-coloured cashew, the company holds an HACCP food-safety certificate and fair-trade certification. In early 2018, it will gain both non-GMO and organic certifications.

Tolaro actively collaborates with international agencies and client companies like Pepsico and Intersnack to implement projects aimed at improving farmers' livelihoods. The Linking to the Future initiative is one such project. It began in 2015 in collaboration with Intersnack to: support farmers in acquiring knowledge and skills in improved production techniques; and organize them to procure basic equipment and improved

planting materials, strengthen market linkages and gain access to flexible credit. In collaboration with BIMS, farmers who participated in this project were surveyed along with non-participating farmers.

In early 2017, Tolaro received funding from Moringa SICAR SCA, a private equity fund, to scale up its primary processing facility, expand its out-grower programme and construct a roasting, seasoning and packaging facility in order to produce the first "100 percent made in West Africa" roasted cashew nuts.<sup>3</sup> The company is also setting up a 2.5 MW solar PV/biomass energy project to meet its growing energy needs in an environmentally friendly manner, to process 20,000 tons of cashews annually by 2021.



<sup>1</sup> http://www.rongead.org/IMG/pdf/african\_cashew\_market\_review\_rongead\_ica\_2015.pdf

<sup>2</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.

<sup>3</sup> http://www.globalaginvesting.com/pe-firm-moringa-sicar-sca-invests-leading-cashew-processor-benin/

# Step 1: Assessing readiness

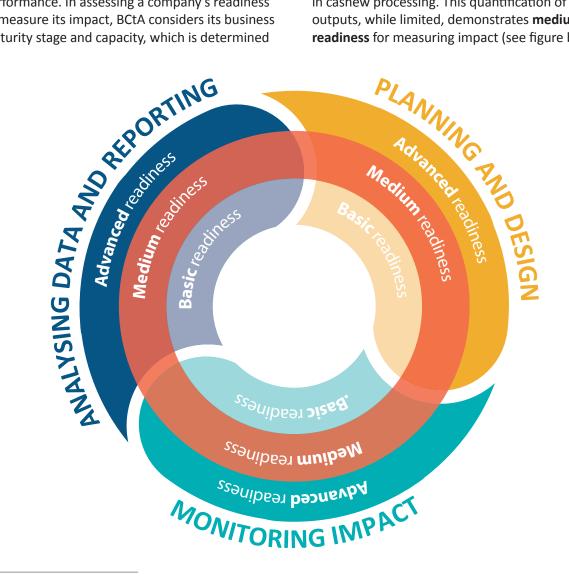
Effective impact measurement<sup>4</sup> begins with determining the reason for measuring impact.

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. It is therefore 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 as social-and environmental impact performance. In assessing a company's readiness to measure its impact, BCtA considers its business maturity stage and capacity, which is determined

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

Tolaro is a **progressive-stage business** that is financially sustainable and is consolidating its resources for future growth. Since its inception eight years ago, its objective has been to work towards creating a sustainable cashew industry that not only adheres to international quality standards but is inclusive, has outstanding values and creates desirable employment. This social-impact focus guides Tolaro's business strategy, culture and operations, as is evident from its regular monitoring and reporting on basic social-output parameters such as farmers trained, jobs created and changes in cashew processing. This quantification of outputs, while limited, demonstrates **medium readiness** for measuring impact (see figure below).



<sup>4</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>5</sup> that links business goals, strategies and operations to outcomes and impact related to the Sustainable Development Goals (SDGs)<sup>6</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. For Tolaro, poor raw cashew nut quality and low yields were affecting its vision of business growth. In addition, working with employees who lacked prior formal employment experience was a challenge. Tolaro developed an Impact Value Chain to understand how its operations were impacting its staff and farmer suppliers.

### **Tolaro's Impact Value Chain**



- Cashew farmers' limited knowledge and capacity, resulting in low yields and poor quality
- Inexperienced human resources

   low skills & capacity for cashew processing
- Lack of an industrial eco-system

# Setting up and running a cashew-processing factory

- Year-on-year growth in processing capacity
- Year-on-year increase in employees
- Frequency and duration of staff capacitydevelopment programmes

### **Farmer projects**

- Training topics: frequency and duration
- Farmers' feedback on training topics
- Income levels of participating farmers

# Cashew processing & employment

- Yearly tonnage of cashews processed
- Employment numbers by gender
- Staff tenure and retention rates

# Cashew production by farmers

- Percent change in cashew production (quality & quantity) yearly by region
- Certification of farmers for organic methods

Which regions require greater training and capacity inputs for farmers?

# Sustained localization of cashew processing in Benin

- Percent change in local processing of cashews
- Change in pricing of raw cashew nuts

# Better livelihoods of employees and farmers

- Year-on-year changes in income levels due to cashew production
- Changes in family expenses annually
- Asset ownership over time

How can farmers benefit more by local processing of cashews?

### Sustainable and competitive ecosystem for cashew production and processing in Benin

- Employment within the cashew/ agriculture sector
- Changes in soil quality, water usage and other sustainable practices

# Improved living standards for cashew farmers and families

- Reduced poverty and improved socioeconomic well-being
- Better educational attainment for children

How to collaborate with government and private bodies to create a sustainable cashew industry?

Decision-making questions:

Which training and capacity-building programmes need to continue, be changed or be discontinued?

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

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, inventories, 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.

Soon after setting up its processing factory, Tolaro began facing issues with the quality and production levels of cashews it was procuring from local farmers. The farmers were not organized and were directly selling their raw nuts to collectors and traders without any awareness of cashew quality or the added value of processing. To ensure a

better supply of quality nuts, the company began working closely with farmers through projects aimed at: improving farmers' knowledge and skills with production techniques; organizing them into cooperatives to achieve better market linkages; and assisting them in accessing flexible credit. These projects were implemented in collaboration with NGOs, international clients and agri-experts.

While the programmatic components of these projects were tracked, Tolaro wanted to undertake a more structured measurement exercise to deepen its understanding of its employees and supplier farmers engaged through the Linking to the Future initiative – and assess the impacts of the factory and the farmer projects on their lives. Using mobile technology, Tolaro created surveys and operation-tracking forms to: (i) identify problems encountered by cashew farmers during harvests; (ii) assess their knowledge of farming practices and selling habits; (iii) monitor daily operations and reporting; and (iv) understand the living standards and aspirations of its employees.

### **Survey implementation**

The BIMS mobile-based data collection platform allows companies to create as many forms and surveys as they require to measure impact. Tolaro developed three forms to survey its beneficiaries: (i) farmers participating in its Linking to the Future (LIF) initiative, (ii) non-LIF participating farmers; and (iii) factory employees. The company also created daily and weekly operations tracking forms to monitor the status of each cashew-processing section of the factory.

- 1. **Survey of farmers participating in LIF:** Tolaro had implemented the LIF program in four regions with nearly 2,500 farmers. A sample size of approximately 360 farmers was targeted to achieve 95% confidence interval and 5% margin of error in the survey. For practical reasons the survey was carried out in only 3 regions with the help of eight data collectors who had worked as trainers on the LIF initiative. At the time of writing of this case study approximately 120 farmers were surveyed in each of the 3 regions.
- 2. **Survey of non-LIF farmers:** To create a comparative group to analyze the impact of LIF, a similar number of non-LIF participating farmers were surveyed. These farmers were surveyed in the same regions by the same data collectors/trainers who were surveying the LIF farmers. While the target population of non-LIF participation was comparatively very large, a sample size of 360 was targeted to achieve close to 95% confidence interval and 5% margin of error in the survey.
- 3. **Staff survey:** Tolaro decided to survey its staff every six months. The first round of survey was focused on full-time employees who have been working for two years or more at the company. This represented nearly 40 percent of all full-time employees. Effort was made to interview these employees across organizational departments and positions. At the time of writing of this case study 75 full-time staff had been surveyed.

# 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?

Tolaro's goal is to create impact at the industry/ sector level across West Africa. Benin has some of the best-quality cashews in Africa, with sweeter-tasting white kernels, but the country lacks adequate infrastructure, technical support, labour, skills and capacity to convert the raw cashew nuts into high-quality cashew kernels for processing. Tolaro is filling this gap by bringing in technologies that conform to international standards and partnering with public and private stakeholders.

In terms of impacts on farmers and employees, 80 percent of Tolaro's raw cashew nut suppliers live below USD 2.5 per day in 2005 purchasing power parity according to the Progress out of Poverty Index in Benin. Through its factory, the company has created over 600 jobs, with 40 percent of its employees coming from households that earn below USD 2.5 per day.

### How are they being impacted?

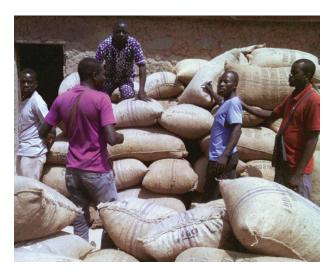
All of Tolaro's employees receive fair wages, healthcare, childcare, access to an on-site store and subsidized food. The company also invests in training and capacity building of its staff in cashew processing, hygiene and safety, and technology; Tolaro's staff retention rate (an average tenure of four years for full-time staff) is over 80 percent. For partner farmers participating in Linking to the Future, it provides training on farming practices, assessing cashew quality and organic cultivation, and encourages them to join cooperatives. Data show that 93 percent of partner farmers have received training and 24 percent have gained fair-trade certification through cooperatives. Among non-partner farmers, only 7 percent have received training on cashew production and

94 percent are not part of a cooperative – compared to 74 percent of partner farmers who are cooperative members. Additionally, 38 percent of the trained farmers reported increased production and 54 percent reported increased quality. This will eventually enable farmers to manage their trees better and increase their incomes through fair-trade premiums.

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

As an agri-business, Tolaro essentially impacts cashew farmers' income levels. It achieves this impact by improving the yield and productivity of the farmers through training, and by supporting the farmers to demand best prices through cooperatives and by gaining various quality certifications (such as organic, fair-trade, etc.). However, yields and prices are volatile and fluctuate based on environmental conditions and international trade. Also, the actual price that farmers eventually sell at depends on micro-economic drivers such as the timing and flow of local supply, farmers' access to credit, and individual farmers' financial conditions and needs at the time of sale. Without specific effort and intervention, most farmers sell directly to traders, perpetuating a very short-term outlook for yields and quality.

Infrastructure such as electricity, ground transport and ports also impacts the local ecosystem and is needed to nurture local processing and export of value-added commodities in Benin. Internationally, fair-trade pricing and organic produce are gaining favor, and Tolaro's clients are necessitating implementation of those practices throughout the value chain.



# 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 impacts – and contribute to achieving the SDGs.

Using the Impact Value Chain, Tolaro identified the following SDGs that are in line with its intended impacts:

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

The company has created over 600 jobs – 50 percent of them for women. Helping farmers to set up cooperatives and building their skills positively impacts their incomes as well.

# **SDG 2** ZERO HUNGER

The preliminary data analysis shows that 38 percent of trained farmers reported increased cashew yields and 54 percent reported increased quality. Tolaro also supports farmers in diversifying their crops and incomes by producing staple crops and engaging in bee-keeping.

# 15 16 17 1 2 3 3 14 TOLARO AND THE SD GS 12 11 10 9 8

# SDG 4 QUALITY FOLICATION

Through Linking to the Future, Tolaro has trained 3,000 farmers on better cultivation techniques.

# SDG 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

As a result of the Linking to the Future initiative, 24 percent of trained farmers have received fair-trade certification through their cooperatives.

# SDG 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Tolaro's processing plant employs 600 people and is being expanded to include roasting, seasoning and packaging facilities, along with a 2.5 MW solar PV/biomass energy project.

# Lessons learned from Tolaro's impact measurement

Engaging staff in different roles and levels in impact measurement helped Tolaro communicate its social-impact vision internally and create actionable social-impact indicators.

Tolaro developed the Impact Value Chain and survey tools by engaging factory staff as well as the field teams who train the farmers. Most of the staff focused on operational indicators that could assess their work and inform them about trends at the factory, while the field teams were keen on assessing how to improve the training they provided to farmers. This allowed Tolaro to link its operational activities with outcomes and impacts, showing the staff how their day-to-day work impacts the lives of farmers.

# Social-impact measurement can assist in testing assumptions.

By grouping farmers based on participation and nonparticipation in Linking to the Future, Tolaro was able to assess what worked and what didn't, or did not add value. This information is now being used for future programme development – narrowing the scope of activities to those that have the most impact on farmers. Some of these activities are related to further encouraging farmers to sell their produce through cooperatives. Similarly, the factory staff surveys validated assumptions regarding employee needs, satisfaction, and motivation. For example, while average job satisfaction level exceeded 90 percent, around 60 percent of the staff surveyed felt they needed additional training.

# Collecting data from a comparator group helps the company to assess its social-impact activities and deliverables.

To better understand the impact of Linking to the Future, Tolaro's field staff suggested surveying non-participants as a comparator group. There are multiple drivers impacting farmers' knowledge, capacities and livelihoods, and by collecting data from farmers who did not participate in the programme, the company could assess whether there was any change in the yields and quality of cashews cultivated by farmers engaged in Linking to the Future initiative, although it is noted that there are other external factors that may also affect the cashew yields and quality.

### Market-level data can be a good indicator of impact.

The company does not enter into pre-harvest contracts with farmer groups, nor does it insist that cooperatives sell their nuts exclusively to Tolaro. Maintaining a free and competitive marketplace is critical for the long-term sustainability of cashew processors like Tolaro – and for farmers. Therefore, even a basic indicator like the pricing of cashews across the value chain provides a good measure of the industry's sustainability and impact on farmers' lives.

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 US\$10 per day in purchasing power parity (2015) – as consumers, producers, suppliers, distributors of goods and services, and their employees.

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Swiss Agency for Developme and Cooperation SDC











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