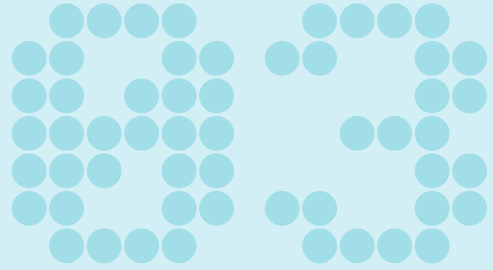




**micaia**

**reflections**



## Implications of baobab value chain development for land and natural resource rights and governance

Andrew Kingman



**LEGEND**  
Land: Enhancing Governance  
for Economic Development



## About Micaia

Micaia is a 'family' of organizations working together around a common strategy based on four 'pillars of local prosperity': sustainable management of natural resources, diverse and inclusive local economies, active citizenship, and food and energy security.

Micaia's approach is to focus on a small number of substantial landscapes – defined geographical areas – over a long period, working with local people on meeting challenges and taking up opportunities linked to one or more of the 'pillars' noted above. As we learn from that work, we hope to share the lessons with others and this 'Reflections' series is part of that commitment to sharing our experience. Micaia Foundation is an operating foundation, established in 2009, and working almost exclusively in Manica Province. The foundation helps people develop the capabilities they need to make informed choices about their lives and livelihoods and tries to link practical work on the ground with engagement with policy/decision makers.

Eco-Micaia Ltd is an ethical trading company that is helping establish inclusive businesses, working with producers and/or community partners. Eco-Micaia focuses particularly on specific value chains within the field of non-timber forest products that have the potential to go to scale commercially. Eco-Micaia has established and manages three subsidiary companies: NDZOU Camp (a community joint venture eco-lodge); Mozambique Honey Company; and Baobab Products Mozambique.

## About LEGEND

Land: Enhancing Governance for Economic Development (LEGEND) is a programme of the UK Department for International Development (DFID) which aims to improve land rights protection, knowledge and information, and the quality of private sector investment in DFID priority countries. It includes assistance to the development and start-up of DFID land-related programmes and activities bearing on land and land rights at country level, alongside knowledge management activities, a challenge fund to support land governance innovations, and coordination with a network of global land partners supported by complementary DFID grants.

From October 2016 to June 2019, Micaia Foundation implemented a LEGEND-funded project. The project was complemented and partly co-funded by a grant from a private family foundation with a management office in the UK and to a lesser extent by German development agency GIZ through its Green Innovation Centre programme. This and two companion papers are reflections on this project. The research underpinning them was supported by the University of Sheffield through a collaboration between Micaia and Sheffield Institute for International Development.

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# Introduction

This reflection paper focuses on the baobab value chain in the north of Manica Province and, specifically, on the ways in which commercialization of the value chain with Baobab Products Mozambique (BPM) is beginning to have an impact on the governance of land and natural resources, including baobab (*Adansonium digitata*).

From October 2016 to June 2019, the commercial interactions between BPM and the communities, particularly the women who collect the baobab fruit, have taken place in the context of a LEGEND-funded project implemented by Micaia Foundation. The project sought to address two central problems:

- Women baobab harvesters have little or no control over the baobab trees or fruit in the current value chain.
- Women harvesters' livelihoods are vulnerable to the rapid, uncontrolled deforestation of the baobab zone – a result of a lack of effective land governance and natural resource management.

Baobab is Africa's 'superfruit', rich in nutrients and having demonstrable medicinal properties. Always used as a source of material for food (leaves, fruit, roots), medicine (leaves, bark), and practical goods (cord, crafts), baobab trees are often associated with spirits and cultural traditions, while individual trees (often hollow) have provided hiding places, stores, and even prison cells! The tree is renowned as a source of water in drought periods. The trees also act as a significant resource for a range of wildlife – bees through to bats – while the fruits are enjoyed and consumed by elephants, monkeys, baboons and more.

## Informal trade in baobab products within Africa has been ongoing for many centuries.

Informal trade in baobab products within Africa has been ongoing for many centuries, and still dominates the overall value chain in most source countries. Development of a more formal, export-oriented trade came about only in the mid-2000s following the approval of the powder as a food product for consumption in the European Union (EU) under the Novel Food Regulations in

2007 and later in the United States through FDA (Food and Drug Administration) approval. The size of the resource base within Africa, and the recognition of the opportunities opened up as a result of the formal trading sector, has seen a big increase in supply, especially in recent years (from 2016). The quality of powder supplied varies greatly, as does the price. As large-scale manufacturing companies are increasingly looking at baobab as a potential ingredient, thus moving the product out of the exclusively high-end or niche 'healthfood' sector, there are both opportunities (increasing scale) and challenges (commoditization leading to low returns and undermining efforts in Africa to add value at source). These issues are explored more fully in other Micaia publications. For this paper, the focus is on whether and to what extent commercialization is having an impact on the traditional forms of governance that apply to baobab in Mozambique.

Baobab trees are found in many areas of Mozambique, but Micaia's work on baobab focuses on the north of Manica Province in Guru and Tambara Districts. Baobab is one of the few sources of seasonal cash income in this area. However, until Micaia started work, the only trade was with traders from Malawi who avoided the formal system (paying bribes to take the product across the border without papers) and paid very low prices for the baobab pulp. Low current returns alongside a large potential market convinced Micaia that there was an opportunity to transform the local baobab trade and in so doing to transform the lives of hundreds of women – in Guru and Tambara Districts, collection of baobab fruit is almost exclusively done by women. In neighbouring Tete Province, men are more involved, though mostly in the marketing of fruit. Micaia started work in the two districts in 2012, and in 2014 created Baobab Products Mozambique Ltd (BPM), the first Mozambican company to commercialize baobab. BPM had its first full season of operations in 2015, buying 60 tons of baobab fruit pulp and seed. In 2019, BPM aims to buy 300 tons of pulp and seed. Since 2016, BPM has had organic status for its baobab powder and oil, and the company has become one of the leading producers of high-quality baobab powder in Africa.

## **Governance considerations in NTFP value chains**

Mirroring the growth in international trade in non-timber forest products (NTFP) over the last 20 years, there is now a wealth of research investigating the nature and impact of change in NTFP value chains. A detailed review of such research is beyond the scope of this paper, but some general points can be drawn from studies that are particularly relevant to the baobab value chain in terms of its recent growth, the nature of the resource base and its governance arrangements.

### **Defining governance**

As this paper intends to explore the impact of change in the baobab value chain on governance of baobab and other natural resources, an understanding of governance is required.

In the context of land and natural resource management, governance necessarily involves multiple actors as well as a wide range of systems – formal and informal norms, rules, processes and social practices. This combination of institutions and systems determines the way in which individuals and organizations interact with resources. Thus governance is a social construct, essentially and necessarily complex, and always rooted in its local context. The following definition of natural resource governance has been developed by the International Union for the Conservation of Nature (IUCN) as part of its Natural Resource Governance Framework:<sup>1</sup>

Natural resource governance refers to the norms, institutions and processes that determine how power and responsibilities over natural resources are exercised,



how decisions are taken, and how citizens – women, men, indigenous peoples and local communities – participate in and benefit from the management of natural resources.

## Multiple governance arrangements

In the context of natural resource management, governance is usually multi-layered and complex. As such, several studies, including Ingram's work on the Congo Basin,<sup>2</sup> use the term 'governance arrangement' rather than 'governance system'. Whereas 'system' implies an integrated whole, an 'arrangement' may take many forms and may be shifting over time as it reflects the way in which people, institutions, policies, norms and processes interact. In this paper the term 'governance arrangement' is used.

In much of the literature on governance in natural resource contexts, and in policy discussions, the focus is on two forms of governance:

- Legislation (regulatory governance)
- Traditional authority (customary governance)

A study<sup>3</sup> of the governance of baobab in Zimbabwe, for instance, describes a 'multitude of statutory laws overlaying existing customary rules'. A review<sup>4</sup> of the governance of marula (*Sclerocarya birrea var caffra*) in southern Africa, while presenting the array of factors that determine the effectiveness of governance arrangements, focuses mostly on the interactions between state-led interventions through regulatory frameworks and customary governance arrangements.

The extent and influence of regulatory governance in natural resource management in general, and NTFP value chains in particular, varies immensely from one country to another and within countries from one value chain to another. Even when regulatory frameworks exist, they may be dysfunctional or inconsistently applied, poorly monitored or enforced, and always open to corruption.

### A common theme across studies of NTFP and natural resources in southern Africa is the continuing importance of customary governance.

A common theme across studies of NTFP and natural resources in southern Africa is the continuing importance of customary governance. Typically, harvesting natural resources for subsistence use is allowed (though may still require some form of authorization from a community leader) but harvesting for commercial purposes requires permission of the chief or equivalent traditional leader. This was seen in Ingram's study<sup>5</sup> of 12 value chains across DRC and Cameroon, the review of marula governance in southern Africa,<sup>6</sup> the Zimbabwe baobab case,<sup>7</sup> and a study of governance arrangements for Namibian Indigenous Natural Products.<sup>8</sup>

While customary and regulatory governance arrangements play, to varying extents, critical roles in natural resource governance, several other arrangements can be equally as important. As NTFP value chains expand, *market-based governance* becomes increasingly important. Market-based governance arrangements describe

the institutions and processes that control demand and supply transactions in markets. These arrangements can be voluntary or formal and institutionalized, often based on international standards (including organic as well as product/industry specific standards) and agreements (such as CITES, the Red-list). In Namibia, where the national government has since the 1990s taken ‘indigenous natural products’ (as they are termed in Namibia) very seriously, governance of market access varies according to the value of the product, the scale of demand, and the destination market. Governance ranges from strict regulation and international product standards (eg for Devil’s Claw) through cooperative and collaborative arrangements to very localized and flexible community norms. In the case of Congo, Ingram found that across 12 NTFP, voluntary, market-based governance arrangements were found in all chains, with international standards having an impact on 2 chains (*Pygeum* – *Prunus africana*; and honey/bee products).<sup>9</sup>

In the review of changing governance arrangements for NTFP in the Congo Basin, Ingram identifies two other governance arrangements that play important roles: *project-based governance* and *corruption*. As NTFP have been recognized for their potential ‘win-win’ benefits (creating economic livelihood opportunities while contributing to biodiversity conservation), NTFP value chain ‘upgrading’ has attracted NGOs and funding institutions. As Ingram notes, projects can have positive as well as negative effects, but they almost always affect the way in which NTFP value chains develop and are governed. This is certainly the case with baobab in Mozambique.

### Corruption should not be seen as the absence of ‘good governance’; it is itself a form of governance . . .

Corruption should not be seen as the absence of ‘good governance’; it is itself a form of governance, shadowing both statutory and customary structures, and often run by the same governors! Across the 12 NTFP value chains she studied, Ingram found that corruption to varying degrees influenced each one.

Perhaps not surprisingly, corruption was most prevalent in the absence of formal regulation (either because it didn’t exist or because it was not enforced), especially when coupled with remote locations or important points along the chain (such as a port). In higher value chains with statutory regulations, customary chiefs and government officials were often involved in corruption. Across many chains, traders and transporters bribed officials to access permits, with such ‘facilitation fees’ accounting for up to 25% of a wholesaler/transporter’s costs. As we describe below, corruption was, and in many areas still is, a significant governance arrangement in baobab value chains in Mozambique.

## **Institutional bricolage**

Across all of the studies reviewed, it is clear that NTFP value chains are governed by multiple arrangements, though how many there are, and the degree of prominence of one or another arrangement, varies considerably – and may change over time. This reshaping of customary, voluntary and legal arrangements by one actor or a combination of actors in a chain has been defined as a form of bricolage. Cleaver<sup>10</sup> describes ‘institutional bricolage’ as the formation of institutions through combining old practices and norms with new arrangements. Under this institutional bricolage, norms are constantly renegotiated



and traditions manipulated or reinvented, social relationships are exploited and reformed, and both formal and customary institutions have their roles and interactions reshaped. This framework is particularly appropriate to describe the interaction and emergence of baobab governance structures, and is used here to explore the changes occurring in these structures.

## Common drivers of change

By far the most important driver of change in natural resource governance is a shift in the nature or scale of *market demand* for a particular resource – in this case, an NTFP. Increasing global markets are likely to encourage introduction of new governance or expansion of existing regulatory governance. This happened with baobab in Zimbabwe and higher value NTFP across southern Africa and the Congo Basin. Major growth in

**By far the most important driver of change in natural resource governance is a shift in the nature or scale of market demand ...**

demand can also undermine long-established local and regional trade governance. Wardell<sup>11</sup> shows how this is the case with shea nut in Ghana. Significant growth in demand for cocoa butter equivalents opened up new opportunities for shea nut butter but in so doing undermined chain governance arrangements that were historically rooted and culturally embedded. At a community level, traditional or customary governance arrangements are weakened by what Ingram termed ‘creeping privatization’ – families moving into common areas and appropriating trees, ‘tacitly creating new ownership rights

from common pool resources’.<sup>12</sup> This same process of ‘privatization’ was also seen in Zimbabwe in the case of baobab, and across several southern African countries in relation to marula, where the locus of governance has shifted from communal (sometimes vested in the traditional leader) to private (usually a male head of household).

As noted above, in many natural resource management contexts, *projects and external funding* play key roles and very often drive change in governance arrangements. Ingram’s study, for example, described projects compensating for deficiencies in government services (eg monitoring or enforcing regulations), establishing new institutions and regulations (sometimes but not always built on customary structures and rules), and upgrading value chains in ways that create new governance arrangements.

Other drivers of change noted in the various studies include population growth caused by internal migration (a result of a weak economy or of local land use changes); disempowerment of traditional authorities (eg by vesting greater power in newly established regulatory bodies); and the introduction of new international standards or agreement.

## Land and natural resource governance in the baobab context

\*This was the number of NTFP species identified by Micaia and community guides in the course of forest inventories undertaken in the early stage of the LEGEND project.

\*\*In reality, it is likely that at least some community leaders have been benefiting from the logging activities, along with many young men from the villages, recruited as casual labour.

† Under the forestry legislation, communities are entitled to receive 20% of taxes paid to government by private entities exploiting forests for timber. However, the communities need to have in place a formal registered CGRN (which, according to the legislation, should include representatives of local government), a formal registry of the community, and a bank account. There are few examples in Mozambique of communities benefiting from the 20%.

The focus of Micaia's work on baobab is in the neighbouring districts of Guru and Tambara in the north of Manica Province. Specifically, Micaia focuses on the dry northern areas of these districts, bounded to the north by the Luenha and Zambezi rivers. The areas are quite densely populated with baobab trees, but also with as many as 40 other 'useful' species that are important for local people for food, medicine, building materials and firewood.\* An abundance of marula trees (*Sclerocarya birrea* var *caffra*) provides another opportunity to develop a commercial value chain, and many communities have significant quantities of important medicinal plants that have commercial potential in high-value export markets.

The northern areas of the two districts had large stocks of important hardwood species (chanfuta (*Azelia quanzensis*) and umbila (*Pterocarpus angolensis*)) and these stocks attracted logging companies. Since 2014 one of the largest companies in the province (Inchope Madeiras) has been systematically logging the districts. Local Regulos complained, in one of the multi-stakeholder meetings staged by Micaia as part of the LEGEND project, that they had had no involvement in the awarding of the licence to Inchope Madeiras and they felt powerless to monitor the logging activities.\*\* There is a local perception that the extent of logging has gone far beyond the licence, but this is difficult to verify. What is clear is that the 'system of rewards' relating to commercial forestry is messy. In some cases, the system works as it should, for example companies such as Inchope Madeiras pay tax and some communities benefit from the 20% tax<sup>†</sup> as a result. In other cases, we have heard of localized arrangements with some community benefit, for example a Regulo negotiating with a private operator to contribute classroom furniture in return for access to the forests. Then there are the other cases of individuals being bought off to 'turn a blind eye'.

Prior to Micaia's engagement, no work had been done either to document the natural resource base of these areas or to organize communities around natural resource management plans. In Tambara District, a few communities had completed delimitation under previous projects supported by ITC (iniciativas para Terras Comunitarias) but there was no immediate link between the delimitation process and any commercial activity, though such a link was intended to be part of the plan. Micaia's focus on natural resource management and community land delimitation was initiated precisely because of the commercial development of baobab.

## Land and natural resource governance in Mozambique: regulatory governance

The Mozambican constitution of 2004 contains important principles relating to natural resources. Article 98 confirms that the state is the paramount owner of the natural resources occurring within its territorial limits (this is in line with most other countries of the world). With regard to utilization of resources, Article 102 confirms the state's obligation

to develop natural resources in the national interest and to determine how citizens can access and use those resources. Additionally, Article 117 (1) calls on the state to maintain ecological balance, conserving and preserving the environment in the interests of the quality of life of all citizens. The constitution's only other references to natural resources are in relation to land.

The collection or harvesting for subsistence purposes of natural products by people living in forested areas is provided for in the forestry and wildlife legislation. No provision is made for commercial exploitation of NTFP, though as Simon Norfolk has stated, commercial exploitation is effectively prohibited by default.<sup>13</sup>

In relation to protected areas, the 2014 Law for the Conservation of Biodiversity (Law 16/2014) establishes the principles and rules for 'protection, conservation, restoration and sustainable use of biological diversity in conservation areas, as well as the framework for an integrated management for sustainable development of the country'. This law includes a range of potentially useful features, from the perspective of community engagement in natural resource management, including community management of conservation areas, sustainable resource use and trade etc. However, as the law is limited to protected areas, reserves and other special use areas, it is not currently relevant to the baobab zones.

## Forestry and wildlife legislation confirms that the management of forest and other natural resources is the responsibility of the state ...

Forestry and wildlife legislation confirms that the management of forest and other natural resources is the responsibility of the state unless forestry concessions or licences to exploit timber are granted. The Forestry and Wildlife Law (Article 1 [18]), defining forest exploration, does not specify NTFP. However, Norfolk points out that Article 1 [22], in defining 'forest', includes a reference to 'timber or plant products', while Article 1 [31] defines 'forest and fauna resources' to include 'forests and other forms of vegetation,

including both processed and unprocessed forest products'. Article 9 makes it clear that 'forest resources' include many other natural products. However, the same article states that exploitation for anything other than consumption can be done only under licence, though it fails to define any limit to subsistence activities.

\*The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) to the Convention on Biological Diversity is a supplementary agreement to the Convention on Biological Diversity. It was adopted on 29 October 2010 in Nagoya, Japan and entered into force on 12 October 2014.

Mozambique ratified the Nagoya Protocol,\* one of whose three objectives is the fair and equitable sharing of benefits arising from the utilization of genetic resources, but it has not yet finalized regulations for its implementation. So another measure, available within the overall system of regulatory governance that could provide guidance for licences and other regulations relating to natural products, is not yet enacted. It is interesting to note that in Article 3 of the Forestry and Wildlife Law, the definition of roles and responsibilities of different stakeholders – community, civil society and the private sector – refers to 'exploitation of forest and wildlife resources' only in connection with the private sector. The community can use resources but is otherwise limited to being involved in conservation, preservation and management of resources.

## Land

Mozambique's 1997 Land Law gives existing occupiers of land considerable protection, while creating processes through which investors can secure and acquire rights to occupy land. The law confirms that all land remains the property of the state, but investors can secure a long-term (50-year) 'right to use' land (on condition that they follow procedures set out in the regulations and noted below). The Land Law (Article 12[a] and 9[1] of the Regulations) recognizes traditional land use rights and formalizes these by giving communities co-ownership rights to land that they occupy. Existing users of land have their right to use the land protected under the law on the basis that they can demonstrate 'good faith', ie that they are using the land for their livelihood.

### Any Mozambican national can apply for a right of use and benefit from land that they have occupied in good faith for at least 10 years.

Any Mozambican national can apply for a right of use and benefit from land that they have occupied in good faith for at least 10 years (this is known as a *Direito de Uso e Aproveitamento de Terra – DUAT*). Foreign nationals and companies can also seek a DUAT by applying directly to the state and following the procedures set out in the regulations.

The co-ownership rights that communities have under the Land Law are effectively the same as those granted to individuals or others who secure a formal DUAT. However, a community may wish to apply for a formal certificate so that its land is delimited and included in the national cadastral atlas (the atlas showing the extent, value and ownership of land) and property register. The delimitation process is defined clearly in the regulations. Whoever is facilitating the delimitation process (often an NGO) must ensure through a series of meetings that there is general understanding of the Land Law and the processes involved in delimitation. The community must elect their official representative to participate in the process. Approval of the process must be granted by the district administrator, including an indication of the reasons for the delimitation – this is critical. If the process is approved, participatory planning processes will take place at community level, producing maps of the land use types in the community and identifying limits with neighbouring community groups. Maps and plans must be presented to the community and its neighbours in the presence of the district administrator (or her representative). All paperwork will then be presented to the Provincial Services of Geography and Cadastre (SPGC), who may need to verify the limits if they were not part of the initial team preparing the maps and identifying boundaries. When the process is finalized, SPGC will record the delimited land in the atlas and register, and issue the community with its land certificate.

## Land and natural resources: customary governance

As outlined above, customary governance is largely enshrined in the regulatory framework. However, while the Land Law and other laws and regulations provide for community involvement in managing, conserving, preserving and using natural resources on the land they occupy, there is no guidance as to how these roles should be performed. This is entirely the arena of customary norms and localized systems.

In the participatory mapping and facilitated discussions that were undertaken by Micaia in 23 villages as part of the LEGEND project (see below), it became clear that in these communities at least, land and natural resource governance has been quite ‘light touch’. There are the standard cultural norms such as a prohibition on harvesting anything from trees in sacred sites (burial grounds or other areas deemed sacred for historical reasons or because they are used for ceremonies); rules relating to fire (while controlled fires are allowed locally as a form of land preparation, people are required to prevent fire spreading, particularly into ‘commons’); and a general acceptance that any natural resource available on a family’s land is theirs to exploit. We found little evidence, unlike in neighbouring Zimbabwe for instance, of Regulos (chiefs) needing to give authorization for harvesting, even for commercial purposes. There was one exception to this general finding: in the village of Tsanzabue, in Tamara District, harvesting of maçanica fruit (*Ziziphus mauritania*) can begin only when the Regulo says so. This is because the fruit is scarce in that area so its popularity and short season encourage early harvesting. The Regulo’s governance of the resource is an attempt to manage scarcity and ensure a more equitable harvesting when the fruit is ready.

In relation to boundaries between villages and within a village, ie settlement areas distinct from common resource areas, governance appears to have been quite relaxed and we found few examples of conflict. In one meeting, Regulos expressed some reluctance

**In common with all traded NTFP in Mozambique, baobab has not been covered by any formal regulatory governance arrangement.**

to overly protect baobab forest areas because ‘cross-border’ harvesting allows for the possibility that in any one year there might not be fruit in one village but there is in another, and the following year the situation could be reversed. In our discussions with women collectors, however, we have heard no reference to this sort of scenario being realized. However, in a meeting of all Regulos from the LEGEND project area, held in September 2019 as part of the closing of the project, some Regulos expressed their frustration with the increasing incursion into their community

by people from neighbouring communities to collect baobab. The frustration reflects a growth in the scale of the trade and, more significantly, the increased value resulting from BPM’s higher prices. The Regulos know that people are collecting in order to sell to BPM, so they are concerned when people from neighbouring communities are benefiting from a resource that should benefit their own people.

## **Governance of baobab trees and fruit**

In common with all traded NTFP in Mozambique, baobab has not been covered by any formal regulatory governance arrangement. Moreover, unlike in neighbouring Zimbabwe, in central Mozambique at least baobab do not appear to carry significant spiritual significance and thus do not have a special status in customary governance arrangements. In Zimbabwe, depending on the region, baobab trees fall under multiple customary governance arrangements, in some cases attached to taboos and spirits, and ascribing sacredness to trees.<sup>14</sup> We have not found this to be the case in Mozambique.

In the past, governance of baobab trees and fruit can be seen to have involved three main arrangements: customary governance, voluntary market-access governance, and corruption. As noted above, the regulatory governance established under the law has had to date little impact on baobab or other NTFP.

In the pre-Micaia/BPM era, the three forms of governance were closely interwoven. Customary governance was essentially facilitative, accepting that when baobab fruit was ready for harvest it could be harvested by anyone, following the basic norm that trees on land occupied by a family should be harvested only by that family (assuming that they wanted the fruit) while trees in the commons should be harvested on a 'first come first serve' basis. Consultations and meetings with communities suggest that customary governance before BPM/Micaia was essentially facilitative.

While some of the baobab was always for consumption (it is available in the 'hungry season' and in these dry areas, where agriculture is particularly challenging, that

**While some of the baobab was always for consumption ... the informal trade has been long established.**

season can be long and hard), the informal trade has been long established. In this regard, Regulos have been closely involved in establishing the nature of the market access. Traders wishing to buy in a village must meet with and secure the backing of the Regulo. The Regulo will assign the trader a place to stay while waiting for people to bring pulp/seed sufficient to fill their truck. We found no evidence of Regulos being involved in price negotiations,

so the women were left to decide whether to sell to the trader or to take pulp/seed to sell to roadside vendors (who might offer a higher price because of their ready market of passing travellers). In this era of entirely informal value chains, market governance was tilted heavily towards the traders, given the lack of knowledge or organization among the women collectors.

The traders were also at the heart of a multi-layered system of bribes and other payments that allowed them to circumvent official permits for transporting agricultural commodities from the districts and, more significantly, the documents and fees required to cross the border (for those traders targeting the Malawi markets). We know from local government officials that BPM is the first baobab buyer to voluntarily pay the tax (MZN 10/sack [USD0.17]) for transporting commodities out of the area. Yet every year many trucks leave Guru and Tambara Districts loaded with baobab pulp/seed. While we do not have evidence to prove that cross-border traders always avoid taxes and documentary requirements (phytosanitary clearance, certificate of origin, etc), a field officer carrying out earlier research for Micaia was able to talk with a driver of a truck loaded with baobab and destined for Malawi. The driver stated that he had to pay the equivalent of USD250 (MZN15,500) at the border to get across without all the necessary documents. In addition to paying 'facilitation fees' to enable their movement once out of the village, traders would in many cases have been expected to 'tip' the Regulo. That this was the case has been illustrated by a few occasions on which a Regulo has hinted to BPM that some sort of 'incentive' might encourage the Regulo to ensure that his people only supply BPM.

This informal combination of governance arrangements worked adequately but mainly in the interests of the traders, with a handful of individuals also benefiting from their part in



facilitating the trade. The women collectors were powerless to do other than accept the price on offer or else not enter the market. It was Micaia's recognition of this situation that led to the decision to engage in the baobab value chain from 2014.

## Micaia: strengthening governance and management of land and natural resources

Micaia Foundation implemented the LEGEND project from October 2016 to June 2019. The project included work directly on baobab, building the skills, knowledge and organizational capacity of women collectors and assisting in development of the baobab value chain. At the core of the project, however, was work designed to help communities better understand the scale, variety and potential value of their natural resources, to improve community control over land and natural resources, and to give women baobab collectors greater security of access to the baobab fruit.

### Micaia field officers carried out forest inventories in all 20 villages initially targeted by the project.

Micaia field officers, working with community guides and supported by a specialist botanist and consultant, carried out forest inventories in all 20 villages\* initially targeted by the project. The main focus of the inventories was on identifying NTFP known and used by community members. The result of the inventories was a detailed list of species with approximate volumes for

each village. This work has important practical benefits for BPM (because it shows the communities with the largest stock of baobab) and for Eco-Micaia in considering additional value chains to develop.

Preparing for natural resource management planning and land delimitation, following initial sensitization in the communities, the focus was on participatory appraisal and mapping. The project team worked in all 23 villages (across 14 Regulos) in which BPM buys baobab fruit, facilitating community members in producing maps of their land, undertaking resource assessments, and discussing resource utilization and management. As usual, the participatory appraisal work also included developing a historical profile including key events, mapping institutions in the community (traditional, religious, NGO, etc), drawing up a seasonal calendar and daily schedules (for men and women), and profiling economic activities. These discussions generated data that formed the basis of natural resource management plans. As planned, SPGC technicians were brought in to verify village boundaries specified by local people. Unfortunately, the field work they did was inadequate and ignored the community-drawn maps: they preferred to draw straight lines between data points rather than acknowledge boundaries following dry streams, the base of hills, etc.

In parallel, complications arose because in some cases, the community of the Regulo (chief) responsible for some of the smaller villages within the 20 mapped in the project had not been involved in the project because BPM does not buy baobab there. Discussions about land and resources must have the most senior Regulo involved. So the project team returned to the field in early 2018 in order to gather additional information, clarify

\*The project started with 20 villages. Because 3 home villages of Regulos had not been included in the 20 villages, those 3 additional villages were included; hence the total of 23.

apparent discrepancies, and ensure that the appropriate Regulo was engaged in the planning process. In all, 8 villages were covered by a rapid participatory data gathering process. These 8 are the head villages for the most senior Regulos. In this case, the team did the appraisal focusing at the level of Regulado. In some cases, the Regulado consists of as many as 7 villages (povoados) though, more typically, Regulos have 3 or 4 povoados within the Regulado.

The Micaia team revisited the 14 Regulos in the period October–December 2018 to carry out geo-referencing of the Regulado boundaries and also the boundaries of the principal baobab forest areas. Once again, SPGC technicians were part of the team. By the end of the year, all data from the participatory community work, and all data points (shapefiles), had been provided to the lead consultant working on the management plans. By the end of March 2019, final draft plans were available for all 14 Regulos, and in each case the plans were backed up with maps marking community boundaries as well as important baobab forest zones. In May Micaia received from SPGC the official land certificates for all 14 Regulos.

In both direct and indirect ways, the official certificate strengthens the communities' basis for managing their land and resources and gaining from the process. First, in the event of growing competition for resources such as baobab, the more formal governance arrangements, and the official delimitation of boundaries, provide a basis for preventing 'raids' from outside the community and/or for resolving conflicts that might arise around resource access. Second, the process of identifying and zoning key baobab forest areas, and linking these with more structured governance processes, should reduce the spread into these areas by families opening new fields (the 'creeping privatization' of the trees). This in turn protects the collectors' access to the baobab. Third, through the process of land delimitation, the Regulos and other community leaders have clearly started to take the issue of natural resource management more seriously, seeing the potential for expanding livelihoods and recognizing the need to establish more formal resource management institutions. Such institutions, if demanded and driven from the community (rather than imposed from a project), can play an important management and 'gate-keeping' function

## **Micaia as 'bricoleur': changing governance in the baobab value chain and local natural resource management**

Since BPM was launched in 2015 and Micaia extended its work in Guru and Tambara Districts, governance arrangements in relation to baobab specifically and natural resources more generally have certainly changed. While the company has brought in new market access arrangements and linked the trade with international standards and certification regimes, Micaia has worked with communities to strengthen customary governance through land delimitation and natural resource management planning. These changes in the baobab value chain are being facilitated by Micaia, in collaboration with BPM, with a clear objective in mind: enabling more women baobab collectors to gain

more from the annual harvest and sale of baobab fruit. Beyond baobab, Eco-Micaia has been exploring the market potential of other NTFP including marula and several medicinal plants, and in 2018 went as far as commissioning a pilot collection of seeds from two medicinal plant species (*Strophanthus kombe* and *Entandophragma caudatum*) for a South African company. That pilot was based on Eco-Micaia implementing procedures (prior informed consent, mutually agreed terms and a benefit-sharing agreement) established under the Nagoya Protocol but not yet included in Mozambican regulations. Using best practice guidelines, Eco-Micaia went ahead with the process in seven communities, explaining the Nagoya-related requirements and reaching agreement with community leaders, only to fail to secure an export licence on the grounds that there are no regulations in place (work is now under way to finalize draft regulations for implementation of Nagoya).

In the process of change in the baobab context, other actors – informal traders, Regulos, local government officials – are having to decide how to respond to the new governance

### The two principal drivers of change in market dynamics are price and scale (of demand and supply).

arrangements. Notable in its absence other than at local level, however, is the state. To date, there has been no change in the nature or reach of regulatory governance. In many ways, in its determination to do business ‘properly’ and to establish clear standards and systems, BPM is filling the void left by the state. This is typical of a situation in which bricoleurs – people who engage in bricolage – ‘make the best of the arrangements in which they find

themselves, and creatively use the different types of capital available to construct new governance arrangements and/or remould existing ones to meet their current objectives, circumstances and livelihoods’.<sup>15</sup>

It can be argued that informal traders, including those from outside Mozambique, have been very successful bricoleurs for many years in the baobab context. Engaging primarily with customary institutions, playing on the regulatory void, and benefiting from systematic corruption and porous borders, traders have been able to exploit women collectors to their own benefit. Perhaps this is a case of ‘entrepreneurial bricolage’ in that the traders are subverting or using existing institutional arrangements to their advantage rather than creating new ones, which is the essence of institutional bricolage. Either way, the situation began to change with the intervention of BPM from 2015. However, it is only in the last two years, as BPM’s scale of operation has grown and Micaia has had access to project funding, that governance arrangements have started to shift.

## **BPM leads big changes in voluntary market-based governance**

The two principal drivers of change in market dynamics are price and scale (of demand and supply). Changes in these drivers usually occur because of the entry of a new actor, as happened with the intervention of BPM. The decision to create a dedicated baobab trading company was taken by Eco-Micaia on both commercial and social grounds. Commercial because the baobab market looked set to grow and Eco-Micaia could see opportunities to greatly improve the livelihoods of suppliers while generating profit that the company could reinvest in other value chains. Social because it was clear that the women suppliers

were being exploited. Once established, BPM quickly began to tip the scales in favour of suppliers. Today, even if the women (and perhaps some men now entering the value chain) do not sell to BPM or else have surplus stock to sell having sold to BPM, they are in a much stronger position to negotiate improved prices from other traders. Some women have stated that they are making the informal traders weigh/use scales (instead of using buckets). This is a fine example of bricolage and how the 'rules' introduced by Micaia/BPM have not only been accepted and legitimized (they women see them as fairer) but taken forward by the collectors and used elsewhere.

BPM only buys from women in Manica Province who hold a contract to supply the company. While the contract is a necessary feature of securing organic certification (part of the traceability requirement), the commitment to buying only from women reflects BPM's (and Micaia's) determination to protect the interests of women in the value chain. Too often,

### BPM only buys from women in Manica Province who hold a contract to supply the company.

when natural products such as baobab, traditionally collected by women, become more valued through commercialization, men start to get more involved. This commitment to contracting only with women is affecting the market dynamic, with women individually gaining status and respect for their role in the market. Survey data collected by BPM/Micaia shows a greater level of support and

encouragement from men for the women's involvement in the trade, along with evidence of women having a greater say over use of money earned from baobab sales. This gradual strengthening of the position of women in the market is being further enhanced by organizational innovations.

At village level, BPM has worked with the women to establish 'collector clubs', informal bodies that facilitate planning, communication and training of collectors. The clubs have a lead collector who is given additional responsibilities by BPM: organizing the harvest, coordinating with the buying team, storing fruit at her house and issuing vouchers for fruit delivered by other collectors to the store. The clubs and lead collector network add a new dimension to the market governance arrangement, creating the basis for more devolution in time by BPM of roles and responsibilities in the buying and primary processing operations.

The new market-based governance arrangements brought in by BPM are exclusive: for women only. This automatically creates distance between customary institutions (Regulo, 'council' of elders) and their influence on the market (facilitating involvement in the community of traders) and these new women-led institutions with roles and responsibilities assigned by BPM for governing market access. These responsibilities include: (a) ensuring traceability and quality; (b) not collecting baobab fruit from outside prescribed areas included in BPM's organic certification; (c) selling only to BPM.

At provincial level, BPM, with the support of Micaia and several funding partners, and with the active and enthusiastic involvement of women baobab collectors, is establishing a new representative association of baobab collectors. This is another exclusive institution: for women. In return for cooperating with BPM, collectors not only receive by far the best price\* in the market for their raw material (the key incentive); they also gain access to training and support through the year and now, via their association, they have the opportunity to own shares in BPM and participate in its management.

\*BPM in 2019 is paying MZN6 (USD0.097) per kilo of fruit, which is equivalent to MZN10–12 (USD0.16–0.19) per kilo of pulp/seed (fruit shell to pulp/seed ratio does vary quite a lot). The one trader active in the same area (on a small scale) this year is paying just MZN4–5 (USD0.065–0.08) per kilo of pulp/seed, less than half of BPM's price.

\*\*This was in part because BPM did not accept the price or terms offered by the company for stock in 2019, though BPM had previously sold powder to that buyer.

†We suspect – but more field research is needed to verify the assumption – that the buyers were able to buy at the lower price when they were able to deal with men who could access fruit collected and stored by their wives.

As we explore how governance arrangements are changing, it is worth noting that in the middle of the 2019 baobab season, a new actor has entered the scene. One of the largest actors in the world baobab market commissioned a Zimbabwean company to enter the Mozambican baobab market,\*\* seeking to buy fruit in Tete Province and in Guru and Tambara Districts, BPM's area of operation. BPM received reports from its lead collectors and buying team that the Zimbabweans – well equipped with a fleet of trucks – were paying approximately half of BPM's price for fruit. This was contested by the representative of the upstream buyer, who insisted that his team had used scales and paid the same price as that paid by BPM. The reality is more complex, a mix of the buying team offering a fixed price for a sack when they could get away with it† and having to pay the BPM price when faced with determined women who know that price.

The fact that the new buyer was able to secure stock in some communities in which BPM has been active for several years attests to the reality that for people with little or no cash income, money in the hand today is better than waiting for a bit more money tomorrow. Only at the end of the season when BPM conducts its campaign evaluation with all its supplier groups will the extent of 'side-selling' become clear. We do know that in some cases the Regulo (chief) of the community sent the buyers away, stating that the community had an arrangement with BPM. This is an interesting indicator of the extent to which customary governance is interacting with reshaped market-based governance. However, the fact that one of the largest buyers of baobab in the world chose to enter directly into the Mozambican supply chain attests to the continuing void in regulatory governance (the buying team needed no permits), the relatively immature and fragile market-based governance arrangements that BPM is putting in place, and the surplus of supply over local (including BPM) demand.

## International standards and certification regimes come into play

BPM has organic certification for its supply areas in Guru and Tambara Districts, and this means new governance arrangements for the suppliers. The women have to understand and be able to demonstrate their understanding (to an inspector from the certification agency) of the organic system and its implications. They have to participate in training and their participation has to be confirmed. This is all a long way from carrying a bowl of baobab pulp/seed to the roadside.

The high standards in international markets for baobab powder – low thresholds for microbiological activity in the powder and for moulds and yeasts – have driven significant change in the processes established by BPM. In order to minimize risk of contamination, BPM buys only whole fruit and has it cracked in controlled conditions. The women collectors understand the rationale for the change and, given that it has left them with more money for less work, they are happy to accept it. However, the system is dependent on BPM's enforcement. Some rules are easier to accept than others; for instance, BPM tries to buy only bigger fruit but many if not most of the collectors will still try to pack small and sometimes damaged fruit pods into the middle of their sacks.

## Micaia-led projects introduce new governance arrangements

Through its LEGEND project, Micaia has helped communities create written natural resource management plans and to secure certificates confirming their land area and boundaries. In parallel, Micaia has supported the development of the baobab value chain, training lead collectors (in various ways designed to upgrade the value chain), supporting development of their association, and working with women on informal learning processes. The combination of project activities is designed on the one hand to create better livelihood opportunities for women in particular, and on the other to create a basis for sustainable management of natural resources. This search for a ‘win-win’ outcome is typical of institutional bricolage.

## Regulatory governance comes into view

As outlined above, Mozambique’s Land Law and the Forestry and Wildlife Act establish the ways in which community rights are protected. The Forestry and Wildlife Act also sets out how communities can benefit from forest exploitation, though this has been difficult to implement. As we note below, the next phase of Micaia’s work is likely to include establishment (where they don’t already exist) and formalization of Natural Resource Management Committees, and this could provide a basis for seeking compensation due from the 20% of taxes paid by companies exploiting forest resources under licence. For the first time, Eco-Micaia has introduced the steps required under a bio-prospecting activity when the company bought sample quantities of the two medicinal plant species referred to above. It looks likely that this trade could expand when Mozambique’s national regulations for implementation of Nagoya are finally established.

On a smaller scale, BPM is abiding by the requirements of the Forestry and Wildlife Act in paying local taxes for transport of baobab out of the districts.

## Customary governance becomes more structured and engaged

Change in the nature of customary governance is under way. The willing engagement of Regulos in the natural resource assessment and planning process, and their insistence that delimitation take place at the Regulado level indicate the shift to a more formal, structured interpretation of customary governance.

The continuing discussion about the scaling up of BPM’s commercial activities and the support given to BPM by the Regulos is another illustration of the closer engagement between customary and market-based governance arrangements. BPM is reaching out to the Regulos, enabling them to visit the processing unit in Chimoio, engaging them in the value chain even though the direct beneficiaries of BPM’s business model are women. BPM and Micaia are well aware of the patriarchal, not to mention polygamous, context of the baobab communities, so the engagement of the Regulos is in part an attempt to



manage cultural and social norms to preclude the undermining of the business model and its social impact dimensions.

### **BPM is using alternative ways of incentivizing the Regulos to support the company.**

Similarly, knowing that in the informal trade system community leaders typically receive payment from traders, BPM is using alternative ways of incentivizing the Regulos to support the company. They respect the role of the Regulo, ensuring that BPM and Micaia representatives always visit the home of the Regulo and engage him in plans and campaign actions, and enable the Regulos to participate in residential training or other events (with per diem payments). Thus BPM and Micaia ensure that the Regulo gains kudos, status, because he is responsible for bringing this new buyer, paying higher prices, to his community. These tactics help gain legitimacy and support for the new 'rules' that BPM is introducing. Micaia is knowingly facilitating a remoulding of the nature of customary governance and its interplay with the baobab value chain.

### **Corruption is excluded from the BPM value chain**

The space for corruption is diminishing in the BPM value chain. This does not mean that BPM will never be cheated by an agent, or even by one of its own staff, but it does mean that the company has made it clear that it will pay its taxes, abide by the rules, and find appropriate ways to incentivize leaders and other key actors in the chain. This does not mean that corruption no longer occurs in the natural resource context. There continue to be other informal sector traders buying baobab in the old established ways, and there is little doubt that many local leaders have benefited from over-exploitation of the forest. However, BPM's determination to play by the rules, supported by Micaia, has laid down a marker. Local people often feel powerless to prevent exploitation such as illegal logging, but with encouragement and knowledge and more formal institutions – all now coming into play through Micaia's work – that situation can change.

## **What happens next?**

### **How robust are the new and evolving governance arrangements?**

The point about institutional bricolage is that the arrangements are always shifting. This is certainly clear in the baobab case, and perhaps more generally in the wider natural resource context. So the current conjunction of different governance arrangements may not be particularly robust, but the bricolage process is robust. Micaia as bricoleur will continue to facilitate changes in governance arrangements and, because Micaia as a whole (including its subsidiary companies) is working to a set of social objectives (ie building community resilience), it can be expected that the evolving governance mix will be broadly benign.

## Individually, some of the governance arrangements are more robust than others.

Individually, some of the governance arrangements are more robust than others. Market-based governance is more robust than ever, and the plans set in place for strengthening the women's baobab association suggest that this will continue to be the case. Similarly, BPM's participation in the world market ensures that current and evolving international standards and certification regimes will continue to be core to the development of the value chain. The current governance arrangement is, however, exclusive, in that BPM and Micaia work only with women collectors, and this raises issues that will need to be addressed. Failure to maintain the engagement and support of men would risk undermining BPM's business model and the gains that are being made for women within the community. BPM recognizes this and in the company's communications at community level, the baobab trade is presented as a family business, but with women (traditional collectors of the fruit) at the forefront.

Customary governance has not been weakened in the last three or four years of Micaia's work, but it is changing. This is probably the most robust form of governance, at least in these more traditional rural communities. However, as in other countries, the spread of people into areas formally functioning as 'commons' is already leading to the 'creeping privatization' of natural resources including baobab. Customary governance needs assistance in preventing this loss of the commons. Micaia's work on planning, zoning and delimitation provides Regulos with tools, should they wish to use them, to establish areas in which resources are available under customary rules, for all to access.

Micaia is committed to working in the wider landscape of the Lower Zambezi Valley, and looks set to secure resources for at least another 4-year period of engagement. This means that processes and project-linked governance arrangements (some likely to become permanent features, such as the committees and baobab clubs) will continue for some time to come. New governance arrangements are likely to be introduced as other value chains (marula, medicinal plants, etc) are developed.

## ... regulatory governance is likely to become a more significant feature of the governance mix.

As we explore below in more depth, regulatory governance is likely to become a more significant feature of the governance mix. For now, it is simply a void, so neither robust nor weak. As for corruption, while low-level corruption continues to exist in the baobab value chain, it is steadily being minimized. Strengthening of community capacity to manage natural resources can also be expected to result in a more robust challenging by communities of unrestrained illegal exploitation of forest resources.

## **Is there a need for regulation – statutory governance?**

A key finding of the study of marula across southern Africa<sup>16</sup> was that when it comes to the interface between statutory and customary rules and regulations, *'less' is often 'more'*, and any state-led intervention is likely to be most effective when it is designed to reflect local context. The study found that regulatory developments are most effective when state and traditional authorities cooperate and when the role of traditional authority in

the community is supported. However, if there is strong customary governance in place, the study concluded that governments might do best to leave well alone unless there is significant pressure on a resource. This makes sense: why impose regulatory governance if community tenure and resource rights are secure (reasonably well established in Mozambique), and customary governance has the capacity to manage natural resources and their exploitation? It is only when customary governance has broken down for some reason or when commercial pressures have intensified to a level that can no longer be managed by traditional authorities that government could usefully step in. In Zimbabwe, the rapid development of the baobab value chain led to new statutory regulation aimed at ensuring ecological and economic sustainability. For a period in the early 2000s, the trade

**With rapidly growing commercial engagement in baobab in central Mozambique, this is probably a good time for government to intervene.**

was actually banned owing to concerns about over-harvesting, and fines were levied for illegal trade. From 2004, new arrangements were put in place with village management committees and a system of collecting permits governing commercial activities. The question with baobab in Mozambique is: *has that point now been reached?*

With rapidly growing commercial engagement in baobab in central Mozambique, and especially given the interest from foreign actors motivated by what they perceive to be low prices, low capacity, and easily manipulated governance systems, this is probably a good time for government to intervene. A system of permits to collect baobab would seem most appropriate, and this is something that Micaia is prepared to lobby for. In addition, permits should be linked to a realistic assessment of the extent of the resource, ensuring its sustainability in the long-term, and to a monitoring and control system backed by serious penalties for contravention.

BPM has nothing to fear from strong regulatory governance. The company's demand for baobab fruit is far below the capacity of the baobab forests, even in the 23 villages in which BPM currently operates. With room for expansion into neighbouring communities, BPM can continue to grow without getting close to any possible limit on collection. In any case, it is in BPM's interest to ensure that harvesting is sustainable. BPM is working with Micaia to plan integration of plot monitoring to assess the survival rate of young baobab trees and ascertain the need for planting programmes. In this context, the potential imposition by government of permits and quotas would not be a problem.

## **Possibilities under the existing legislation**

As noted above, Mozambique has a raft of legislation that creates possibilities for strengthening natural resource governance and community rights and benefits, but much of the legislation is not yet implemented widely, and the potential of some measures remains unexplored.

## Forestry and Wildlife Law

In the section above detailing provisions of existing legislation that deals with NTFP, we noted that while there is little explicit reference to NTFP in the Forest and Wildlife Act, Article 9 does include definition of resources included under the law and this does extend to NTFP. The same article specifies that exploitation of any forest resource, ie including NTFP, can only be done under a licence. This suggests that should Micaia/BPM decide to push for development of some sort of permit system, this article might provide a sufficient regulatory basis to do so. As the law is currently under review, there is an opportunity for Micaia to lobby for inclusion of appropriate and reasonable permit systems in relation to biotrade in general as part of the revision to the law.

## Community Conservation Areas

One possibility to explore is in relation to Community Conservation Areas (CCAs). These are defined as ‘area[s] of sustainable conservation, delimited in the community public domain, under the management of one or more local communities, where they have the right to use and enjoyment of land, for the conservation of fauna and flora and the sustainable use of natural resources’.\* CCAs have objectives entirely focused on conservation and sustainable management of natural resources, including local sustainable development, while maintaining local people’s access to important features of biodiversity including medicinal plants. Once established, a CCA management body must give consent prior to any exploitation of resources within the CCA by a third party. This should be in the form of a partnership agreement between the community and the private operator. In addition to setting out the basis for commercial exploitation of resources in a CCA, the law includes detailed provisions for creation and implementation of CCA management plans.

Given that in 14 Regulados there are now demarcated baobab zones, these could in some or all cases be converted into CCAs. This would have clear advantages from a conservation perspective. Assuming that BPM and Eco-Micaia continue to expand their work in this area, there would also be economic livelihood benefits from sustainable harvesting of resources within the CCA under partnership agreements. The trade-off would be that local families would be prevented from opening up machambas (fields) in the CCA. Micaia is already planning to work with communities on sustainable agriculture, encouraging a shift away from the ‘slash and burn’ system. This type of support could be a means of compensating local families for accepting the formalization of boundaries that might currently be seen as ‘flexible’.

## The Nagoya Protocol

Draft regulations exist for implementation of the Nagoya Protocol in Mozambique, and it is important that regulations should be finalized and implemented. A clear and widely understood distinction between biotrade and bio-prospecting is essential (the latter being fully subject to the requirements of the Protocol). When South Africa introduced regulations linked to Nagoya, this distinction was barely made and the biotrade sector

\*Article 15 of the Law for the Conservation of Biodiversity (Law 16/2014).

suffered badly. In Guru and Tambara Districts, the baobab value chain would be unaffected by the Nagoya Protocol, but should Eco-Micaia wish to further explore trade in *Strophanthus*, for instance, then that would be subject to the regulations set for implementing Nagoya. Micaia is fully supportive of the Nagoya Protocol and is actively encouraging government to finalize the regulations.

## Conclusions

The Micaia ‘family’ – itself an unusual combination of governance arrangements – has facilitated changes in governance arrangements in relation to natural resource management in Guru and Tambara Districts. So far, the combination of project-based governance and significant changes in market-based arrangements has served to strengthen customary governance while to some extent sidelining informal arrangements including low-level corruption. There is emerging evidence of a ‘win-win’ outcome – stronger natural resource management and land rights, coupled with expanding economic livelihood opportunities.

To date, Micaia and BPM have managed to find a balance between creating exclusive market-based governance arrangements and strengthening customary governance in general. This balance has resulted in part from Micaia’s multidimensional engagement in the communities, working on land and natural resources management, economic livelihoods and organizational development. It is also a result of Micaia and BPM interacting creatively with cultural norms and traditional leadership.

New governance institutions are emerging in these districts, some formal, organized and linked (to markets or regulatory frameworks), others informal and largely customary. There is no clear design, no defined ‘architecture’ for the emerging governance arrangements. Rather, through a process of bricolage, Micaia is facilitating change that has potential to meet development or livelihood outcomes alongside conservation goals.

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