Catalysing Market Development

MNP Staff prepare to distribute sample juice products to village producers, to show them the final product.

1. The Magic of Marula

1.1 Commercialising a Product from the Wild

While the Bridging the Gap processes were highlighting the importance of intermediaries in supply chains in the craft sector, MDA was also acting as the catalyst for the development of the market and the supply chain required for the commercialisation of products derived from the indigenous marula fruit, harvested 'from the wild' – as the literature on Non-Timber Forest Products (NTFPs) would describe it:

> Brought to public attention by Ben and Jerry's rainforest crunch ice cream and the Body Shop's range of exotic moisturisers, non-timber forest products have – for the last two decades – been widely promoted as a contribution to the sustainable development of tropical forest resources.... Non-timber forest products are seen as having the potential to achieve dual conservation and development goals by increasing the value of forest resources to local communities. (Schreckenberg et al 2006: 1)

Catalysing a market for an indigenous resource that has not previously been commoditised raises a particular set of opportunities and challenges in making this market work for the poor – at the same time as illustrating at a very local level some of the ways in which such processes and such markets are socially constructed – and some of the limits placed on this by the wider structure of markets and existing endowments within them.

The Marula, or *Sclerocarya birrea*, sub-species *caffera* is an ancient African tree that grows prolifically in a belt that stretches from Northern Kwazulu Natal across the lowveld into Namibia and all the way north to Zambia. ('A strategy for the Commercialisation of Marula Products from the Wild: Mineworkers Development Agency: 2001)

Mhala Development Centre is located comfortably within this belt, and the marula tree and its produce are an integral part of the local landscape and culture. Andrea Nzima at Mhala Development Centre identified the prolific local marula resource as an opportunity for development, and proposed that MDA support Mhala Development Centre to embark on a product development process to explore this further. This was initially run under the auspices of the Mhala Development Centre, and later transferred into a company called Marula Natural Products (Pty) Ltd, set up as a subsidiary of MDA, and with equity from the MNP Trust, representing wider community interests.

Outside the areas in which marula is part of daily life, it is probably known for two things only: firstly, for entirely apocryphal stories of elephants becoming drunk on fermented marula berries and stumbling around the veld; and secondly, from Amarula Cream, currently the second largest cream liqueur in the world, sold in over 100 countries and produced by Distell. (www.amarula.com: 21/6/2006).

Traditionally, marula beer (technically a fruit cider) was widely brewed at homestead level but not traded. However, as research in the Bushbuckridge area by Shackleton et al 2002 shows, a vibrant informal local market in home-brewed marula beer does now exist. However, between the international export market and the village, very little other commercial use had been made of marula. A sub-sector analysis of the

'Commercial Marula Industry' conducted by the Institute of Natural Resources in October 2002 characterised the sub-sector market as follows:

Figure 18: Companies involved in commercial trade in marula fruit (Mander et al 2002)

	Company	Involvement in marula industry (products produced)	To be included in the project	Comments
1	Distell (formally Cape Distillers)	Amarula Cream	Yes	Commercial production of alcoholic beverages
2	Mhala Development Centre (MDA)	Beer, Juice, Marula Oil,	Yes	Community based commercial processing
3	Kigela	Zhinga's Secret - Cosmetic containing Marula Oil	No	Product no longer in production
4	Magaliesberg Citrus	Processing of Citrus products and investigating processing marula in the off season.	No	No current commercial production of marula products
5	Halewood International South Africa (Oasis Breweries)	Kwarula marula Ale and Chikoto Beer	No	Kwarula Ale is no longer produced and Chikoto Beer is produced using synthetic flavourings.
6	Ina Lessing Jams	Jams	No	Small scale commercial production that does not involve communities
7	Lisbon Estates	Jams	No	No longer in operation

Two primary role players were therefore identified during this sub-sector analysis:

- Distell
- Mhala Development Centre (MDC).

Given Distell's market capitalisation of over R4 billion (Distell Annual report 2005, www.distell.co.za), the primary roleplayers represent the elephant and the ant. While the global penetration of Amarula Cream and the presence of Distell in the market might seem to reflect a high level of commercialisation of the marula fruit, the volume requirements by Distell are low relative to the global scope of its market, with small quantities of marula in the final product. Distell's marula needs are supplied by one supplier called Mirma in Phalaborwa, which sources the fruit from local communities in adjacent areas. The development opportunity was to find additional ways in which this prolific resource could benefit local communities.

1.2 Mhala Centre and product development

The beer brewers from Mhala Development Centre present Vukanyi and Timongo Nuts at the Lapologa Chris Hani Mine Beer Garden, Cullinan.

Mhala Development Centre's starting point was to explore whether traditional marula beer – widely and wildly drunk at a key point in the season – could be stabilized and commercialized. At that time, the mines were outsourcing the running of mine beer halls, and MDA was involved in a pilot at Premier Mine in Cullinan, where retrenchees ran the 'Lapologa Chris Hani Mine Beer Garden', in what became a form of joint ownership between an Employee Share Ownership Scheme and the NUM branch at the mine. The very earliest idea for marula beer was to target mineworkers through such beerhalls: a nice tied market.

MDA entered into a research and development partnership with the Foodtek division of the Council for Industrial and Scientific Research (CSIR), working with food scientists Dave Harcourt and Morewane Mampuru. At the 1997 NUM Congress, all 800 delegates were issued with a sample bottle of marula beer, labelled 'Vukanyi'. Tasting trials were also done at an event at the Lapologa Chris Hani Beer Garden. From both these survey results, it was clear however that targeting this market was

going to pose problems. Those that had never had it before didn't like it; those that knew it well wanted it to taste like it did at home, which the bottled version did not. Far from being willing to pay a premium for it, they were used to getting it for free, and even if MDA couldn't match that price benchmark, they certainly expected it to be cheaper than Castle Lager. (Report by Shoba Mistry: 'Post-launch Dipstick Research: Vukanyi Marula Beer': 22 October 1997). The intractable challenges of volume, price and productivity ratios were on the agenda again.

The target market shifted. Mhala is in a belt surrounded by the most up-market game lodges in South Africa. It is ten kilometers away from the Kruger National Park. Surely it would be possible to get a premium for marula beer from tourists in this 'external' but adjacent market? MDA piloted this opportunity using a micro-brewery located at the CSIR, producing 3,500 litres for test marketing purposes. (MDA AGM Report: 2000)

Along with the beer, and as part of targeting the game lodges, MDA explored packaging the marula kernels in snack-packs, labelled 'Timongo Nuts' , in order to sell the two as part of an indigenous experience. Tests run at the CSIR, however, found high levels of a carcinogen causing liver cancer in the Timongo nuts once packaged. Just one example of why consumers do need to be protected by regulatory controls and standards in the food industry – market access issues notwithstanding. Timongo Nuts stopped there. (Correspondence, Dave Harcourt; Report on CSIR Marula Nut Drying Trials: 1997)

In the meantime, a rather more lucrative market for marula oil had also become apparent. During this period MDA joined Marulanet, which was then a loose network of NGO's involved in different attempts to commercialise marula products, scattered across Namibia, Zimbabwe and Botswana. On behalf of this network, the French NGO CRIAA (later Phytotrade) commissioned specialist research into the properties of the oil. Through this process, MDA was alerted to the potentially high commercial value of marula oil as a cosmetic oil, giving scientific weight to the marketing claims regarding marula's magical properties, also highlighting commercial potential in the pharmaceutical and food industries. This included the fact that the marula fruit contains up to four times the Vitamin C of oranges, and the oil has a range of properties that make it attractive to the cosmetics industry:

> Marula oil is naturally processed. This high-stability lipid is under research and development for the natural products and cosmetic sector. The oil is rich in Oleic acid, which is an essential component in the maintenance of healthy skin. It is a high-value oil appropriate for body and facial products, with natural alpha-hydroxy properties as well as natural sunscreens. It is also tremendously stable, outperforming all known natural liquid oils. The combination of high nutritional value and excellent stability make it an ideal and innovative choice for modern cosmetic formulae, and for other applications where unsurpassed resistance to oxidation are required…
>
> (MDA Bridging the Gap: 'A Strategy for the Commercialisation of Marula Products from the Wild: Creating Incomes for the Rural Poor' 2001: 3; citing Teichman and Leatherhead Foundation research).

MDA also initiated a process of product development, market testing and market development in relation to both the oil and a stabilized juice product. This meant targeting two different sub-sector markets – in the beverage industry and the cosmetics industry, with very different sets of product quality requirements.

Marula oil was cold-pressed from marula kernels using manual oil presses on site; the supply of kernels extracted from the hard marula casing provided a potentially more lucrative and ongoing income opportunity for Mhala's suppliers than the seasonal opportunities from juice.

MNP's juice pulping process was designed to leave the kernel undamaged so that quotas of kernels could be returned to suppliers pro rata to the weight of berries they had supplied, in order to provide a secondary income stream. Susan Barton, MDA's marula manager from 1999-2002, explained:

> The aim was to contribute to people's livelihoods throughout the year, and not only for three months. Plus, from the perspective of sustainable use, it made sense to optimize the returns from every berry. Research into uses for the peels should follow. (Interview with Susan Barton: 2005)

This was equally key to MNP's own viability as an entity, which required overheads to be spread across a diverse range of products and across the year, rather than 'frontloaded' solely onto the marula fruiting season

By 2002, approximately 2,400 people in 42 villages were part of MNP's supply network, although these numbers have varied over time, peaking at 4,000 and declining in contexts of lower demand:

> The trade is providing women, in particular, with access to an independent source of income. Although, on average, incomes earned from trading either beer, kernels and fruit were only a few hundred Rands over the season …traders mentioned that it all counted towards them being able to put food on the table, pay school fees, clothe their children or purchase household goods. Many people mentioned how they were "suffering" (e.g. the cost of maize meal has more than doubled past two years) and how the sales of marula products have helped to ease this if only for a few months of the year. The extremes in gross income earned, e.g. from between R8 - R899 for fruit, and R11- R1900 for kernels in Bushbuckridge, indicate that households that apply themselves seriously to the production and sales of marula products are able to earn a sizeable sum over the season. (Shackleton et al 2003: 23)

The problem was not supply - in fact Mhala Development Centre had to limit the supply by allocating quotas to participating villages. The problem was that there were as yet only limited markets for either juice products or the oil. The marula programme was in a pre-commercial product development phase, in which the parameters of potential products and markets were still being explored – at MDA's risk. In 2001, 12 tons of fruit were processed, and the first large order for 80 tons came in 2002 – still only a small step down the path towards the development of sustainable commercial markets. (Interviews with Njoni 2004, Kamstra 2006).

Before examining the commercialisation process further, however, there is a need to explore the social and environmental risks and benefits associated with commercialising this highly-valued but almost entirely non-commoditised local resource, and the implications for the institutions governing its allocation and use. It is a process which illustrates some of the local parameters of the social construction of a market – circumscribed as this scope may be in the wider social and economic context.

1.3 Institutions framing marula use

Marula has a profound cultural significance, both within ritual and belief systems, as well as within traditional medicine, and for a wide variety of practical applied purposes.

> Xikuha Marula Festival
>
> Festivals are held in the marula fruits' honour throughout southern Africa, to celebrate the harvest from the fields in February. At the end of the marula harvesting season, women make marula beer, and gather at the chief's kraal, and sing, present the chief with a calabash full of marula beer. They sing special songs and praises known as "chembe." Everyone

> is allowed to drink beer, and the festival gives people a sense of oneness and togetherness and belonging….
> Often during the "First Fruits" ceremony, the ritual slaughter of a goat or black bull will take place, known in Zulu as umsebenzi. This takes place at a specifically selected marula tree, where an offering of marula beer in a clay pot is made to the ancestors at a ceremony where the local traditional spirits, spirit mediums (izangoma) and traditionalists in the community are involved.
> (www.marula.org.za)

An extensive list of examples of the cultural significance of marula is available on the website of MDA's Marula Natural Products (www.marula.org.za). This introduces significant complexity to issues of use, ownership, access, intellectual property rights and control.

Many homesteads have at least one marula tree within their boundaries. In an inventory of marula incidence and yields in Bushbuckridge, covering four villages, associated communal lands and two protected areas, Shackleton et al 2002 (1) found that 78.9 % of households had *S. birrea* trees in their homesteads, and 58.2 % had marula trees in their fields (as allocated in communal lands by the chief).

Historically, the management of communal tenure farming areas and woodlands has been a function of the local tribal authority. In this region, people are fined for cutting down trees in communal areas without permission, but the terms of this vary from authority to authority:

> If found cutting down a tree that bears edible fruits, people are fined. The fines are as follows: Chief Khosa Jonilanga (Jongilanga Tribal Authority) – R500. Chief Nxumalo (Amashangana Tribal Authority) – R500 and confiscated the cutting tools (axes and saws and pangas). Chief Chiloane (Sehlare Tribal Authority) – R300 and Chief Mnisi (Mnisi Tribal Authority) – R300. Charges for the permit range differ from one Tribal Authority to the next. Permits start from R1.00 for 10 poles. (Chiloane and Phala 2002)

However, the inability of the tribal authorities, as well as overlapping authorities in the transition period in SA, to police this have lead to increased degradation of the resource. During this period, MDA entered into a partnership with the Department of Water and Forestry (DWAF), to promote community forestry and the propagation and effective management of marula in the Bushbuckridge area, funded by Danish donors DANCED. An evaluation of the project and its challenges was done by Felicia Chiloane and Jackson Phala in 2002, and reflected on the problems of woodland management:

> In the last 10 years the woodlands have been even more degraded and people blame democracy.
>
> The cause of this partly lies with the chiefs and the local councillors who are competing for power in the communities. They use their power to give people access to land and natural resources to win the support of the communities. This competition is resulting in poor decisions being taken regarding the woodlands and is causing even more degradation...
>
> In this period of change and the resulting lack of clarity on roles, mandates and legislation – and in the way people interpret democracy (freedom) – any prior system of natural resource management has broken down. People take advantage of this confusing situation and get access to land or natural resources either through the chief or the local government depending on which one they think is more likely to grant them their request. However, in most instances they ignore both authorities and simply occupy and clear the land and collect natural resources without permits. It is this freedom that is causing problems. People say now there is freedom, they can do what they like and collect anywhere and collect as much as they like. (Chiloane and Phala 2002: 19)

The inventory of marula stocks and yields done by Shackleton et al 2002 indicates seasonal access to approximately 500 tons of fruit per village. With supply to MNP spread across 42 villages, the current risks of putting the resource under pressure do not seem high, even taking into account existing use. Yet the potential for conflict over the resource is an obvious issue for concern.

In village level workshops, even villages that share open access areas, such as Welverdiend and Hluvukani, reported no conflict at this stage, although they predicted conflict could arise in future. 'The only problem was that they were scared of snakes or lions and other dangerous animals.' (Chiloane and Phala: 2002)

> The participants did not admit to there being conflict between villagers when collecting marula fruit. However, because competition is high, conflict does occur. This is especially evident when the Madile villagers sell their fruit and kernels to MDC. Fights break out among them over the amount they are supplying. (Chiloane and Phala 2002: 19)

This, however, is conflict over who will supply MDC - in a context of excess supply and limited demand - rather than an example of the resource itself being under stress.

Wynberg et al report mainly positive reactions to the opportunities to commercialise marula resources, and note that 'virtually all criticisms against marula commercialisation emerged from men (typically in positions of power)' (Wynberg et

al: 25) and focussed on reduced access to free marula beer. MNP's Mademezulu Njoni refers to initial resistance to commercialisation from tribal authorities:

> When we introduced the buying of fruit, the chiefs said: 'Then you want to introduce death in our communities, because marula is God's given fruit and you can't trade it'. But people are hungry. People are hungry. And when you look at that, it brings in a lot of other issues, gender issues, because the people who are hungry much more are the women and children. And they are the ones who are supposed to be brewing the juice for free and giving it to the men to enjoy and drink freely. But now the women are very much empowered, they are saying 'No! We are selling'. Somehow, poverty can change structures and, maybe, the way that things are supposed to be done. (Interview with Njoni: 2004)

Over time, the attitudes of the tribal authorities has shifted, as the commercialisation process has in fact strengthened conservation – which is not always the outcome when non-forest timber products are commercialised. A key and fortuitous feature of marula, however, is that the fruit has to be collected from the ground. If it is picked before it drops, it does not have the same qualities and is rejected. In practice, the commercialisation process has lead to a convergence of interests in relation to the conservation of the resource, leading to strengthened systems of community and tribal authority management of the resource, as well as increased marula propagation at homestead level also.

> The tribal authorities and chiefs have realised that the only way of sustaining these trees is by commercialising them and putting some money value on them, because that's the only way the trees can get respected....
>
> So now the chiefs are working with us in so many ways. They are more receptive to what we are introducing to these communities, and we involve them, because we believe it helps, because a lot of people still believe that what they get from the chief is the right thing. ...We have involved them in our structures, and the CDF's (Community Development Forums) and the municipalities.
>
> They participate in the marula village committees, and we want them there, it helps a lot. It's a good channel, and a consistent channel of communication. If we leave a message for the villagers with the chief to say that there's going to be a meeting, that message disseminates. (Interview with Njoni 2004)

The diagram below shows how the marula committees fit in to local structures:
The marula committees are incorporated into the Community Development Forum Structures, as illustrated in the diagram below, which neatly captures the reality of dual power in rural areas, in the context of continued contestation over policy towards communal tenure systems and the relationships between elected and

traditional authority. It outlines the institutions governing Community Based Natural Resource Management (CBNRM).

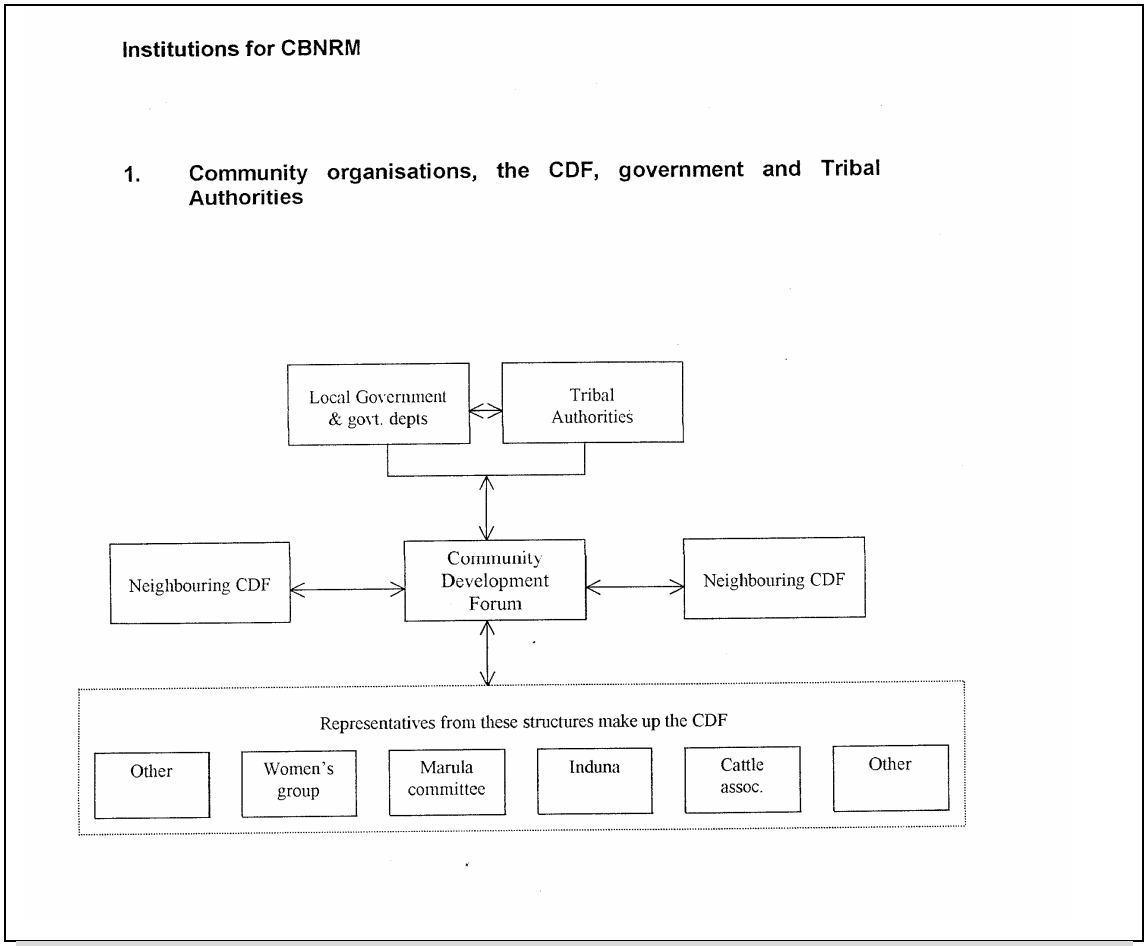

Figure 19: From Chiloane and Phala: 'Evaluation of the Marula Project in Bushbuckridge;' for DANCED and DWAF; September 2002.

Marula committees in 42 villages have been facilitated by MNP. The following responsibilities were defined for these committees:

- Transfer information to other community members
- Inform people of the collection dates and collection points
- Inform people about quality and quantities required.
- Work closely with other committee members and collectors
- Weigh kernels and fruit to be sold by each collector
- Quality control of the fruit (not too green or too ripe) and kernels
- Solve problems and conflicts around marula collection and selling
- Conduct and attend meetings
- Write minutes and reports, filing and record keeping
- Encourage collectors to be patient and tolerate problems and be on good behaviour (they insult the people from DWAF and MDC when there are problems). (Chiloane and Phala 2002)

In the first two seasons of fruit collection, MNP faced significant logistical challenges, not least of which was the process of 'weighing and paying' at each village collection

point, which did not always go according to plan - leading to delays and frustration at collection points further down the route.

Working out institutional roles and relationships was also complex. Over time, however, the role of the marula committees has become increasingly developed; the number of community liaison officers employed by MNP has declined, with the marula committees taking on more responsibility. Payment also no longer takes place at the collection points, but monthly into bank accounts:

> What we also did this year is that we transferred the money into their bank accounts, because they have opened bank accounts. You cannot believe it! We requested the communities to open bank accounts, and we asked the suppliers to collect a rand each to open that account and keep it alive, and it worked. It's a community account, not an individual account at the moment. So each village has their own account; we pay into the village account, and with that account the village pays the individual. It is amazing.
>
> And now, with the introduction of the Mzansi account, people will be encouraged to open their own accounts, so that we can transfer directly into those accounts. It will also be very helpful if we get a consistent supply, because then each one will know that each month, there will be a consistent amount coming into their account.
>
> When we heard about Mzansi, we thought 'Wow! This is our solution!' We knew nothing about this Mzansi account that was being set up, it was coincidental, and what was amazing was to discover that while you're working on one thing, other people are working on something else that is part of your solution. (Interview with Njoni: 2004)

The marula committees have become an accepted stakeholder within local systems of village level governance, providing a new form of economic co-operation in relation to the use of a communal resource; with a wider set of developmental benefits in terms of inclusion and empowerment also evident.

2. Challenges of commercialisation

2.1 The community interface

A range of factors acted as constraints on the commercialisation of marula, that had made it an unattractive proposition for the private sector, and that had, inadvertently, protected this resource in ways that created a unique opportunity to convert it into an asset in the hands of the poorest at community level. These constraints still had to be overcome, however.

The key reason why a market in marula creates a unique opportunity for the poor is that this resource has never been recognised as having commercial value, and has never been either 'colonised' or propagated commercially. The marula grows and fruits prolifically, but this sizeable resource is available almost entirely on communal land.

> This made the private sector nervous. They couldn't quantify the scale of the resource, and because it is located on communal lands, access to the resource meant working through tribal authority structures and communities, and in their terms, ownership relations were unclear. These concerns and perceptions represented a significant hurdle to overcome. (Interview with Barton 2005).

While the example of Distell may demonstrate that the private sector can overcome such barriers, there was little evidence of this taking place on a wider basis. Njoni argues that the private sector in the food industry is used to dealing with 'machines, ploughing, planting and contracts'. Dealing with communities that are highly dispersed 'has not been the game of the private sector':

> For them, it takes a *lot* of time – and it *does* take a lot of time, it's very true… for over five years now, each season, we still go to communities, and remind them: the kind of fruit that we want; that they mustn't cut trees, the regeneration process, the administrative process…. So the private sector would be very…. lazy, if I have to put it that way…. to go into communities to talk to these people because to them they are too scattered and they don't understand and it's taking a long time and it's too risky and all of that. (Interview with Njoni: 2004)

The fact that local harvesting of forest resources requires the participation of large numbers of harvesters in order to create volumes, coupled with the quality control issues is identified as a critical barrier to private sector involvement in a report to IUCN. (Steyn 2003). This critical facilitation function in relation to volume, quality and consistency was the key role performed through the organisation of the marula committees. This required MNP to act as the interface between the requirements of the commercial world, and the institutional and organisation context of the village. It was the ability to play this dual role that proved key.

The critical skills that Mhala Development Centre and later Marula Natural Products brought to the process was the ability to work at community level to create supply channels that have become accepted as legitimate within the local institutional framework. This was no mean feat in a contested border area, during a period of

tenure reform, in a context of 'dual power' and lack of role clarity between traditional authorities and the new local government systems. It was not a challenge the private sector would take on lightly.

Arguably, the skills of the ex-miners played a role in mediating between these different points of authority at local level. Both Andrea Nzima and Douglas Mboweni from Mhala Development Centre were by now also councillors in the new local government structures, and very active in the establishment of the community development forums.

Through the creation of these village networks, a form of economic co-operation was institutionalised, which created economies of scale in the supply of fruit and kernels that made entry into wider supply chains feasible. This issue of volume supply, and consistency and quality of supply, were the next critical hurdles to be overcome.

2.2 Product development constraints

In the wider literature on the commercialisation of non-timber forest products, the long lead time for product development is recognised as a major constraint, typically taking between five and ten years. Certainly, this has been the experience with the marula oil, where it took six years of product testing with marula oil samples before the Body Shop integrated the oil as a base ingredient in their make-up. (Shreckenberg 2003: 13).

These long lead times create huge constraints for any commercialisation process. The costs of such delays can be absorbed in established businesses with existing product lines, but for rural producers attempting to enter markets with an indigenous resource for which no market yet exists, a six-year gap between the delivery of samples and the first volume orders is simply unbridgeable. This problem is relatively well understood in the literature, but the next dimension of this problem is not. Susan Barton explains:

> Of course the private sector is interested in the properties of your product; but that is actually just the start. I've had buyers bowled over by the properties of the marula, but that has still not translated into follow-up orders. No private sector company is going to invest in a research and development process that will last for several years if they are not confident that a secure and consistent supply of the resource will be available at the end of that period. They won't invest in product

> development on the basis of samples that have been developed in a lab; they won't even start a product development process unless they are confident that there is a supply chain that can deliver the volumes and quality they will require if they decide to go ahead in the future. But without markets in place, how can the supply chain be in place? That's why a pre-commercial production phase was necessary. (Interview with Barton 2005)

This intractable problem is at the heart of the commercialisation challenge, and significantly limits the ability of poor producers to enter such markets. It was a key reason why MDA opted to go into a pre-commercial phase of production, despite the lack of secure markets at the time. This meant that the village networks were established, the berries and kernels were bought in, and pilot-scale production activity initiated at risk, because it was clear that no-one in the private sector was willing to buy an idea or invest in new product development on the basis of samples of marula oil or pulp produced in laboratory conditions. Doing this required funding, however; and such funding is either venture capital funding – hard for MDA to secure – or donor funding, which typically comes with the non-commercial expectation that full cost recovery can be achieved within a three-year project cycle.

In the literature, there is a tendency to focus either on supply side constraints, or on market constraints, without necessarily understanding that these – along with organisational and institutional issues – are inextricably linked in an iterative process.

> The very difficult thing in product development will always be what comes first. It helps that we've gone into production first because we've learnt a lot - you find out that while you are producing, you are learning about the other side, the market, and what they require - for instance quality issues, consistency issues, capacity issues, you learn about the marketing side of things, their minds and their thinking, in that world. (Interview with Njoni: 2004)

The initial expectations were that the real value lay in potential for marula oil to find a market in the global cosmetics industry. This may still be the case, but it has proved to be an even longer and rockier road than access to markets in the beverage sector.

The pioneering work in relation to the oil was done under the auspices of the French NGO, CRIAA SA-DC, working with village-based suppliers in Namibia, later organised into the Eudafano Women's Co-operative. CRIAA-SA-DC did key initial research into the properties of marula oil, with further funding for research secured with the support of the regional network Marulanet.

CRIAA SA-DC brokered the initial contract 'that led to marula oil becoming the staple ingredient of The Body Shop's entire make-up range.' (Shreckenberg 2003). MDA understood CRIAA SA-DC to be acting for Marulanet as a whole in negotiating this contract, and MDC did initially supply oil to the Body Shop also. However, this contract has given priority to oil sourced in Namibia, and there are areas of unresolved tension over the rights to the access to the research outcomes in relation to the cosmetic oil. (Barton, Njoni, Kamstra).

MNP has secured some South African markets for the oil. This includes the use of marula, with its natural sunscreen properties, in 'Tropitone' suntan cream; in the 'Rain' range of products, as well as to US buyer Arch. MNP has also launched its own set of hand and body creams. The critical volume breakthroughs required to support income generation on any significant scale have not yet taken place,– although, in the nature of this sector, they may well be imminent. Can MNP keep the organisational infrastructure underpinning the rural supply system going that long? If so, it will be to a large extent because of the complementary processes in relation to the commercialisation of the juice, where MNP has been a key innovator. This will be the main focus of the remainder of this Chapter.

2.3 From pre-commercial production to markets

There were a range of technical problems associated with processing marula. With the assistance of the CSIR, MDA developed ways of stabilizing the juice, which opened the option of targeting the fruit beverage markets instead of alcoholic beverage markets. Mhala is not only adjacent to the game farms, but is also close to the commercial farming region that supplies sub-tropical fruit such as mangoes and litchis to the fruit beverage market on a mass commercial scale. The ability to join this wider supply chain proved critical to the potential viability of a marula juice product. Business consultant Boris Kamstra was assisting MDA with developing the business plans for marula:

> The initial plan was to set up a processing plant. When we ran the numbers, it was almost impossible to make a profit; because you had a 3 month period in which you are producing, and a 9 month period in which equipment is standing; but you would have to service that debt for 9 months. (Interview with Kamstra: 2006)

It became clear the marula programme had to find a commercial partner willing to pulp the fruit. MDA first approached a factory in Hoedspruit that was pulping fruit for large juice manufacturers such as Ceres. Njoni describes the process:

> The people at Bonanza did not have confidence in the marula, somehow. Their view was that there's so much fruit in Hoedspruit that they have to deal with, and they said we cannot waste their time with this. When people believe they are too big it takes a lot of time for them to understand that they can help you to be at their level. (Interview with Njoni: 2004)

Kamstra facilitated a link with a company called Bronpro in Hazyview:

> The secret that unlocked Bronpro was that they had a citrus line that was standing unused during the marula season, and aspects of that line could be adapted to cater for the marula. It's all about getting risk and exposure as low as you possibly can, and optimising the equipment you have, so immediately the potential opportunity from marula was attractive to them – they said, OK, we probably only have to sink about R50,000 into capital equipment to do this – we'll do it.
>
> In addition, the major asset in these processes is your freezer farm. You have to process 24 hours a day in season, and then freeze it, and freezer capacity is hugely expensive. But if you have a number of fruits going through at different seasons, you can rationalise those costs. Bronpro had spare freezer capacity. (Interview with Kamstra: 2006)

Bronpro took the risk, invested in adapting their equipment, and placed an order for fruit with MNP – in a context in which they too had no market for marula. They were, however, supplying a range of fruit pulps to the industry, and had ready access to processors further down the chain. They succeeded in marketing the concept of a new juice line to a company called Fruit Time, who agreed to develop the first commercial marula juice product, which was retailed in 2002, at which point the larger market players started to take more notice:

> Ceres are a lot more thorough and less entrepreneurial in their approach, but as soon as they realised another player had brought a marula juice product onto the shelves, they sat up and took some interest.
>
> Samples were continually going up and down from Bronpro to Ceres, but it took them two years before they finally said: 'OK, we'll run a trial'. It's that interim period that's so difficult, because you have to hold sufficient inventory to be considered serious - no-one is going to develop a new product if they know there's only 5 tons of inventory available; that doesn't make sense.

> So you have to be able to hold that position. Bronpro sat on half a million rands worth of inventory for three years – it finally all went out at the end of last season. (Interview with Kamstra: 2006)

Ceres brought out a mixed juice product called Marula Mania under its Liquifruit label, with Bronpro supplying the juice, and MNP supplying the fruit. Ceres also produces a marula 'Liqui Cooler', as illustrated below.

The fruit pulp was initially semi-processed and stabilised on site at Mhala Centre, and then sieved and supplied to the manufacturers by Bronpro. Volumes have increased from the initial 10 tons in 2002 to 450 tons in the 2006 season; Bronpro has further adapted its machines to handle the full pulping process, with MNP providing the fruit. (Interview with Kamstra: 2006) Mhala still produces a high-quality juice on site, to fill its ten-ton freezer capacity and to service growing demand from lower-volume niche markets.

According to Kamstra, Bronpro's involvement 'is a commercial proposition, totally and absolutely.' The selling points are firstly that marula juice is organic and natural, and this is seen as a rising trend, and secondly, international markets have 'run out' of fruit flavours. Marula is already a global brand as a result of Amarula, and this makes it an attractive entry point into international markets. Entering such markets posed new problems, however.

In 2002, Bronpro secured a large order for marula juice from a German company. However, because marula was not registered as a food product in Europe prior to 1997, it could not be marketed in Europe without being proved safe for human consumption by the European Food Safety Authority in terms of EC Regulation No. 258/97 on Novel Foods and Food ingredients. Distell provided supporting documentation to assist MNP and Bronpro in their attempt to appeal against this requirement on the grounds that Amarula had been marketed in Europe before the regulation, but this was rejected because the quantities of marula in Amarula are small compared to the juice. (Interviews with Njoni 2004, Kamstra 2006).

The process of getting marula juice approved as a food product and other regulatory hurdles in order to access European markets has taken over two years and substantial legal and specialist expertise. The way is however finally clear for marula juice to be exported into Europe, based on organic certification – and the German order still stands. Now a US company has expressed interest, and it's the US Food and Drug Administration that will have to be tackled next - with another couple of years and more legal fees on the agenda before export to the US is feasible. (Interview with Kamstra 2006). Meanwhile, the South African market continues to grow.

3. Making markets work for the poor?

The issues highlighted by the process of developing markets for marula bring together a set of themes from other Chapters, as well as raising new dimensions and questions about the scope for making markets work for the poor. Many of the lessons from marula resonate with the kinds of issues being raised in the context of M4P, and also with MDA's experience in the craft sector: in particular, the importance of integration in supply chains, and the role of intermediaries.

In addition, with a certain tenuous access to significant external markets through the Body Shop and through other channels into wider beverage and cosmetic markets, the power of global markets comes within tantalising reach of what are very poor and marginalised communities in Bushbuckridge. However, there is no shortage of risks as this process unfolds. While right now it is certainly the poorest women in these communities that gain access to brief and transient poverty relief from the

income contribution derived from marula resources, market pressures may well drive prices further down and/or lead to changes in the distribution of benefits as this market develops, if indeed it does.

As the marula case illustrates - it is hard enough securing a foothold in these markets at all: making markets actually 'work for the poor' is a challenge of a different magnitude altogether. Even simply within this sub-sector market, the extent to which they do, is determined across a range of dimensions, layers and levels, through institutions and organisations that include the level of the household and village, where in this case, new institutions have emerged to govern access and use of marula as the market has developed, through to the terms on which demand for a new product is created in global markets. Within that process, governance within the supply chain is not necessarily uniform, with different sets of relationships, dependencies and bargained outcomes at each level.

With global markets as the target, global governance of these supply chains and the factors that shape them will often trump national policy – important as it is - in defining the rules of this particular game. Yet 'amorphous' and distant as they may seem, global markets are as socially constructed as access rights to marula at village level. The challenge of a global ethnography identified by Michael Burawoy is to link social processes and experience at a local level to social forces at a macro level. (Burawoy et al 2000: 27) Part of the challenge in making markets work for the poor is to do the same, and in the process, to identify where the levers of change lie.

The different terms on which marula oil is supplied also illustrates the different structures of value chain governance highlighted in the last Chapter. The 'exclusive deal' and the associated confidentiality over the properties of marula oil lends itself to the 'captive' model as described, whereas in the case of MNP, supply to diverse clients keeps open the possibility of a more relational supply chain. Tenuous as MNP's access to markets may be, they have a unique offer that is not easily replicated. As Kamstra indicates, while Bronpro does do some buying from suppliers at the factory gate, the quality of MNP's product is still the best, and remains Bronpro's preferred supplier. The longer this relationship lasts, and the greater the levels of tacit knowledge that arise as a result, the greater the switching costs for

Bronpro and the more secure MNP's place as in the chain – and as the originator of the chain.
As the marula case illustrates again, for enterprise on the margins, access to wider markets means entry to supply chains, and this requires partnerships with the established private sector. The challenge is to find ways to do this that entail sharing the risks and investment required, and transferring them as far up the chain as possible. Bronpro did this by purchasing juice from MNP and carrying the costs of inventory during the market innovation process in the case of marula juice; Grobler does it with the stone; but in the case of Namibia's marula oil sales to the Body Shop, it seems a less effective transfer of cost and risk has taken place.

The Body Shop is (or perhaps was, before the L'Oreal deal) the quintessential representative of a brave new world of fair trade, corporate social responsibility and the role of consumer power in shaping and 'socially constructing' markets, with impacts all the way down the supply chain to the poor. The fact that Namibian women seem to be pre-financing the Body Shop's input supplies of marula oil for up to a year illustrates that even where the context should favour a fairer spread of risk and benefits, this still has to be effectively negotiated if the interests of the poor are to be asserted.

The different routes and relationships even within the emergent context of a marula sub-sector market highlights also the extent to which these relationships and the spread of benefits is an outcome of negotiation and power. In the case of the oil, attempts have been made to capture additional value by entering into exclusive deals with high levels of confidentiality over product qualities. The risk associated with this is, however, a value chain in which the producers are 'captive', and power lies with the buyer. While the value chain for the juice is not without its power imbalances, the extent to which Bronpro has mitigated MNP's risk in the product development process, and Bronpro's significant reliance on supply from MNP means that this part of the value chain fits the 'relational' model, with significant switching costs for both parties. In addition, the fact that Bronpro is supplying an expanding range of buyers in a context in which MNP and Bronpro together remain the sole suppliers of a filtered juice product means it may be possible to build a more relational chain and avoid 'capture' by buyers further up the chain. However, this

depends on demand growing to minimum levels, in a context in which the current price for the juice remains a constraint. It's not quite a sellers' market.

It is in this critical stage that market pressures may make producers become 'willing captives' – ceding exclusivity rights or entering terms of exchange that limit the value they are able to retain within the chain in the future, in order to secure a market in the short term. A key issue here is the ownership of intellectual property, and the 'intangible value' from branding that has become such a significant part of the final value of products in developed markets:

> Today, the income of companies worldwide is dominated by the intangible value in IP assets such as technological know-how, patents, trademarks, copyrights, brand names, trade secrets and other IP. The Brookings Institute reports that in 1982, 62% of the market value of Fortune 500 companies could be attributed to tangible assets and 38% to intangibles. By 1998, only 15% of assets were tangible and 85% were intangible. This reflects the income generating power of intellectual property. (Light Years IP Brochure: 2006).

Many key brand names no longer operate their own production facilities at all: they own and manage a brand. In this context, as Light Years IP argues, developing-country producers, exporters and governments are leaving most of their export product value on the table for others to own and control. In the face of poverty and market pressures, these rights are easily ceded without the producers necessarily even knowing it is happening, or having the resources to prevent it. The risks of this are very high in the context of marula.

The lengthy list of social, cultural and health uses of the marula on MNP's website indicates deep local knowledge of its properties. Can MNP capture the 'intangible value' of this collective knowledge, rather than ceding it further up the chain? Should MNP or even the MNP Trust be able to do so, when there is much wider community ownership at stake?

Leaving aside this significant latter question, the reality is that capturing this value requires resources and bargaining power within markets. In a context in which MNP's survival as an enterprise is still marginal and at risk, its ability to bargain to secure such rights, or to initiate the legal processes to do so is limited without external support – or access to the kind of high-level 'strategic services' discussed in Chapter Six.

The dominant development logic of a rapid transition to full cost recovery by an enterprise such as MNP, that has now been 'in the market' for some six years, means that it does not qualify easily for the kind of support that would make this possible. In the process, the price of keeping the poor in this market at all may well be that the opportunity to make this market work differently – or to work better for the poor - is lost, with intangible value ceded as the short-term price of market access and market survival.

While the goal is for marula-based products to be viable on commercial terms, this potential trade-off nevertheless represents another variant strain of an unmediated cost-recovery logic having an 'anti-politics' effect, placing the nascent potential for the marula resource to support a form of 'development from below' at risk – with better-endowed players well placed to take up the opportunity instead.

The ways in which markets reproduce inequality and their distributional impacts were highlighted in another way by the marula experience also. The issue was highlighted inadvertently by research done as part of a DFID-funded comparative international study on 'Winners and Losers,' that explored success factors in the commercialisation of Non-Timber Forest Products. A study of the commercialisation of marula in South Africa and Namibia by Mander et al was a part of this wider study, and it included a comparative analysis of Distell and MDC in relation to the marula juice value chain.

It is a largely technicist sub-sector analysis, that lends itself to critique for reaching detailed quantitative conclusions on the basis of estimate figures – because neither Distell nor MNP were willing to give their figures to the researchers, for legitimate commercial reasons. These estimate figures are then used within a dubious cost accounting framework, but critiquing this aspect of the approach is not the purpose here – despite the report's significant negative impact on MNP. The final point made in the Executive Summary is this:

> There is great differentiation between the current returns to the two largest commercial operations in the sub-sector (Distell and MDC). The Distell operation is estimated to run at a profit of R388 000 per annum while MDC is estimated to have operated at a loss of R36 396 in 2001. The profitability of the Distell operation is attributed to their success in securing a market, while the MDC operation has yet to establish a secure

> and reliable market for the quantities of marula products they are generating. (Mander et al 2002: vi)

The report never formally declares Distell the winner and MDC the loser, but this is clearly the implicit conclusion, based on estimates of 2001/2002 figures, that compare MDC in its pre-commercial phase to Distell's established operations.

The flawed figures and the failure to recognize accounting protocols for amortising research and development costs are not the point, however. The point is the way in which an ostensibly 'neutral' comparison between Distell and the MDC, devoid of any political economy, creates the impression of a level playing field, on which Distell emerges a winner while MDC and its clients get to be the losers – once again. The absence of a wider political economy in such analysis implicitly endorses the status quo as a reflection of the outcomes of a free and fair competitive process, or some kind of Darwinist process of natural selection in the economic sphere.

To put this into context: Distell is almost iconic in what it represents in the South African context – regardless of current transformations underway. Distell was formed from a merger of Distillers, owned by the Rembrandt Group. The Rembrandt Group was formed in 1945, and became a symbol of the rise of Afrikaner capital in the South African economy in the apartheid years; a product in many respects of the policies aimed at converting the political power of the Nationalist Party into economic power – a central part of the apartheid project.

A shareholder in Distillers is KWV – another South African icon. KWV was a wine co-operative, and part of the network of white farming co-operatives that were the heartland of the political power of the agricultural sector in the apartheid years. In 1996, when KWV opted to convert from a co-op to a company, the Minister of Agriculture, Derek Hanekom, attempted to block this conversion in court. At the core of the argument was that KWV had benefited significantly from state support over many years, and that its assets – estimated at over R1 billion - could not so simply be privatised by its current members. (Heather Formby, Sunday Times Business Times: 15/12/1996)

Key to the argument was that KWV had benefited from statutory levies on wine and spirits that had been reinvested into its reserves. While this takes us back to the

issues in Chapter Four in a somewhat different context, the critical issue is that the economic strength of the farmers co-operatives in South Africa were built in a context of significant direct and indirect government support, in a policy environment which protected white farmers through tariffs, investment in infrastructure development, tax rebates and incentives, subsidised credit, drought relief schemes and more. This was in a wider context in which black farmers were forcibly removed from the land – and into Bantustans such as Gazankulu, where Mhala is located.

This political economy lives on in the structure of the economy and in the endowments that players bring into the market and their scope to play the game in that market on 'winning' terms. To say that the profitability of Distell is attributed to their success in 'securing a market' is to somewhat understate the factors that place Distell at a market advantage in the marula sub-sector by comparison with the MDC.

Bringing history into the equation is generally treated as a distasteful thing to do in market development debates, where the Polaroid approach is preferred: a snapshot of the status quo in any given sub-sector is accepted uncritically as the starting point for market development going forward. Even where the history is acknowledged – and in South Africa, it is hard to overlook - there is a tendency to take the current structure of the economy as the given and immutable framework within which a market logic must now be given precedence going forward. The problem is that the application of a market logic to this context will simply reinforce and deepen the inequality that history has already embedded, reproducing the same pattern of winners and losers. This is a variant strain of Chang's analysis of the processes of 'kicking away the ladder' to maintain existing structures of global economic power.

The way in which the political economy of the past impacts on the market structure of the present is to a large extent in relation to the endowments that different players bring with them into the game – as argued by Chang and cited in Chapter Two. Capital is the obvious one, but skills, networks, access, forms of inclusion and exclusion all play their part also – with the value placed on intellectual property adding a new dimension also.

In Johnson's paper on M4P, the point is made that 'distributional and equity issues are not directly dealt with by the market'. (Johnson 2005: 3). This is not entirely

accurate. Not only do issues of distribution and equity fundamentally affect how markets work, markets do in fact play a direct role in reinforcing and deepening existing patterns of distribution. This is a direct role in relation to distribution and equity, and it is one of the most intractable obstacles in meeting the challenge of making market systems work better for the poor.

Addressing issues of redistribution and equity is therefore a necessary condition for achieving a systemic-level change in how markets work, and in whose interests they work. As a consequence, an M4P approach has to engage directly with a wider redistributive agenda to achieve its purpose. Redistributive policy is key to M4P, because without it, markets will tend to reproduce, entrench and extend inequality. Making markets work for the poor is just not a role that can be left to the market to perform.