

Ecuador: Asociación Rio 7

Plantation workers become owners of a bamboo enterprise

by Shoana Humphries and Alvaro Cabrera

Asociación Rio 7 in southern Ecuador recently took over a bamboo enterprise owned and managed for the last decade by an armed forces company. Over the next 10 years, the association must pay the government for the value of the land and the company for the value of the physical assets, including 205 hectares of bamboo. While the enterprise has a great resource base and secure local markets, it still faces some serious risks. The terms of the transfer of land and physical assets are still being defined, and the association has a high dependence on an outside manager and weak organisational capacities. While the Ministry of Agriculture, Livestock, Aquaculture and Fisheries (MAGAP) offices has committed to help with technical capacity building (such as business administration and loan management), the association knows it must also work with its partners to strengthen its organisational and business capacities.

4.1 Assessing the existing situation

4.1.1 About Asociación Rio 7 as a business

This case study is about a bamboo enterprise in southern Ecuador. In January 2016, the ownership of the enterprise was transferred to the business's field workers of Asociación Rio 7. The enterprise was founded in 2005 by a holding company, Hdineagro SA, of which 51 per cent is owned by the armed forces and 49 per cent by a retirement fund for military retirees. The land on which the bamboo plantations were established is federal land held by the Ministry of Defence and is located approximately one hour north of the town of El Guabo in El Oro province (Figure 4.1). Hdineagro SA has several other enterprises including banana, cacao and rice cultivation, as well as livestock and shrimp production. Its other businesses are also being transferred to small producer associations as part of the country's current land reform initiative.

There are 25 full-time field workers in the bamboo enterprise. Other employees include a full-time manager (forestry engineer) and a part-time administrator (economist). Until December 2015, all workers were officially employees of Hdineagro SA. In January 2016, the association assumed total responsibility for all employees, including the manager and administrator.

The enterprise owns 300ha of land, including 200ha planted with *caña guadua* (*Guadua angustifolia*, a species of bamboo native to Ecuador) and 5ha planted with giant bamboo (*Dendrocalamus asper*, a species introduced from Asia in the early 20th century). The plantations were established in 2005 and began being commercially harvested in 2010. The enterprise also has a bamboo processing facility, consisting of a pool for treating bamboo, and several buildings for administration and housing employees.

Figure 4.1 Map of the study area



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The business sells bamboo poles locally to intermediaries and in some cases directly to banana and cacao producers. Additionally, the business sells laths (3.12m segments of bamboo poles cut in half longitudinally) to the enterprise Allpabambu (AB), which is exporting them to the US (see also Chapter 3).

Asociación Río 7 was founded in 2013 by 33 field workers when the proposal to transfer the enterprise to the bamboo plantation workers was made. The association has an internal committee that includes a president and delegates for the different activities of the association. The transfer of the enterprise to the association from Hdineagro

SA officially took place in January 2016. This transfer was organised under the federal government's Plan Tierras Programme for land redistribution.¹

Many members of the association live within the plantation at a field camp with their families, including young children. The housing is offered free of charge, which is a big benefit to workers. However, this situation exposes the children to many risks, as there are trucks and heavy machinery operating in the area.

4.1.2 The main products

The enterprise's main products are *caña guadua* bamboo poles and, to a much lesser extent, giant bamboo poles of different lengths, mainly for the local market. A limitation for the business is that bamboo poles of high commercial value (ie with a large-enough diameter and thick-enough pole wall for construction) need to be at least of the fifth generation of poles from a plant (a plant produces one generation per year, if managed), and need to grow for at least five years. As the plantation was established in 2005, its bamboo is just starting to reach commercial size.

A *caña guadua* culm is typically divided into five commercial segments (or poles), and each segment is used for different purposes:

- Two segments of 3.12 metres each (at the base of the culm) for export and use in construction,
- One 6m pole for the local market (construction, mining, agriculture),
- One 4.5m pole for local banana production (called *cujes*), and
- One 2.5m pole (at the end of the culm, called a *puntas*) for the local production of cacao.

Giant bamboo is typically sold by the enterprise on the local market as follows:

- One 4m pole (at the base of the culm) used to build bridges in banana fields,
- Two 6m commercial culms used in construction,
- Two 3.5m poles to support banana plants in the plantations, and
- One 3.5m pole for to support cacao fruits in plantations.

In 2015, the production capacity of the enterprise was:

- 64,000 poles/year (poles for export), and
- 168,000 poles/year (*cujes*, poles to support banana or cacao plantations).

In 2015, the enterprise began selling laths of 3.12m to Allpabambu, a family business in northwest Ecuador, which exports them to the USA for use in the construction sector. Allpabambu has high standards for the quality of the laths, which requires more work for the enterprise, but they also pay fair prices. Asociación Río 7 also has some other clients in Peru, which has a very large market for bamboo (INBAR 2015), but most production is sold locally for use in agriculture or construction.

1. Plan Tierras aims to redistribute large areas of public land to farmers in the country and to promote sustainable agricultural development and access to public policies of the national government. These goals are within Ecuador's national plan for good living (SENPLADES 2013). MAGAP contracts land-titling brigades in each province to help facilitate the process of tenure transfer and to prepare new landowners to take on related responsibilities.

Bamboo has traditionally been used in agricultural production systems across Latin America. In Ecuador, bamboo is used in large quantities for banana production. Ecuador is the largest banana exporter in the world (FAO 2014). Farmers often use two to three bamboo poles to support each banana bunch, which typically weighs between 30 to 50kg. The poles are from the highest part of the bamboo culm (3.5–4 metres), which is known as a *palanca* or *cuje*. Given that a commercial bamboo pole is 16–20 meters long, farmers are currently exploring alternative uses for the remaining parts of the bamboo pole, which are normally sold to intermediaries for low prices (INBAR 2011).

The construction sector is also an important market for bamboo producers. In Ecuador, there are more than 380,000 homes made of bamboo (INEC, 2010) which house approximately 1.2 million people. There is also a growing trend in coastal areas to use bamboo in the construction of ecotourism facilities (authors' personal observation).

4.1.3 Location and regional influences

The Rio 7 plantation is located on the border of three provinces (Azuay, Guayas and El Oro) in southern Ecuador. Although the plantation is located in Tenguel district in Guayas (Figure 4.1) the plantation was registered in Machala (the capital of El Oro) which is much closer.

Several rivers run through the region, and flooding usually occurs each year for a few weeks to months. In 2008, of the 275ha originally planted with *caña guadua*, 125ha were destroyed by floods after an extreme rainy season. Later, the enterprise worked to restore and maintain affected areas and recuperated approximately 50ha, bringing the new total to 200ha.

The main economic activities in the area are agriculture (banana and cacao production), gold mining, fishing, shrimp production and commerce. Originally, the area was populated by people called '*costeños*' – people from the coastal areas. In recent years, gold mining has had a significant influence on the composition of the population, attracting people to the region from all over Ecuador, as well as from Peru. The important Ponce Enriquez mining area is located nearby.

The gold-mining activities have also affected the quality of life of the people within and around the plantation. Recently, several members of the Asociación Rio 7 were admitted to hospital after eating contaminated fish from the river which runs from the mining areas to the plantation. The company Hdineagro SA asked workers to avoid swimming in or eating fish from the river, and to keep their families from doing so.

Mining has also affected the local economy by driving up prices for services, food and goods etc. This has made it harder for Rio 7 members/workers. Many workers spend most of their wages paying debts to local retailers who provide goods on credit. After an episode where a worker with a family tried to commit suicide for not being able to pay his bills, the workers and management team decided to establish a small market in the field camp with food products at lower prices for workers.

4.1.4 Legal operating context

In 2012, the association, before it was formalised legally, applied to the government for the land title of where the plantation and field camp are located. It is also negotiating with Hdineagro SA the value of the investments the company has made in the land since 2005.

The government transferred the land in January 2016 as an asset to the National Finance Corporation and then to Rio 7, which will buy the land and pay off the debt over 10 years (after a two-year grace period). The debt is estimated at US\$360,000.

The value of the investment is still under discussion. A recent estimate placed the value at US\$1.5 million, but the association has requested another assessment and thinks the value is more likely to be closer to US\$300,000. Once the amount is agreed on, the association will begin payments to Hdineagro SA and its investors (principally an association of military retirees).



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New bamboo stems growing on the bamboo plantation

The process is seen as returning the land to the people. In the 1960s, the Ministry of Defence appropriated large areas of land in the southern provinces which were perceived to be strategic for the security of the country, due to armed conflicts between Ecuador and Peru from 1941 to 1995 (Garcia 2014). Many rural families were displaced.

The Ministry of Defence also received additional lands in the same region two decades later when the company United Fruit closed. The company had begun cultivating bananas for export to Europe and the USA in the 1960s but was asked to leave at the end of Rodríguez Lara's presidency in 1979. The Ministry of Defence decided soon after to actively manage these lands for the production of banana, cacao and pastures for livestock, creating Hdineagro SA to manage these activities.

In 2005, Hdineagro SA decided to plant bamboo to support banana plantations in the Rio 7 plantation. The Rio 7 plantation is located one hour from the Peruvian border and the company was also interested in selling bamboo to the Peruvian market, which consumes an estimated 7.2 million bamboo poles per year (INBAR 2015).

In 2008, the government of Ecuador, through the national Plan Tierras Programme, began the process of transferring Ministry of Defence land to farmers. Farmers are expected to pay for the land over ten years. To date, the government has sold land to 78 associations (Terán 2015).

The bamboo plantation is registered with MAGAP. The same institution issues permits to harvest and transport bamboo products to different destinations, including for export. Asociación Rio 7 assumed these responsibilities in January 2016.

4.1.5 Bamboo market

Despite the importance and traditional use of bamboo in rural and urban areas, the bamboo market is largely informal. An estimated 15.1 million bamboo poles are consumed in Ecuador per year; however, only about 20 per cent of this is officially reported (INBAR 2015). During the last decade several initiatives and development projects helped local organisations and enterprises become formal entities. However, formal companies find it hard to compete in the market with informal enterprises which do not pay taxes or comply with labour and other legal requirements (Aguilar 2015).

4.1.6 Actors in the value chain

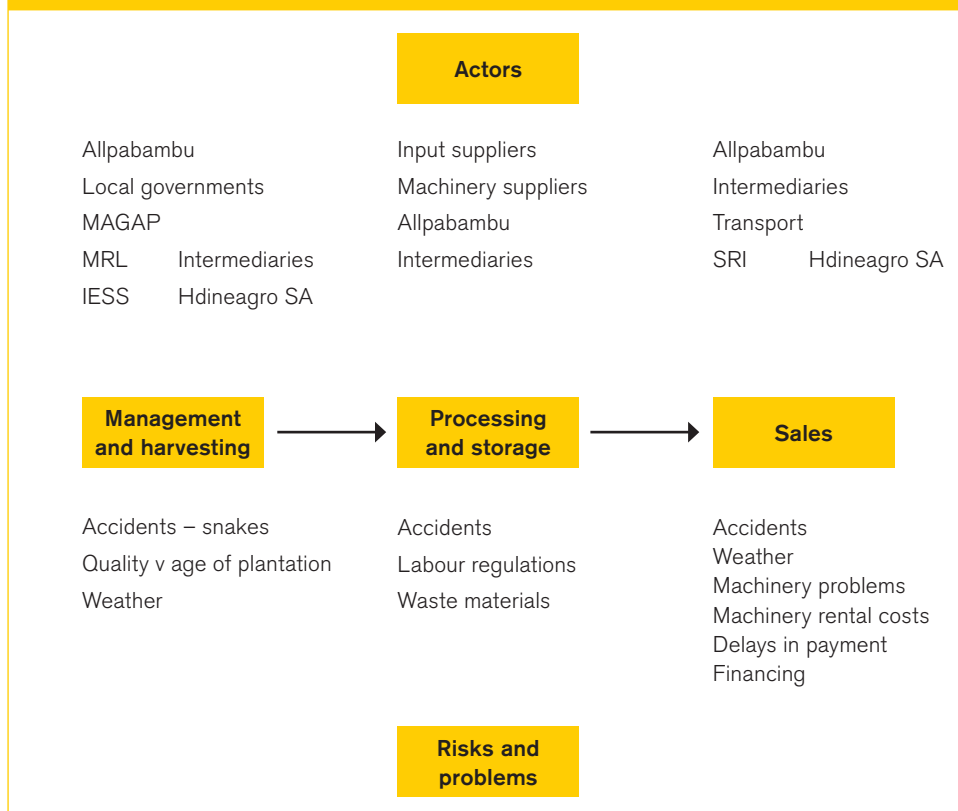
The enterprise sells bamboo to local intermediaries, banana producers and Allpabambu. Since 2010, the main product sold locally has been bamboo poles for banana plantations. In 2015, the enterprise began selling laths to Allpabambu, which has become an important strategic partner for adding value, accessing technical assistance and receiving fair prices.

The federal and local governments are important indirect actors in the supply chain. Local governments are very important to the enterprise as they maintain the roads used to transport bamboo poles. As the Rio 7 plantation is surrounded by three provinces, in some cases more than one local government has helped the association with road and bridge maintenance. At the federal level, MAGAP, which facilitated the transfer of the plantation and enterprise to Asociación Rio 7, will provide technical assistance as the workers transition from being just workers to co-owners. Other indirect actors in the value chain include the providers of inputs for the preservation treatment of the bamboo (boric acid and borax) and machinery companies.

Asociación Rio 7 has several important collaborators not necessarily involved in the value chain. Principal among these are the International Network for Bamboo and Rattan (INBAR) Latin American and Caribbean Office, which is located in Quito, Ecuador, and the members of the National Bamboo Roundtable (*Mesa Sectorial Nacional para Bambú*). INBAR is an intergovernmental organisation that works for the well-being of the different actors of the bamboo value chain in many parts of the world. The organisation has worked in Ecuador since 2003, and through development projects is helping bamboo producers and industries to innovate and improve local capacities to produce better bamboo products and gain access to new markets. It provides and/or helps facilitate technical assistance, business connections, access to machinery and the organisation of events, such as workshops, symposiums and commercial fairs.

INBAR helped establish the bamboo roundtable in 2011 to help producers, industries, governments, universities and individuals to organise and develop a common agenda. The roundtable has members from across Ecuador and meets in different provinces every two to three months to discuss common problems and opportunities. At the moment, the roundtable is facilitated by INBAR and led by MAGAP. Most of the actors who can help Asociación Rio 7 to address risks participate in the roundtable: MAGAP, Ministry of Industries and Productivity (MIPRO), Ministry of Environment (MAE), different companies, universities and individuals, among others.

Figure 4.2 Value chain for the bamboo enterprise to be taken over by Asociación Río 7



Notes: MRL Ministry of Employment; SRI Internal Revenue Service

Asociación Río 7 participates actively in the bamboo roundtable. Through this platform it has the opportunity to talk directly with different governmental agencies, private businesses, universities and international development organisations. Furthermore, representatives of the association were very active in the recent effort to separate the roles and responsibilities for MAGAP and MAE for plantations versus natural forests. The association provided key information for this process on the problems and challenges for producers in the production and harvesting of bamboo in plantations. The technical coordinator for Asociación Río 7 also provided suggestions for a new way to calculate the volume of bamboo to be transported.

There are other governmental institutions that interact directly and frequently with the association, including IESS (Ecuadorian Institute of Social Security), Ministry of Labour, ProEcuador (Institute for Export and Investment Promotion, Ministry of Foreign Affairs) and the Ministry of Defence (for the land transfer process).

4.2 What does Asociación Río 7 see as the main barriers and risks?

The most serious risks for the Asociación Río 7 (marked with two asterisks in Table 4.1) are uncertainty about the transfer of the enterprise, the association's weak organisational capacities and its high dependence on an outside manager. In 2015, the transfer of the enterprise to Asociación Río 7 was very uncertain largely due to delays by the municipal government in transferring the title. Up until December 2015, the association was still uncertain as to when the transfer would happen and what the terms would be. This made it difficult for the enterprise to sign contracts with buyers and to pursue credit. The land and assets were transferred in January 2016, but at the time of this study the exact terms of payment are still being worked out.

Another serious risk is that the manager is under pressure from his family to leave the enterprise and work closer to his family home. In addition to having worked to establish the plantations from 2005 to 2008, since 2014 he has been the technical manager in charge of operations, maintaining legal documentation and sales. While the manager states he would like to continue working with the association, he is considering other options that would allow him to live closer to his family in Quito (6–8 hours away by car).



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Organising the bamboo poles to be transported from the enterprise's plantation

It is difficult to imagine how the association would cope with this loss of capacity and institutional memory. The authors strongly recommended that he take on an assistant in the near future. This risk is related to another risk: the lack of organisational capacity of the association. While the association has defined leadership positions among its members, they have not received much training in decision-making, conflict resolution or transparency. This threatens the ability of the association to deal with risks and challenges.

Other important but less serious risks (marked with one asterisk in Table 4.1) include a lack of market for some parts of the bamboo pole, periodic flooding, dealing with dishonest buyers, and a lack of financing. First, the enterprise's most common products are 3.12m sections of bamboo which are sold to Allpabambu; *cujes* (the last section of the bamboo before the point) and points (long tips used to support cacao trees). The enterprise is having difficulty finding a buyer for the 6m central part of the culm.

In addition, as the plantation is at sea level and a river must be traversed to reach the plantation and field camp, temporary flooding of the river and parts of the plantation are

common in January, February and March. This makes it complicated for anyone to enter and leave the plantation, including workers and trucks that transport the products to buyers. Floods can also kill the bamboo, as happened in 2008.

Due to the highly informal nature of the bamboo market, the manager has been asked several times to provide false receipts to buyers. This unfortunate aspect of the market puts pressure on the enterprise, which is operating legally, to join the informal and illegal market.

Finally, the association does not have access to finance for operating capital or investments. As a result, it depends on advances from buyers to cover some operating costs, and does not have the cash to repair machinery or respond to other emergencies. At the time of the study, the tractor, the main means of removing poles from the forest, was inoperable due to the need for very expensive repairs. The enterprise was completely dependent on using mules for transport, which are much slower.

Table 4.1 Summary of risks identified by Asociación Rio 7

Revenue flows	Resource access	Business relationships	Security of operating environment	Brand development	Operational capacity
<p>*Informal markets.</p> <p>Lack of market for some parts of the bamboo culm.</p>	<p>*Lack of financing.</p> <p>** Lack of clarity of the final terms of the transfer to the association</p>	<p>*Dishonest business partners.</p>	<p>Periodic flooding.</p> <p>Pests and diseases.</p> <p>Accidents at work.</p> <p>Frequent changes in laws and regulations.</p>	<p>(The enterprise has never promoted itself).</p>	<p>**Limited capacity in administration/ managing accounts/business management.</p> <p>**High dependence on an external manager.</p> <p>**Weak organisation (bylaws, structure etc).</p> <p>Internal conflicts.</p> <p>Lack of infrastructure – Communication (have to leave to issue guidance) – Disaster preparedness/ response.</p> <p>Poor understanding of the debts the association is taking on (for land and investments).</p>

Notes: ** most serious risks * risks of major concern, but less serious in terms of the viability of the business



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Loading bamboo poles for transportation to a buyer

4.3 How can Asociación Río 7 manage risk?

To stay abreast of developments in the transfer of the enterprise (land and assets) to the Asociación Río 7, the manager and association president participated in meetings organised by Plan Tierras and travelled frequently to the capital to talk directly with officials in MAGAP. The participation of the association in the national bamboo roundtable has also helped give it greater access to national authorities.

Regarding the high dependence on an outside manager, the manager created a work team of association members to teach them how the association is administered, including financial management. However, this transfer of knowledge has been difficult for association members given their generally low levels of education and administrative skills.

To improve the weak organisational capacities of the association, INBAR will provide training in financial analysis and micro-finance initiatives in 2016. MAGAP and MIPRO are also expected to provide training in business management as part of Plan Tierras.

The association has been very active in coordinating with the local municipalities for help with maintaining roads and logistics for the sale and transport of bamboo. They have also approached several local governments to request assistance with machinery to clear the canals around the plantation to avoid or lessen the impacts of seasonal flooding.

Finally, the association recently agreed to a plan to provide high-quality bamboo to Allpabambu for export to the US. The plan includes training activities for harvest and post-harvest operations to reduce the harvest volume of unacceptable bamboo poles, which negatively impacts both parties.

Table 4.2 Risk-management options for Asociación Río 7

	Revenue flows	Resource access	Business relationships	Security of operating environment	Brand development	Operational capacity
Most significant threats	<p>*Informal markets.</p> <p>Lack of market for some parts of the bamboo culm.</p>	<p>*Lack of financing.</p> <p>Lack of clarity of the final terms of the transfer to the association.</p>	<p>*Dishonest business partners.</p>	<p>Periodic flooding.</p> <p>Pests and diseases.</p> <p>Accidents at work.</p> <p>Frequent changes in laws and regulations.</p>	<p>(The enterprise has never promoted itself).</p>	<p>**Limited capacity in administration/managing accounts/business management.</p> <p>**High dependence on an external manager.</p> <p>**Weak organisation (bylaws, structure etc).</p> <p>Internal conflicts.</p> <p>Lack of infrastructure</p> <ul style="list-style-type: none"> – Communication (have to leave to issue guidance) – Disaster preparedness/response. <p>Poor understanding of the debts the association is taking on (for land and investments).</p>
Opportunities	<i>None identified</i>					
Options for managing risk (business)	<p>Asociación Río 7 could:</p> <p>Conduct a market study,</p> <p>Diversify products offered (eg fence posts),</p> <p>Explore potential alliances in Peruvian market, and</p> <p>Provide training in disease prevention (dengue, malaria) and avoiding other hazards (eg snakes).</p>	<p>Asociación Río 7 could:</p> <p>Conduct financial analyses,</p> <p>Follow up with MAGAP to obtain clarity on the final terms of the enterprise-transfer process, and</p> <p>Produce a simple handout for workers about the land-transfer process.</p>		<p>Asociación Río 7 could:</p> <p>Continue to search for new clients, and</p> <p>Diversify products offered.</p>	<p>Asociación Río 7 could promote its products.</p>	<p>Asociación Río 7 could</p> <p>Provide training in administration and organisational capacities,</p> <p>Assign an assistant to the administrator,</p> <p>Promote its products (eg bamboo roundtable, billboards, newspaper, radio),</p> <p>Work with a collaborator to establish a warehouse in a strategic area, and</p> <p>Start a community microcredit fund.</p>
Options for policy (government/private sector)	<p>Regional government could help to clear drainage canals to avoid flooding.</p>	<p>INBAR could offer training in financial analysis.</p> <p>Government could help with low-cost credit.</p> <p>Undersecretary of Land and Agrarian Reform could offer technical assistance with land transfer and loans.</p>		<p>Bamboo roundtable could help with finding buyers.</p>		<p>Municipal government could help with road maintenance.</p> <p>INBAR could offer training in community microcredit funds.</p>

4.4 What are the options to reduce risk through external support?

External actors interviewed included representatives of the Undersecretary of Land and Agrarian Reform and the Undersecretary of Forestry, both within MAGAP, and the owners of Allpabambu, a main client of the association's.

The representative of the Undersecretary of Land and Agrarian Reform was asked about the land-transfer process of the plantation to the association and how his office is supporting the association. The representative described a programme for informing, training and accompanying associations going through the transfer process once a transfer is formally initiated. This assistance is expected to begin in March 2016. In the end, however, he was very pessimistic as to whether associations who receive land transfers would be able to pay their loans. He said that only 2–3 per cent of the 78 associations currently in this process are doing so. In cases where associations default, the land will revert to the bank to be sold, and the association members will carry any remaining debt. He said that in spite of the recognition of this problem, the government is moving forward with the programme.

The representative of the Undersecretary of Forestry was asked about programmes for supporting small and medium forest enterprises. She explained that while there is a programme for incentives for plantations (establishment costs are reimbursed), bamboo is not among the species included. For technical assistance, smallholders must contract a technician, although some community forest enterprises have received assistance from the Rainforest Alliance's Training, Extension, Enterprises and Sourcing Programme (TREES) and other NGOs. In addition, she personally has worked with some communal plantation enterprises. She reported the main risks as not having title to their land (which made legal authorisation and documentation of sales difficult), low capacity in administration and financial management (including internal conflicts over funds), and problems with plant health. Her main recommendations for providing training for associations included: administration, accounting, labour laws, innovation for quality management, and technical skills for plantation management. In the end, she was very doubtful about the capacity of associations to manage land and businesses, based on what she has seen in her career to date working with different types of community businesses in Ecuador.



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Rio 7 administrator at the enterprise's bamboo plantation

The owners of Allpabambu understand the association's need for operating capital, and have set up a payment plan for each order. The association receives 30 per cent of the payment at the signing of the contract, 50 per cent when the container arrives at the company's processing centre, and 20 per cent when the company's client confirms the quality of the laths. This is both to help the association cover its costs, and to reduce Allpabambu's risk of receiving low-quality laths. In addition, to ensure the laths are of the quality Allpabambu needs, it provides technical training for identifying and harvesting the appropriate culms. It has given the association a simple hand tool for measuring culm diameter as well as the thickness of the lath wall, and Allpabambu's owners are present as laths are loaded onto the container for export.

Finally, the INBAR Latin America office in Quito in has committed to running two training programmes with Rio 7. The first is in financial analysis, to ensure the association understands its operating costs (including indirect costs for which they will soon be responsible – paying the manager and administrator). The second is for establishing and running a social savings and credit plan, an area in which INBAR has trained community groups in Ecuador for 12 years. This would be a way to eventually replace the small loans that the company Hdineagro SA used to give workers.

Table 4.3 Solutions to reduce risk for Asociación Rio 7

Risk categories and options for improving the business environment of locally controlled forest businesses	Practical potential for beneficial impact – in author's opinion (score out of 10)
REVENUE FLOWS (concerns over profit and balancing costs)	
INBAR training in financial analysis.	5/10
Government help with low-cost credit.	8/10
Technical assistance on land transfers and loans by Undersecretary of Land and Agrarian Reform.	8/10
RESOURCE ACCESS (concerns over resource access and stewardship)	
Government to help with clearing drainage canals to avoid flooding in plantations.	10/10
BUSINESS RELATIONSHIPS (concerns over conflict-free relationships)	
Members of the bamboo roundtable could help the association to identify/improve new products and buyers.	7/10
SECURITY OF OPERATING ENVIRONMENT (concerns)	
See Resource Access above	
BRAND DEVELOPMENT (concerns over reputation with customers)	
Not currently applicable.	
OPERATIONAL CAPACITY (concerns over operating efficiencies)	
Municipal government could help with road maintenance.	7/10
INBAR could provide training in community microcredit funds.	5/10

4.5 Conclusions and ways forward

When asked, the administrator and several workers were able to quickly identify their main risks, but they did not have an explicit plan for dealing with them. This has led to a sporadic and disorganised way of managing risks (ie only addressing those that seem most urgent) with no plan for monitoring risks over time. The association representatives confirmed that self-assessment of risk would help them more explicitly plan how to meet their main risks. The authors believe self-assessment of risk would specifically help Asociación Rio 7 members to:

- Better follow-up on the enterprise transfer process, including assigning specific people to take responsibility for clarifying different aspects of the process.
- Prioritise limited labour resources: identify someone to work with the manager as his assistant, so that if he leaves there is still some institutional memory and administrative capacity.

As with the case of Allpabambu in Chapter 3, a workshop and training materials where different types of risks are explained and an adaptive management model for risk is presented would help to build capacity in the self-assessment of risk for enterprises like Asociación Rio 7 and its partners.

Such a workshop should include analyses of real businesses from the region, and target leadership committees, future leaders and trusted partners. Partners have an important contribution to make to the risk analysis – and it would provide them with a better understand of how the enterprise perceives risk.

Over the course of 3 – 6 months, the workshop process could:

- Part 1: help to identify risks for two to three businesses, rate them in terms of seriousness, and develop risk management and monitoring plans,
- Part 2 (three to six months later): reconvene to discuss the impacts of risk management, update risk assessments based on monitoring, and update management plan as necessary, and
- Part 3 (six months to one year later): reconvene and repeat activities from Part 2.

Meetings with external actors to share results of the risk self-assessments would help them to develop an understanding of risks these enterprises face, for example with key actors who have more influence over mitigating risks (such as MAGAP). This would help them to understand their role in causing and/or potential ameliorating specific risks. Summary findings could be presented at the bamboo roundtable and other forums to create greater awareness and to help generate solutions and commitments.

Finally, partner organisations could help turn the results of the self-risk assessment into policy recommendations, targeting decision makers, academics and funding agencies and contributing to a wider understanding of the risks faced by businesses like Asociación Rio 7.



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