
Promoting Development Through A Social Enterprise in Bali

Introduction

Aaron Fishman, a 29-year-old American, always wanted to do something good for the world's poor. He found an opportunity to volunteer for a non-governmental organisation (NGO) in the village of Ban, Karangasem District, East Bali, Indonesia. Here, he taught the public health staff about wound care and nutrition and at the same time started to understand the wider picture of poverty in that region. It was during his volunteering time that Aaron learnt that almost all local families grew cashews as a primary source of income. These were typically sold unprocessed to middlemen to be shipped and processed abroad, mostly in Vietnam and India.

As Aaron started to pick up *Bahasa Indonesia*, he saw an opportunity to provide jobs and training by producing uniquely local cashews that would be processed where they were grown. By establishing a cashew processing facility in the local area, he could employ, empower and provide an alternative source of living for local families, especially women. Relying on recent development research, Aaron believed that by delivering income directly into the hands of local women, it could trickle down to improve the health and education of their families too. The cashew processing facility meanwhile also presented a good business prospect because it could meet high demand for cashews, both in the domestic market and overseas, whilst simultaneously cutting out shipping and intermediary costs. This new organisation envisaged by Aaron would be established as a Social Enterprise (SE) - in this case a for-profit entity that would create social impact through business-oriented activity.

Within a few months, Aaron garnered the support of four initial investors and launched East Bali Cashews (EBC) at the start of the harvest season in 2012. In the first year, the company produced 180 tons of cashews, providing 130 new jobs and employing a 90% female workforce. Having proven the basic concept, the business then faced a series of strategic decisions and challenges around how to scale up. As a business that aims to generate both financial and social return, these challenges included an additional layer of complexity compared to a traditional, purely profit-oriented business. In particular, the EBC team was faced with a set of decisions around how to target and scale up their social impact, all the while bearing in mind the potential trade-offs and synergies with the financial returns sought by the business.

This case has been written by Patrya Pratama under the guidance of Senior Fellow Donald Low, Lee Kuan Yew School of Public Policy (LKY School), National University of Singapore and Emily Perkin, Manager at Impact Investment Shujog (Shujog), and has been funded by the LKY School. This case study is the result of a collaboration between the LKY School and Shujog, an advocacy, research and capacity-building non-profit Social Enterprise which assists Social Enterprises in raising growth capital. The case does not reflect the views of the sponsoring organization nor is it intended to suggest correct or incorrect handling of the situation depicted. The case is not intended to serve as a primary source of data and is meant solely for class discussion.

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Background

Local Development Challenges

Bali is one of the smaller islands in Indonesia, located in the central region of the country between the nation's economic center, Java, to the west and the poorer island of Lombok to the east. With an area about eight times larger than Singapore, the province is divided into eight districts and one city (Denpasar, the capital). There are close to four million people living in Bali (2010), with 20% living in Denpasar.¹ The village where EBC is located is in the less populated district of Karangasem, east Bali, one of the poorest parts of the island.

The main sectors driving Bali's economy are tourism and agriculture, with 32% of GDP coming from the tourism sector in 2012, and a further 20% from the agriculture sector.² Agriculture has been declining in recent years, although it still remains the island's largest employer, accounting for 25% of all jobs in Bali.³ However, in the EBC factory area, the population is predominantly smallholder cashew growers (cashews are suitable due to the dry nature of the area), while some also grow mangoes or keep cows and pigs as livestock in their land for additional income.

Despite its reputation as a tourist paradise, parts of Bali continue to suffer from poverty, with a range of social issues including low education levels, poor access to healthcare and a lack of water supply in some areas. Poverty is particularly pronounced in the northeast of the island, including Karangasem, where the dry climate and the lack of public infrastructure have hampered economic development. In the EBC factory area, most of the people do not have a reliable source of income, earning an equivalent of less than US\$2 per day. The village was only connected to the electricity grid in 2013 (whilst the factory was launching) and roads were still in bad shape with no available public transportation at the time of launch. Many people from this region move to nearby cities to seek employment due to lack of opportunities in the local area.

In the health sector, Bali has an unequal distribution of health care services across the region. For example, in 2010 almost 95% of all births across the island were delivered by medical professionals; however, the remaining 5% were tightly concentrated in a small number of poor districts, including Karangasem.⁴ Providing a sufficient supply of quality health care facilities and professionals remains a pressing need in Bali, and the system has been under visible pressure since the government started to implement national health insurance for the poor in 2008. In the EBC factory area in 2013, there were only three midwives serving a population of 11,000. For those not yet covered by the national health insurance program, the cost of care is often prohibitive; and even those that are covered by the program report difficulty in accessing services due to the shortage of facilities and medical professionals.

In the education sector, as of 2013 only two districts in Bali have achieved the government's nine-year education target (all children to attend school for at least nine years) despite a policy of free and compulsory basic education.⁵ Challenges include the lack of school infrastructure or other issues such as lack of transport and supplemental costs for families such as text books and lunch money. In the village where EBC is located,

¹ Statistics Office of Bali, <http://bali.bps.go.id/>

² *Loc Cit*

³ *Loc Cit*

⁴ Bali Provincial Government, <http://www.mademangkupastika.com/>

⁵ Regional Planning and Development Office of Bali Province, www.bappeda-provbali.info/

as of 2013 there were eight elementary schools, one junior high school and no high school, with high illiteracy among the majority of the adult population, including those employed at the factory. Dropout and absentee rates tend to be high, particularly at junior high school level.

In the water and sanitation sector, it is estimated that by 2015, Bali will experience an annual water deficit due to the high demand from tourism-based districts in the south and large-scale land transformation for business and tourism purposes.⁶ The problem has made life difficult for farmers to irrigate their crops as well as for households, especially in the dry regions of the north and east, to access water for daily necessities. In the EBC factory area, the lack of clean water supply has forced locals in some cases to rely on rainwater, which is often not sufficient. Many locals report furthermore that they drink the rainwater without boiling it first. The lack of a clean water supply and unhygienic practices create health problems such as diarrhea among the local people.

Bali's agriculture sector has been in decline since 2006, mainly due to the large scale transformation of agricultural land into business or tourist areas (at an estimated rate of 600 hectares per year in 2013).⁷ Most of Bali's agricultural products are not processed on the island, but are shipped abroad or to other parts of Indonesia for processing. The local government has been trying to revive the agriculture sector since 2009 by providing cash and technical assistance to farmers' groups willing to adopt organic farming methods and to use alternative energy sources.

In the EBC factory area, cashew farmers typically own 1-2 hectares of land, which produces around 1.5 tons of cashews worth US\$1,000 a year. To manage the irregular and unpredictable flow of income from the cashew harvest, most families rely on debt to the cashew traders, who pay a reduced price upfront either in cash or in rice. The cycle of debt leaves the families with little protection from disaster (such as health shocks), as well as facing an ongoing pressure to cut costs. This results in high drop-out rates from the local school and a tendency to buy cheaper health treatments from the traditional healers rather than seeking modern medicine. Meanwhile, the work of maintaining a cashew smallholding and a small number of cows does not, in fact, require full-time labor from both the husband and wife in a family unit. With no formal employment opportunities in the region, many women report that their days are typically fairly unproductive.

The Potential of Cashews

The cashew industry in Indonesia started in Southeast Sulawesi in the 1980s before it spread to other regions. Cashew is one of the crops grown by a large population in Indonesia, with approximately 400,000 farmers in mostly the eastern part of the country, including Bali.⁸ Cashews are grown largely in the dry and poor regions of eastern Indonesia as they are particularly suitable to the dry climate in these regions.

Demand for cashews has risen over the past decade – both domestically and internationally. The emerging markets (especially India) have started to displace the traditional consumer markets of US and Europe as the growth drivers for global cashew demand, with Indian consumption more than doubling in the last ten years to 2013. China is also experiencing significant growth in demand given middle class formation and the

⁶ Walhi Bali, www.walhibali.org

⁷ *Loc Cit*

⁸ Ian Baker, *Final Report: Cashews Potentials in Eastern Indonesia* (Ausaid: December 2009), p8.

growing focus on health benefits of consuming higher value snacks such as cashews. [Exhibit 2](#) shows the global demand for cashews. At the same time, the domestic market for cashews within Indonesia has grown rapidly over recent years, with sales in Bali growing both for the domestic and the tourist market. This demand is currently being met by foreign companies that import from processing plants in Malaysia and Singapore, neither of which are in fact cashew producing countries.

Supply of raw cashews is traditionally dominated by India, Vietnam and Brazil, the world's main cashew producing countries. However, production in these countries has experienced slow growth over recent years due to a combination of factors including the limitations of the smallholder dominated supply chain, declining yields from old trees (cited in India) and instability of weather patterns (in Brazil). The gap in supply is in part being met by rapid growth from a number of African countries that are starting to emerge as major suppliers. But with the slowing growth in traditional producer countries and the emerging African producers often subject to additional geopolitical risk, there is an increasing opportunity for countries such as Indonesia to carve out market share in the global cashew supply chain.

Around 130,000 tons of raw cashews are produced in Indonesia per year (as of 2013), of which 92% are shipped to India and Vietnam for processing. A significant proportion of the potential value is therefore realised outside of the country. By processing cashews within Bali at the same place where they were produced, there is an opportunity to cut out middlemen and shipping costs, accessing the raw product at a lower price than that paid by overseas processors. [Exhibit 3](#) shows this opportunity.

Balinese cashews have several competitive advantages over those produced in other countries. The quality of Bali's raw cashews is considered better than African cashews, commanding a higher price (US\$775 per ton). Bali's cashews are also harvested at a different time from other producers in Asia and Africa (September-November as opposed to February-April), resulting in higher prices. A further advantage is Indonesia's proximity to Vietnam and India, which makes transportation cheaper than for African cashews.

Operating a Cashew Social Enterprise

EBC was launched in 2012 with initial backing from five individual investors. The company leased a plot of land in Ban village, built a small factory and recruited around 120 local people. The following section sets out the key aspects of the operating model of the business.

Supply of raw cashews

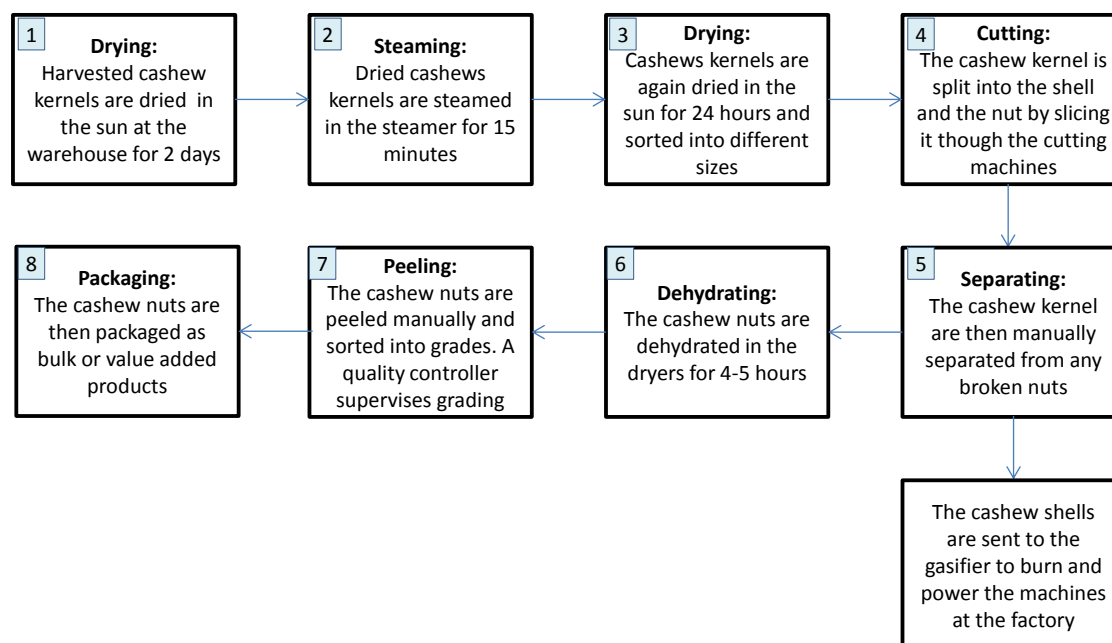
During 2012-13, the business sourced the raw cashews by purchasing from local first-level traders who collected cashews directly from the farmers. There were around 85 first-level traders that supplied cashews to EBC all of whom came from the same poor community as the farmers and factory employees, and some of whom were farmers themselves. EBC agreed to purchase from these traders at market price, marking up the farm gate price by \$0.03 per kilo, which was the same price the traders would sell the cashews to buyers other than EBC. [Exhibit 5](#) shows an overview of the supply chain.

Processing model

EBC processed 180 tons of raw cashews during its first year of operation. The peeling process is the step that necessitates the most manpower, with around 80 local people

recruited as peelers during the first year. The diagram below shows the key steps in the process.

Diagram 1: Key steps in the cashew process



Staffing

The peelers were paid by kilos of cashews peeled, which was on average IDR 8,000 (US\$80 cents) per kilo. As each peeler could peel up to 6-8 kilograms of cashews per day, they earned approximately IDR1.2 million (US\$120) per month. EBC also provided training for the peelers not only to do their job well in peeling, but also to introduce them to some basic concepts of formal employment such as working hours. For the rest of the process, EBC recruited 19 local people, many of whom previously had gone to work in Denpasar to support their families in the village. These permanent staff were paid a fixed salary of IDR1.7 million (US\$170) per month during the first year.

Low carbon energy

The local power grid relies on diesel (a high carbon fuel) and is also unreliable with frequent power cuts that arise without warning. In this context, EBC designed and built its own machine which uses biomass as the power source. The biomass is produced by using cashew shells (a bi-product from the factory process). It produces sufficient energy to power all the processing machines throughout the day.

Sales

Revenues of the factory come from two streams: bulk sale to the international wholesale market and value-added products sold to retailers and distributors. In 2012/13, EBC sold 89% of its production as bulk export and 11% as value-added products (flavoured nuts, granola and cereal bars). For the bulk export, EBC sold to an Indonesian bulk export company which bought from EBC on a regular basis in small quantities because of the small capacity of EBC. For the value-added cashews, EBC developed accounts with local hotels, restaurants and small-scale retailers who then sold the product to middle-class or high-class customers – either local or tourists.

Challenges

Scaling Up Social Impact

As the business began to scale up in 2013, Aaron and his team faced issues around how to build on their initial success to target and further increase their social impact:

Issue one: Channeling the increased income of the workers

The original hypothesis for EBC was that when additional household income is paid into the hands of women, they are more likely than their husbands to spend it on items that have a long-term development impact, such as food, healthcare, clothing and education for their children.⁹ Evidence from interviews and focus groups with the EBC employees conducted in July 2013 showed that the business was having a significant impact in increasing the incomes of local people and that there was also some evidence of subsequent impact on development outcomes such as healthcare and nutrition. Nearly two thirds of the employees interviewed said they reinvested their money in assets such as cows (livestock is a key form of savings and investment in the absence of any formal banking system) and meanwhile local school enrollment increased by an estimated 15%. Meanwhile, a significant proportion of the employees also reported spending their money on consumption and leisure items such as televisions. This pattern of spending raised the question of whether EBC could or should look to develop further initiatives to channel their employees' spending more strictly towards areas that are overtly associated with positive development outcomes.

Issue two: Opportunity for increased impact

During the first year of operations, it became apparent that few women with very young children were applying to work at the factory, whilst there were many more employees with school age children. Women with school age children tended to report that they were able to leave their children with relatives during the day, allowing them to leave the house to work at the factory. However, many women employees noted that those with younger children found it harder to leave the house and were therefore excluded from the benefits of working for EBC. With this issue in mind, the EBC team developed a proposal to build a pre-school on the factory premises – this would allow more women to work at the factory, as well as helping the business to recruit the additional labor that it would need as it scaled up. The suggestion was unanimously well received – by the peelers themselves, as well as by local teachers and community leaders (interviewed in 2013).

The EBC management therefore faced a question of whether to channel part of the profits of the business into building the pre-school – an investment that would increase the social impact of EBC, but that may also imply short-term negative impact on the financial returns of the business. Possible solutions to explore included developing a partnership with a non-profit entity and seeking funding from investors that were motivated by a blend of both social and financial return.

Issue 3: Extending EBC's reach further across the supply chain

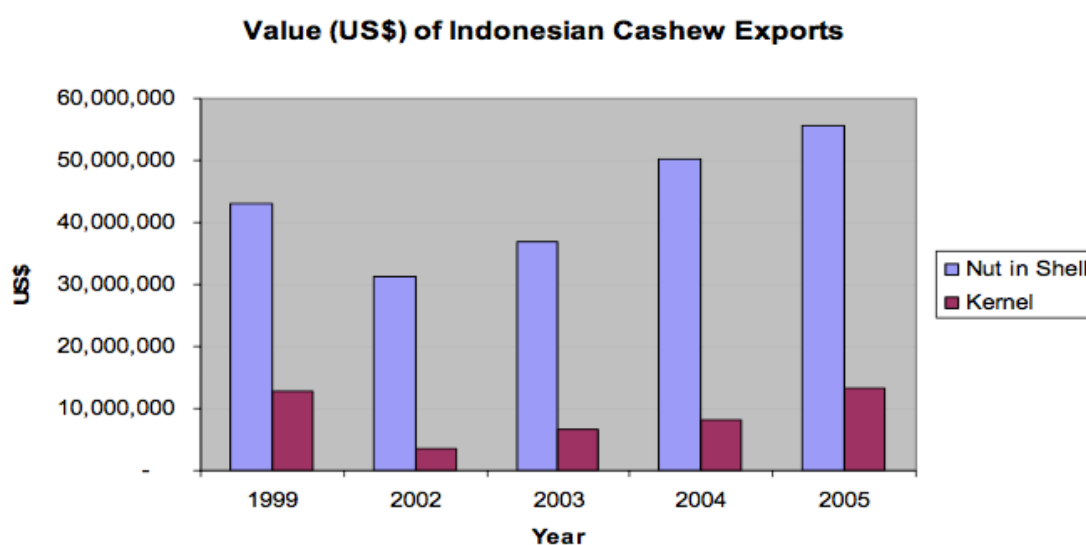
As EBC developed its relationships with local farmers, it became clear that there was significant potential for them to increase their yields – if provided with the correct support. As of July 2013, local farmers in the area only produced around 500 kilograms per hectare,

⁹ Food and Agriculture Organization of the United Nations (FAO), *The State of Food and Agriculture 2010–11: Women in Agriculture—Closing the Gender Gap for Development* (Rome: 2011).

which was far below the productivity level of other countries such as Vietnam, where farmers could produce 2-3 tons of cashews per hectare. Such low yields were the result of poor knowledge of cashew farming techniques amongst the farmers: for example, local farmers reported that they did not know the method of cutting trunks in order to prevent the tree branches from piling up. Knowledge was also limited around the effective handling of pests and plant diseases such as the widespread "*Rigidoporus Lignosus*"). Meanwhile, almost all farmers reported that they used chemical fertilizers, which risked reducing the productivity of the land over the medium- to longer-term.

By providing local farmers with extension services such as training and access to organic fertilizer, EBC had an opportunity to strengthen its supply chain as well as boost incomes for a wider group of stakeholders. However, while it was clear that there would be demand for some form of extension service, it was not clear what would be the most effective and efficient way to implement such a program. The EBC team did not have the in-house capacity to provide the training—and nor did the first-level of traders who collected cashews from the farmers. The situation was particularly difficult because local farmers did not have an established platform to share information with each other through regular meetings.¹⁰ EBC looked to partner with a local NGO to provide the services, but there were few NGOs that already had sufficient familiarity with the area. The team therefore faced a question around whether or not to pursue this opportunity—and if so, how to implement it.

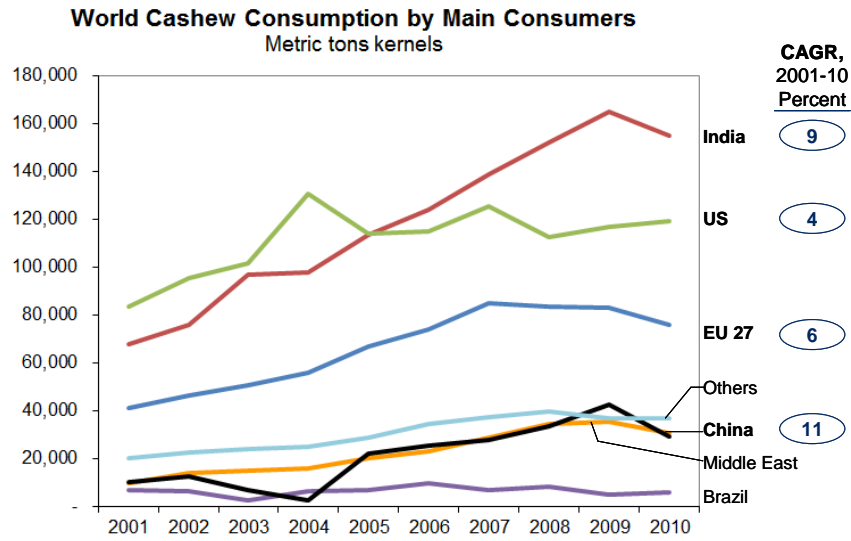
Exhibit 1: Total Value of Indonesian Raw Cashews and Kernels Export



Source: External Trade Statistics, www.bps.go.id

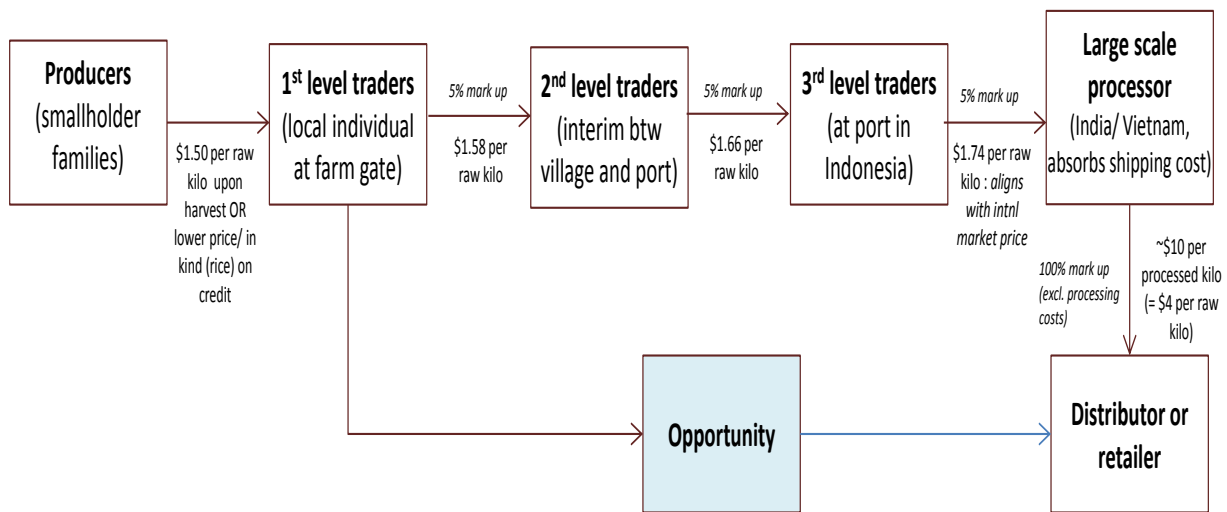
¹⁰ International Relief and Development, *Cashew Business Basic* (IRD: September 2011).

Exhibit 2: Global Demand of Cashews



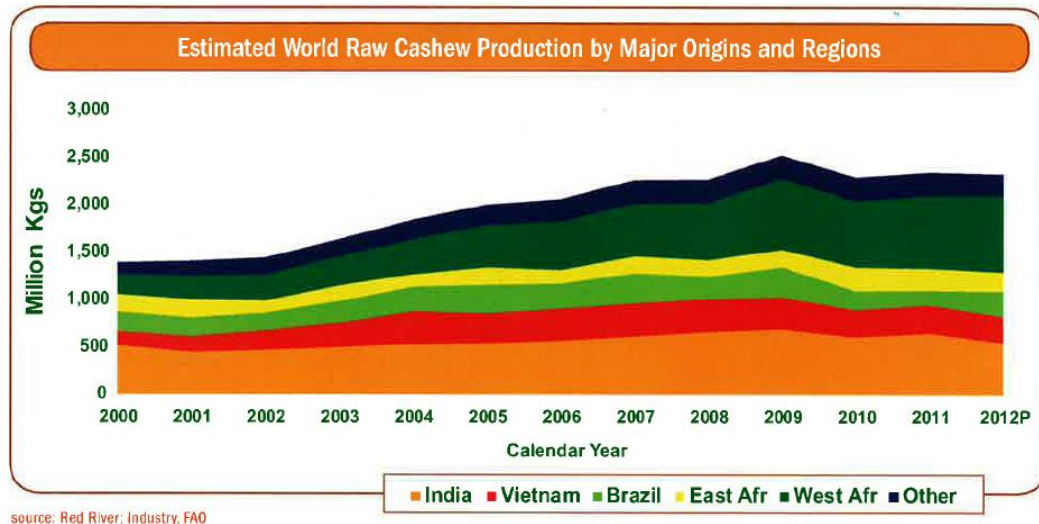
Source: Shujog, *East Bali Cashews Technical Assistance Document* (Singapore: 2013)

Exhibit 3: Opportunity to Process Indonesian Cashews Domestically



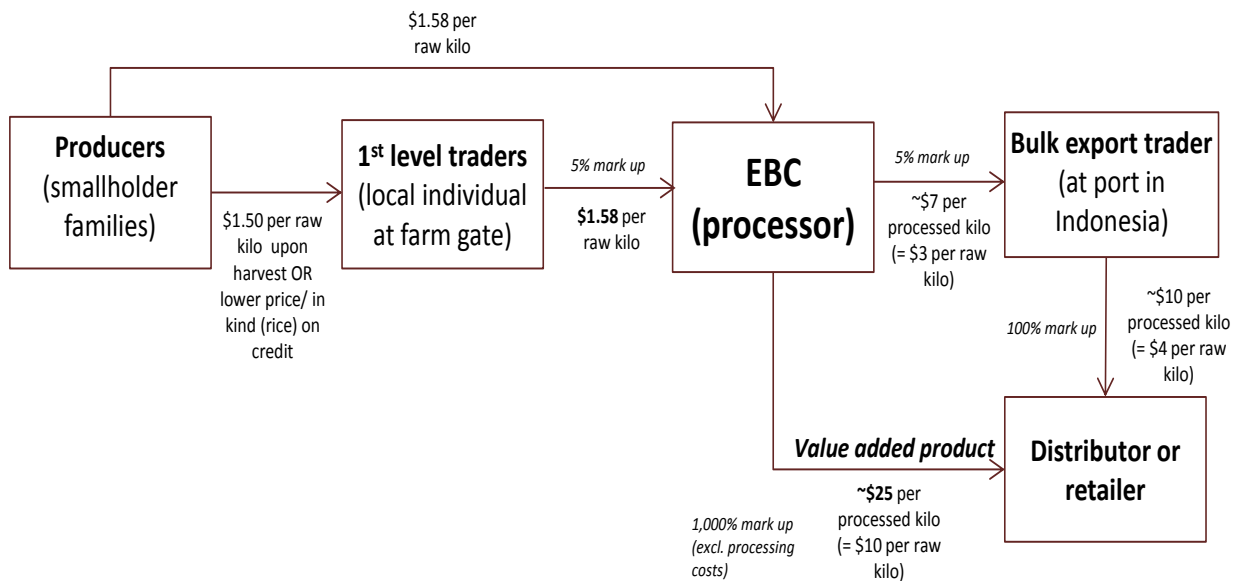
Source: Shujog, *East Bali Cashews Technical Assistance Document* (Singapore: 2013)

Exhibit 4: World's Major Cashew Suppliers



Source: Red River; Industry, FAO.

Exhibit 5: Basic East Bali Cashew (EBC) Supply Chain



Source: Shujog, *East Bali Cashews Technical Assistance Document* (Singapore: 2013)

Exhibit 6: Pictures on the ground



Pic1: EBC factory from afar.



Pic2: Raw Cashews bought from traders.



Pic3: Raw Cashews are dried.



Pic4: Raw Cashews are steamed in the oven.



Pic5: Biomass to power the machines.



Pic6: Cashew are graded and cut.



Pic7: Peeling.



Pic8: Peelers.



Pic9: Peelers are paid by kilos.



Pic10: Bulk export cashews.



Pic11: Value added cashews for retails.



Pic12: Husbands and kids at home.



Pic13: Simple house of employees.



Pic14: Cows as asset.



Pic15: Lack clean water is a major problem.



Pic16: Rocky road and bad infrastructure.