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Bats, Birds and Rural Business

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Guanomad S.A., Madagascar



Guanomad's flagship trademark (Photo: Guanomad)

The Republic of Madagascar (Madagascar), an island country in the Indian Ocean, has since time immemorial nurtured several dozen species of bats and birds. For generations, Malagasy shared the island with their winged neighbors, but with little direct interaction. When there had been contact (bats sometimes find refuge inside the roofs of houses), bats were often considered unwelcome intruders and birds treated with some indifference.

Much has changed since Erick Rajaonary, an accountant-turned entrepreneur, decided to switch careers and start mining bat droppings in order to create organic fertilizer. Intent on developing and commercializing this idea, Mr. Rajaonary, a native of Madagascar, created a company called Guanomad S. A. (Guanomad).

Established in 2006, Guanomad has expanded its fertilizer production capacity and created a wide portfolio of brands – including *Guanostar Engrais 100% Bio*. In the process, the company has become the number one brand in Madagascar of fertilizer based on bat droppings – usually known as *guano*, a word of South American origin. As of 2014, Guanomad was not only commercializing its products globally; the company had also become a multiple award winner.

Goods with specific geographical origin

Guanomad's success has been due in large part to Madagascar's specific geography. Having broken off Africa over 150 million years ago, the isolated island (it has few predatory animals, which allows a number of species to flourish) has been conducive to a large variety of unique *flora* and *fauna*. Indeed, 90 percent of the country's wildlife, including insects, mammals and birds, are indigenous to the island (a level of endemism unparalleled in the world).



Madagascar's uniqueness provides for native flora and fauna (Photo: Guanomad)

Madagascar is not only home to over 100 native bird species, such as *Ardeola idae*, the Malagasy Pond Heron; the island is also home to dozens of endemic bat species, including *Pteropus rufus*, the Madagascar fruit bat. The island's bats, in addition, produce plentiful nitrogen-rich guano – which can be mixed with limestone deposits from a large network of caves in the country – that has been used to create fertilizer.

While mining guano for fertilizer on the island can be traced to the 1920s (peaking in the 1960s), a large part of the industry's resurgence in Madagascar can be attributed to Guanomad. Indeed, the degree to which raw materials such as guano can be distinguished due to their specific geography (or production tradition), allows governments and enterprises to promote producers and their products.

Guanomad mines bat guano from caves in Madagascar – in collaboration with ancestral communities, who often have a sacred relationship with the lands surrounding such caves – and successfully uses it to create distinctive organic fertilizers (some of which are mixed with bird guano) for a variety of industries. The versatile fertilizer is used as all-purpose manure for soil maintenance or as an agent to aid plant growth in horticulture, farming and fisheries (to fertilize pond plants such as algae and plankton, which are eaten by fish).

Branding and commercialization



The country's caves have untold amounts of guano (Photo: Guanomad)

In order to compete globally, Guanomad has developed a robust branding and commercialization strategy – which includes implementing quality in its production standards, creating a variety of distinct brands, and raising brand awareness.

Indeed, one of the earliest challenges facing the small and medium sized enterprise (SME) was to re-brand the negative image that was sometimes associated with guano – such droppings were thought to be unsafe as fertilizer, especially compared to chemical fertilizers. Bats, moreover, can produce a strong smell that has given them an unfavorable image.

To re-imagine guano, the SME linked the word to a new sense of national identity and pride – hence Guanomad, a conflation of guano and “mad” (an abbreviation of Madagascar). Extending this hearts and minds campaign, the company has sought to gain community support for guano-based products. To this end, Guanomad holds seminars for producers with detailed explanations of the true nature of guano – for instance, during its formation, microbes and beetles decompose the droppings and thereby eliminate most viruses that may be contained in it.

Guanomad also ensures sensitivity when mining a cave (especially those within ancestral lands of indigenous communities) and engages benefits-sharing agreements with local councils – for each kilogram (kg) of extracted guano, an agreed upon portion is given freely to local producers.

In line with revamping guano – a word at the core of the company’s corporate identity – the SME has created eight separate brands of fertilizer (apart from Guanomad), such as *Guanomad Guanostar Engrais 100% Bio* (a mixture of bat and bird guano), and *Guanobarren 100% Bio* (a mixture of rock phosphate and sea bird guano).



Farmers in Madagascar are embracing guano-based fertilizer (Photo: Guanomad)

The company, moreover, has ensured its brands are produced to national and international standards. Guanomad, for instance, achieved certifications for its production processes (operations, processing, hygiene and health and safety) awarded by the Ministry of Breeding of the Malagasy Government – the department responsible for ensuring quality for Malagasy agriculture.

Guanomad has also fulfilled industry standards including that of *Organisme de contrôle et de certification* (Ecocert), one of the largest organic certifications organizations in the world. Certification not only enhances the company’s competitiveness (as an increasing number of consumers prefer organically produced food); it also reassures industry partners and customers of the quality inherent in the SME’s products – which display certification labels from organizations such as Ecocert.

With quality ensured and a positive brand image created, the company has positioned itself within the niche market of guano-based organic fertilizer – which is aimed at the growing numbers of sustainable farming practitioners (who address environmental and social concerns of the industry) both in Madagascar and other countries.

Organic, versatile and nutritious, guano is rich in nitrates (which helps plants grow), phosphorus compounds (to replenish soil), and fungicides (to fight off crop disease). The product is also highly cost-efficient: manufacturing costs for guano fertilizer are as much as 50 percent less than that for artificial or chemical fertilizers.



The company promoting its brands via industry events (Photo: Guanomad)

In addition to branding, certification, and competitive niche market positioning, the SME has further enhanced its corporate profile via a professional company website (in both English and French), through TV, radio and billboard advertising, and via well-known social network platforms such as Twitter, Facebook, Flickr and YouTube.

The company, furthermore, prioritizes industry trade fairs, its own distribution centers and community events (via meetings with smallholder farmers or through its own model farms – a variety of crops are grown on them using the SME's fertilizer) as vehicles for promoting its products, business ethos and brands. Guanomad, for instance, has participated in the African Pavilion of BioFach, one of the largest international fairs in the world for the organic foods industry.

Distinct, safe, and actively branded and marketed, approximately 50 percent of Guanomad's products have been exported to the European Union (EU), North America and, more recently, Africa – the remainder has been commercialized domestically. In 2014, the SME was the only guano-based fertilizer producer in Madagascar – where it had approximately 200 distributors (such as supermarkets and hardware stores) in its national network.

Research and development

Guanomad's early years were marked by great risk and uncertainty – the SME, for instance, had to penetrate a domestic market largely monopolized by chemical fertilizer producers. The company also had to overcome some reluctance among the country's farming community towards mining guano – as some of the caves identified for mining may have religious significance for local populations. To meet these challenges, Mr. Rajaonary utilized his experience in business and relied on family and friends; he also engaged in research and development (R&D) activities.

Well before establishing Guanomad, the entrepreneur received a certificate in accounting in Paris, the French Republic, where he opened and managed a successful accountancy firm (beginning in the early 1990s). Returning to the island nation in 1998, the accountant worked in the same industry until 2005, when he had a fortuitous conversation with a friend who introduced him to guano.



Guano-based fertilizer in preparation (Photo: Guanomad)

Following a field visit to a vast network of bat caves in the port city of Toliara, in the southwest of Madagascar, Mr. Rajaonary began to imagine a new life as a producer and exporter of guano-based fertilizer. Leveraging personal funds (the company began with capital of around US\$100,000), the accountant-turned-entrepreneur intensified his R&D investigations – including researching market trends in fertilizer products.

Having decided to go into the fertilizer industry, the entrepreneur hired workers in order to begin mining guano, and transporting it to Antananarivo, the capital of Madagascar. In this period, Mr. Rajaonary used his home as an office; the yard surrounding his house became a fertilizer storage and packaging center – the products were packed by hand into 50 kg, 5kg and 2.5kg sacks.

Within its first year of operation, Guanomad – which subsequently developed a modern facility in Antananarivo where guano is tested to ensure consistent quality – sold 400 tons of fertilizer. Two years later (in 2008), the company sold 13,000 tons. Despite political and economic instability in Madagascar (between 2009 and 2010; this affected the country's import and export sector, especially to the EU), by 2014 the SME mined guano from its network of approximately 120 caves.

In the same period, Guanomad produced between 350,000 to 450,000 tons of guano annually (used for a variety of purposes such as fertilizing rice, vegetable, corn, and fruit-growing farms) and employed approximately 100 fulltime (and around 400 part-time) workers – including an expert on bats and other industry specialists.

Trademarks and IP management

With quality brands and a fast-expanding business to hand, Mr. Rajaonary has been acutely aware of the benefits that can accrue – such as ensuring the SME's corporate identity – from investing in intellectual property (IP) assets. To this end, the entrepreneur has relied heavily on the IP system. As the entrepreneur said, "It's very important for the future; for the image of the company [to register IP assets]. Nowadays, your trademark is your stock-in-trade."

Keen to protect the company's brands and identity in Madagascar, Mr. Rajaonary has registered more than 30 trademarks – including Guanomad Guanobarren Engrais 100% Bio, Cocque de Cacao by Guanomad, Guanostar, and Guanoferti-P Guanomad – via the Malagasy Industrial Property Office (OMAPI).

In order to secure his company's hard-won corporate identity, Mr. Rajaonary sought the guidance of an IP lawyer. "It was easy to register my trademark," Mr. Rajaonary said. "My legal adviser explained to me all the steps I would need to go through with [OMAPI]. A week later, we received the document confirming that the trademark was ours [...]"

Justifying the need to registered more trademarks than the company was currently utilizing (of the SME's 30 registered trademarks, only a handful were in use in 2014), the entrepreneur added: "Because I'm looking to the future. My aim is to develop other guano-based products." In other words, Guanomad registers more trademarks than its current business strategy requires so that its avenues for future expansion remains open.

Moreover, with an eye on the international market, especially the EU and the United States of America, the entrepreneur ensured [Guanomad](#) was registered as a trademark (2013) via [the Madrid system for the international registration of marks](#) (the Madrid system), managed by the World Intellectual Property Organization (WIPO).

Partnerships

From the beginning, the SME had to manage a lack of purchasing power within its domestic market. Indeed, although agriculture is a major revenue generator and employer in Madagascar (employing about 85 percent of the work force), the country has been one of the poorest in the world (World Bank, 2014) – hence Guanomad's initial commercialization focus was on the export market.



Collaboration has enhanced Guanomad's capacity and image (Photo: Guanomad)

To stimulate the domestic market for organic fertilizers, the SME partnered with government agencies such as the Regional Directorate for Rural Development, a department of the Malagasy Ministry of Agriculture, which provided subsidies that (rice) farmers in the Itasy Region of Madagascar, for example, could utilize to purchase Guanomad's products.

In addition to relying on such subsidies, the SME has sought collaboration with industry partners – partly because the political instability in the country between 2009/2010 led to a disruption of government-sponsored financing. Guanomad, for instance, leveraged funds provided by Databank Agrifund Manager

Ltd. (DAFML), an international, multi-agency private equity group specialized in agriculture and food production.

DAFML's African Agricultural Fund (AAF) – aimed to be between US\$30million and US\$80 million – was established to support food production and processing for SMEs on the continent. Guanomad was able to secure approximately US\$2.8 million from this fund over five years to enhance its production capacity (part of the AAF has also been used for direct assistance for local farmers, who have, in turn, relied on such funds to utilize the SME's products).

By working with partners, therefore, Guanomad has been able to realize its business development plans (especially during tough political and economic times), while paving the way for clients, both domestic and international, to enjoy the benefits of its versatile products.

Environment and food security

Madagascar, along with many countries and regions, has faced a number of environmental challenges in recent years including soil degradation, failed crop yields, ground water contamination, deforestation and a threat of extinction for *flora* and *fauna*.

With a largely rural population relying on a low yield but important agricultural sector (mainly small, unfertilized subsistence farms that account for 25 percent of GDP), most Malagasy have been trapped beneath the poverty line – living on less than US\$2 a day (World Food Program (WFP), 2014). The country's population, moreover, has endured poor health for generations – Madagascar, for instance, is the sixth highest in the world for chronic malnutrition, especially among children (WFP, 2014).



Producers in Madagascar embarking on sustainable farming (Photo: Guanomad)

Despite these challenges, the island nation is conducive to growing a number of crops such as rice (which represents the greatest single revenue generator in the country and accounts for 47 percent of its arable land), cassava, potatoes, bananas, corn and beans – with the main export crops being coffee, vanilla, cloves and sugar. The country, therefore, has been ripe for a sustainable farming revolution – indeed, only 11 percent of subsistence farms use modern fertilizers.

For farmers, Guanomad's affordable, effective and safe fertilizers are helping replenish farms, increase yields, open new markets, and ensure steady food supplies. For the environment, organic farming ensures soil and water table quality without harming the surrounding *flora* and *fauna*. (By contrast, chemical fertilizers – which are as effective as organic fertilizer in the first year of use – begin to have a negative impact on soils after two years.)

Indeed, a key goal for Guanomad has been to help protect the environment and ensure food security (including the livelihood of farmers) both in Madagascar and in other markets. To meet these ends, the SME has continued to work closely with the Malagasy government and with industry partners and the local community.

Guanomad not only provides affordable organic products to farmers in the country; the SME also engages farmers in sustainable farming seminars (via its own demonstration farms where producers receive sustainable farming instruction) including presentations on re-forestation and rural development. As Mr. Rajaonary was keen to point out, “Madagascar’s future lies in agriculture, which is the only solution to the food crisis [The country has faced food crises due to locust attacks on rice and other crop yields].

Guanomad’s strategies to protect the environment and increase food security, moreover, have been in line with the Malagasy government’s commitment to revive the country’s rural and urban economy. Called the Madagascar Action Plan (MAP, 2007 to 2012), this nation-wide program had a number of goals that included establishing sustainable agriculture and food security via a “green revolution.”



The country's largely rural population is preparing for prosperity (Photo: Guanomad)

The results of MAP have been promising. The government’s green revolution (which has been supported by SMEs such as Guanomad) has led to a decrease in rice imports into the country while domestic rice yields and exports have increased (up 40 percent in 2009 compared to the previous year). The positive trend was repeated in 2011 – when rice yields increased to 50,000 tons a year from an average of 30,000 tons in the preceding period.

As a result of MAP and efforts by producers such as Guaomad, Madagascar is slowly but steadily beginning to secure its own food supplies, protect more of the environment and begin tackling the many social and ecological challenges that the country has endured for years. Moreover, given the great efforts of Guanomad to elevate the reputation of bats in the country, a new dawn may be rising for other *flora* and *fauna* on the unique and richly endowed island.

Business results

Created following a fortuitous conversation with a friend, Guanomad is supporting sustainable agriculture in Madagascar, improving the livelihoods and health of producers and helping to secure the environment. In the process, the SME is meeting with positive business results and receiving international praise.

In recognition of the company's sustainable development model, Guanomad was awarded the Outstanding Small and Growing Business Award (2013) by the African Leadership Network (ALN). ALN's annual award – US\$50,000 per winner – recognizes four entrepreneurs in Africa from a number of industries who demonstrate business excellence and positive social impact.



Mr. Rajaonary presenting at the MIT Media Lab on 10 May 2014 (Photo: Guanomad)

On receiving the award, Mr. Rajaonary said, "It gives me great pleasure and encouragement to know that there are people across Africa, who share the same vision of a prosperous Africa as we do at Guanomad." The award brought increased recognition to the company, and the entrepreneur was selected to be a featured speaker at the Legatum Center for Development & Entrepreneurship of the Massachusetts Institute of Technology (MIT) for the MIT Media Lab on 10 May 2014. Mr. Rajaonary's presentation highlighted Guanomad's experience on the ground with agri-business in Africa. As of 2014, the SME produced approximately 11,000 tons of guano-based fertilizer annually.

Taking Flight

When Erick Rajaonary decided to trade in his accountant's job for a new life as a producer of organic fertilizer, the odds for success seemed against him. In a few years, however, the entrepreneur rebranded the industry, created a number of quality brands and products and expanded into the national and international market.

At the same time, Mr. Rajaonary has invigorated the farming community in Madagascar and helped lay the foundations for a prosperous future for the island's producers and the unique *flora* and *fauna* that they rely on.

► [Sources, references and related links](#) ↓

This case study is based on information from:

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