

**Ministry of Trade
and Industry
(MTI)**

**Trade and Investment
Development Programme
(TIDP)**

**Appropriate ownership models for natural
product-based small and medium
enterprises in Namibia**

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14th August 2003

Sponsored by funds from the 8th EDF

Glossary and acronyms **Acknowledgements**

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GLOSSARY AND ACRONYMS

BDS	Business Development Services
CBD	Convention on Biological Diversity
COSDEC	Community Skills Development Centre (in Ondangwa)
CRIAA SA-DC	Centre for Research Information Action in Africa, Southern African – Development and Consulting
CRS	Corporate Social Responsibility
CSIR	Council for Scientific and Industrial Research (South Africa)
DEA	MET Directorate of Environmental Affairs
DIT	MTI Directorate of International Trade
DRFN	Desert Research Foundation of Namibia
EWC	Eudafano Women's Co-operative
IDD	MTI Industrial Development Directorate
IFTT	Indigenous Fruits Task Team
IPR	Intellectual Property Rights
IPTT	Indigenous Plants Task Team
KAP	Katutura Artisans Project
KNRT	King Nehale Resource Trust
MADI	Mashari Agricultural Development Institute, Kavango region
MAWRD	Ministry of Agriculture, Water and Rural Development
MEDA	Mennonite Economic Development Associates
MET	Ministry of Environment and Tourism
MTI	Ministry of Trade and Industry
NAB	Namibian Agronomic Board
NGO	Non-governmental organisation
NNFU	Namibian National Farmers' Union
NTFP	Non-timber forest product
OAU	Organisation of African Unity
PCS	Production-to-consumption system
PIF	Promotion of Indigenous Fruits project
R&D	Research and Development
SANProTA	Southern African Natural Products Trade Association (recently renamed as PhytoTrade Africa)
SME	Small and Medium sized enterprise
SSO	Statfold Seed Oil company, UK (preferred supplier of seed oils to The Body Shop)
SUFEI	Support to Farmers' Economic Initiatives (project of the NNFU and French Cooperation)
TIDP	Trade and Investment Development Project
TRIPS	Trade-Related Aspects of Intellectual Property Rights
WTO	World Trade Organisation

ACKNOWLEDGEMENTS

Particular thanks go to Mourine Matomola of the MTI for being an excellent counterpart and assuming all driving responsibilities. Thanks are also due to Klaus Handschuh and Maureen of the TIDP for facilitating the consultancy, and to Michael Kehoe for sharing his office. This report has benefited greatly from the helpful comments on the first draft provided by Pierre du Plessis and Michel Mallet of CRIAA SA-DC.

EXECUTIVE SUMMARY

This report begins by analysing the different functions, actors and relationships that together make up a product value chain. It goes on to look more specifically at the market opportunities that exist for natural products. Based on an analysis of 10 case studies from around the world, it then draws lessons for how to approach the promotion of natural product-based enterprises in Namibia. Overall it is argued that Namibia should have the confidence to build on its growing body of expertise, its unique set of plant resources, and the excellent coordinating mechanism represented by the Indigenous Fruit Task Team, to move ahead rapidly and develop a thriving natural product-based sector. While the strategy needs to be differentiated and allow for promotion of products for the domestic market that will help a few people in a small way, its main focus should be on attracting high-level investment into innovative technology to produce products for the much larger international market.

Benefits to rural producers would come through guaranteed markets, better prices and employment. Knock-on impacts on agriculture would lead to the creation of a diversified and profitable resource base including plants such as marula, wild melon, manketti and others specifically adapted to the Namibian environment.

To promote a coherent and sustained strategy it is recommended that the Indigenous Fruit Task Team broaden its remit to become the Indigenous Plant Task Team. A priority should be to encourage more active participation from the MTI, civil society and the private sector, if necessary through thematic sub-groups.

It is further recommended that a working group decide on a suitable mechanism to ensure the implementation of a number of activities necessary for the development of new product value chains. Three possible scenarios are suggested, from sticking with the current situation in which CRIAA SA-DC coordinates these activities, to establishing a for-profit marketing organisation that provides services specific to the natural products sector, or setting up a business incubation unit that can deal with all elements of product R&D.

At the policy and legal level, it is suggested that the government continue providing high-level endorsement of the sector by, for example, creating a national logo. Expertise on standards and certification is needed and it is recommended that the processes underway in MAWRD (to set up a certification agency) and MTI (to set up a standards office) respectively ensure that the specific certification needs of the natural product sector are taken into account. The government also needs to review and try to pass its draft legislation on intellectual property rights issues to clarify the framework within which plants (or their components) can be developed for commercial use. These actions need to be complemented by strategic research and capacity-building to train people in the multidisciplinary approaches needed to market new products successfully.

Finally, a specific recommendation is made suggesting that a specialist capacity-building project be sought to help develop the Eudafano Women's Co-operative into a strong producer organisation. Only when it can hold its own in negotiations with other actors in the value chain, will it be ready to engage in other activities such as processing.

1. INTRODUCTION

In April 2000, the First Promotion of Indigenous Fruit workshop in Namibia led to the establishment of the Indigenous Fruit Task Team (IFTT). Its objective was to promote the sustainable use of indigenous Namibian fruit plants for:

- Greater household food security;
- Agricultural diversification;
- Income, employment and livelihood opportunities; and
- Agro-industrial development.

The main vehicle for achieving this objective was the Promotion of Indigenous Fruit (PIF) project, managed by the non-governmental research and development organisation, CRIAA SA-DC. Three years later, as reported at the Second National Indigenous Fruit Workshop in May 2003 (IFTT, 2003) a great deal of progress has been made. The IFTT has developed into a dynamic forum which meets regularly and brings together a wide range of stakeholders from government and non-government organisations. It has proved to be a good coordinating mechanism that supports a holistic approach to product development, from an understanding of the resource base through to complex business negotiations with international clients.

The first phase of the PIF project has been successful in taking a natural product with no local market (melon seed) and turning it into a new line of products sold by the international cosmetics company, The Body Shop. This built on much previous work by CRIAA SA-DC which culminated in marula oil becoming the staple ingredient of The Body Shop's entire make-up range. Research and development on several other products has progressed to the point at which the key opportunities and constraints to further market development are clear.

Progress in Namibia has been taking place in the context of growing international interest (both from development agencies and the commercial sector) in natural product-based enterprises. However, in part because of the great variability of both natural products and their potential commercial uses (from handicrafts to potent drugs), combined with the usually small quantities of products involved, there are no standard models to follow. Inevitably, therefore, the achievements of the last three years have been a learning process for all concerned. It is a testimony to the constructive atmosphere in the IFTT and the honesty of CRIAA SA-DC, that a number of difficult issues encountered during the implementation of the PIF project have been raised for discussion.

Perhaps the thorniest of these is to do with the ownership of business opportunities developed with government support, and related confidentiality issues. Concern with how best to deal with this issue has led to the present consultancy, which is sponsored by the EU-funded Trade and Investment Development Programme (TIDP) within the Ministry of Trade and Industry (MTI) on behalf of the IFTT (see detailed terms of reference in Annex 1). The basic objectives for the consultancy are:

- To present a critical review of options of ownership models for natural product-based SMEs based on an assessment of the situation in Namibia and with reference to relevant international experiences.
- From consultations with local stakeholders in the promotion of natural product-based SMEs, to recommend the most appropriate options for the Namibian context and document the best way forward for promotion by public-led and/or private-led interventions.

My consultancy began with a literature review in the UK, followed by meetings and field visits in Namibia during April 2003. Most of the latter were carried out together with Mourine Matomola of the Ministry of Trade and Industry. After a further period of UK-based literature review and consultation with key informants, a preliminary presentation was made to the Second National Indigenous Fruit Workshop in May 2003. Working group discussions at that workshop helped to further inform the present report.

The report is split into several sections as follows. After this brief introduction, section 2 reviews the whole process of commercialisation, first from a generic perspective and then focusing down onto the specific characteristics of marketing natural products. This section aims to provide some of the theoretical underpinning necessary for taking viable strategic decisions to promote the natural product sector in Namibia. In section 3, I have pulled together a diverse range of case studies from Namibia and other countries to illustrate some of the specific problems and/or potential solutions the IFTT may need to consider. Before recommending new actions, it is first necessary to examine existing support available for the sector and this I attempt to do in section 4. Based on the information in sections 1-4, I present some options for ways forward and make specific recommendations in section 5.

2. UNDERSTANDING THE MARKET CHAIN FROM RAW MATERIAL TO FINAL PRODUCT

In order to take decisions about how best to promote natural product-based enterprises, it is first necessary to understand how the natural product-based market works. In this section, I aim to present some key concepts relating to the functioning of natural product-based value chains¹, including the different actors involved, the relationships between them, and contextual factors.

2.1 Functions in the value chain

Long gone are the days when a producer could sell a barely processed product directly to a consumer. Globalisation has transformed the way business works, making supply or 'value' chains more complex and difficult to manage (Blowfield, 2001). The production to consumption system (PCS) consists of all the functions that occur between the producer and the final consumer. This may include several sub-sets of activities: production, collection, processing, storage, transport, marketing, and sale (Figure 1). The relative importance of each of these may differ from product to product, they may not occur sequentially and some may even be repeated or omitted for particular products (Marshall *et al.*, in press).

The producer is responsible for cultivation and/or wild-harvesting. In the case of non-timber forest products (NTFPs), a comparative study of 61 cases from around the world (Ruiz-Pérez *et al.*, in prep.) suggests that harvesting from largely unmanaged wild populations tends to occur in very marginalised areas with little integration into the cash economy, and that large proportions of the population may be involved, each earning just a small amount of their total family income from the NTFP resource. Increasing cultivation, on the other hand, is associated with greater market integration, and involves fewer but more specialised people who earn a greater

¹ The value chain is a complex web of companies and other actors that affect the production to consumption process (Blowfield, 2001).

proportion of their income from the NTFP. As markets for particular products grow in size and become more stable, there appears to be a natural shift away from collection of the wild product towards management of the natural resource and cultivation on farm in a bid to increase individual control over the resource and the quality and quantity of the product. This may mean that the producer group changes as people with less access to land over which they have decision-making power may not be able to engage in cultivation, particular of longer-lived trees.

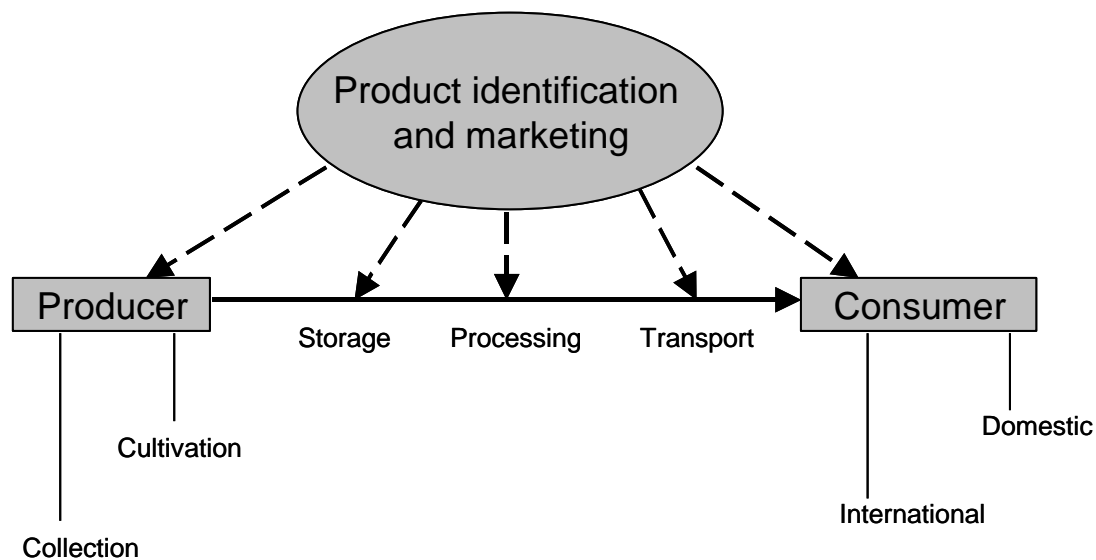


Figure 1. The production-to-consumption system

Depending on the product, storage, processing and transport (in no definite order) must then take place. These steps may be more or less complex depending on where the product is produced relative to the destination market, consumer requirements, etc. For some products, such as fresh fruit, perishability may be a serious concern, requiring that primary processing at least be carried out close to the point of origin. Transport is a key component of 'bulking-up', bringing together sufficient volumes of the raw or partially processed material to make the next processing step worthwhile. Demonstrating a sufficiently large supply is crucial for eliciting commercial interest at the next stage up the value chain – commercial partners are generally reluctant to waste time and resources on natural products that will only be available in very limited quantities for the foreseeable future.

If the final consumer is international, a number of functions linked to exporting and importing must be carried out. These include fulfilling export and import requirements (with respect to quality standards, phytosanitary regulations, permits, taxes, etc). Once in the importing country, another round of storage, processing and transport may be required, often involving an array of agents and distributors, before a more highly processed (and often unrecognisable) product is sold by retailers to the consumer. At each stage of the trade, normal commercial considerations – a guaranteed supply of quality-assured material delivered according to a predictable schedule at reasonable transaction cost – are of key importance to developing a sustainable long-term relationship between sellers and buyers.

The critical activities of product identification and marketing (including collection of price information, product promotion, finding buyers and negotiating deals with them,

etc.) must occur, to some degree, at all stages in the process. The further you move along the value chain, the more these activities become complicated and circumscribed by regulations.

2.2 Actors in the value chain

Rarely will the whole production-to-consumption system be encompassed within a single enterprise. Instead, there will be a chain or network of different types of organisations, from loose associations to shareholder companies, involved in getting the product from the field on to the shelf. Box 1 indicates some of the different organisation types provided for by Namibian legislation. Within each 'type' there remains a great deal of flexibility for the organisation to express its values. Thus a company may have shares of different types including non-voting or voting, profit-sharing or not. The balance of shareholders between domestic (including producers) and foreign can also be varied. In the case of a co-operative, this may range from a small group of people working closely together on a range of activities to one that provides specific services (such as seed, extension information or sale of product) to a large number of members.

Box 1. Different organisation types provided for by Namibian legislation.

The key differences between the following organisation types relate to who is liable if the business fails, how the organisation is taxed, and the level of financial monitoring required.

Sole proprietorship: An individual running a business on their own. The owner is personally responsible for any debts incurred.

Partnership: When two or more people (max 20) decide to conduct business together. All partners bear equal responsibility for debts incurred.

Public company: At least seven members, shares are traded on the stock market.

Private company (Pty limited): 1-50 shareholders, shares are traded between members, and only directors are liable for any debts incurred. The director does not have to be a shareholder. Financial statements must be available within 7 months of the end of the FY.

Company limited by guarantee: Any number of members. Members guarantee that they will pay for any costs if the company is wound up. (No real-life examples in Namibia)

Close corporation (cc): Less formal version of Pty Ltd for up to 10 members, all of whom are directors and are fully liable for the running of the business. Doesn't need to be audited but financial statements must be checked by accredited accountants.

Association not-for-gain (section 21.1 company): The company is formed to plough all funds back to promote the purpose of the company, e.g. religion, sports, etc., no dividends are paid. Must be audited (They are often preferred by donors because they are more formal than trusts and associations, and are able to get tax exemption.)

Trust: Managed by Board of Trustees with varying liability; taxed as an individual.

Co-operatives: A co-operative (with at least 7 members) must first go through provisional registration on the basis of a constitution or byelaw about how it runs its business and a description of the intended business. The provisional registration can be renewed annually for a maximum of 4 years, at which point a Business Plan is required to achieve full registration. After full registration the co-operative must hold an AGM of members – this has highest authority – and appoint a supervisory committee of 3 people to oversee the board. Depending on size and activities, the board may appoint a manager. The Namibian co-operative movement is still young and while over a 100 co-operatives have been formed, only a handful have achieved full registration.

Joint ventures: Any combination of the entities above, with each retaining its own status, formed to acquire certain skills or additional capital, or to cope with business expansion.

In addition to the above, it is possible to have a simple agreement between members to set up a body (with a project name), which is not incorporated, but which has strict financial rules and procedures, e.g. about how and when the accounting is carried out and to whom reports are given. Members cannot be sued and are not tax liable, and administration costs are low.

Some types of organisation may be more appropriate for performing different functions along the value chain. Thus co-operatives may work well at producer level, while processing and trading may be better managed by individual entrepreneurs, and joint ventures will be necessary for functions requiring unusual investments of capital and/or skills (such as higher level processing or international marketing). The key thing is that each actor or organisation should focus on their 'core competences', namely the activities for which they have relatively unique resources or skills, and leave other activities to other actors in the value chain (Kaplinsky and Morris, 2001).

To understand the roles of each of the actors in the value chain, it helps to break these down into:

Rights: these must be adequate and clear.

Responsibilities: these must be achievable and agreed upon.

Returns: these must be sufficient to instigate action.

Each of these elements of an actor's role may need to be negotiated with others in the chain, indicating the great importance of relationships between actors (Mayers, 2001). Table 1 shows what the 'role' of producers might comprise of.

Table 1 Analysing the 'role' of producers

<i>Possible producer rights</i>	<i>Possible producer responsibilities</i>	<i>Possible producer returns</i>
<ul style="list-style-type: none"> • Security of resource tenure/access • Credit on good terms or input supply • Bonuses or premiums • Training, building business and technical capacity • Transparent systems of grading and weighing produce • Involvement in decision-making 	<ul style="list-style-type: none"> • Delivering an agreed quantity of produce • Meeting produce quality standards • Supplying the product on time • Paying membership subscriptions (in the case of co-ops) 	<ul style="list-style-type: none"> • Price paid • Guaranteed market • More sustainable livelihood

Source: Adapted from Maynard et al. (2001)

The many roles of intermediaries

Perhaps the most misunderstood and often maligned actors in the value chain are the many types of intermediaries. Misunderstandings would not arise if their roles were clearly understood and relationships with other actors clearly agreed. At least three common types of intermediary can be distinguished (Humphrey, 2000; Maynard et al., 2001):

(i) Intermediary trader

- Buys from the primary producer and sells on to processor, exporter, etc.
- Can play an essential co-ordinating role in consolidating volumes for export or national processing as mainstream companies with high stock turnover do not have the time to source from a large number of small marginalised businesses, while the primary producers rarely have the production capacity or the resources to make market links with commercial buyers (Humphrey, 2000).
- Many such intermediary traders also offer various services (inputs on credit, etc.) to the producers.

- Where an intermediary trader is a single individual, he or she is often referred to as a middleman. It is important to avoid 'parasitic' middlemen who add little or no value to the product but drastically increase the price to reflect their bargaining power. However, the role of intermediary trader could just as well be performed by a co-operative or a company with 'social' objectives.
- In the Namibian context a key role for intermediary traders is to rationalise the transaction costs of organising product collation and transport from remote rural producers to markets.

(ii) Export processing service

- Facilitates links between producers and commercial buyers.
- Deals with (downstream, post-collation) logistics of product transport, contracts between producers and buyers, export formalities, etc., and is paid for services rendered.
- May provide producers with services such as inputs on credit, training, toll-processing, etc.
- Danger that both producer and buyer may become dependent on the services of the intermediary (Maynard *et al.*, 2001). While this might be a problem if the intermediary were an NGO desiring an eventual exit strategy, it would not necessarily be a cause for concern for a commercial intermediary.

(iii) Intermediary marketing organisation

- Identifies market linkages with appropriate buyers and is paid a commission for each successful deal facilitated. This kind of role is essential to help marginalised businesses achieve access to export markets, e.g. by arranging first-time meetings with a European buyer. Producers may then deal directly with the buyer and control the export process. This is most likely to succeed in the case of unprocessed raw materials or products which require little local processing.
- In the fair trade field these are sometimes known as 'alternative marketing organisations'. Typically they need to understand both how the destination market works and the social development needs of the producer businesses.
- Provides various forms of support to producers, including:
 - business counselling;
 - design input;
 - market information service;
 - strategic market analysis for a particular product;
 - arranging meetings with relevant buyers;
 - acting as a convenient contact point for any communications from the buyer.
- Humphrey (2000) argues that such marketing intermediaries working with marginalised producers cannot be expected to be viable independent of external funding because the service they provide is correcting a market failure. There is however a danger that external funding can distort the true commercial and transaction costs of negotiating and maintaining certain types of trade relations, especially when introducing a new product to international markets, and thus create an illusion of profitability where none in fact exists. To counter this tendency it is desirable/advisable that the true on-going costs of intermediary marketing services be reflected, either through direct cost-recovery payments for services provided, or in a system of "shadow accounts".

2.3 Relationships in the value chain

Having understood the roles of different actors in the value chain, it is then necessary to understand the relationships between them. Moving along the value chain from producer to consumer, relationships between actors are likely to shift from more informal agreements to highly formalised arrangements circumscribed by contracts and memoranda of understanding. Whatever form agreements take, there is an increasing global interest in ensuring that trade is 'fair' to all concerned. This usually means introducing conditions or practices to safeguard the interests of the less powerful partners in any relationship, typically the producers.

One approach to this is the fair trade movement, which aims to increase export opportunities for producers while not exposing them to exploitation through their lack of bargaining power, and to ensure that the increased trade has a beneficial impact on poverty (Humphrey, 2000). Over and above the requirements of conventional trade, such as emphasis on efficiency, quality and seeking new markets, the introduction of fair trade adds the need for transparency. Furthermore, the success of value chains is considered to be more likely if producers are involved in decision-making to some extent (Maynard *et al.*, 2001). However, this can also lead to tensions between the social development and marketing objectives of a relationship, an issue which has been widely debated within the fair trade movement. It highlights the need for those intermediary organisations working with marginalised producers to be particularly clear about their objectives, and their planned sources of funding (e.g. whether from donors and government, or through commission on sales) (Maynard *et al.*, 2001).

Box 2 outlines some of the practical implications of fair trade. It should be noted, however, that fair trade standards are still being developed for new products including NTFPs, and there is no accepted best practice. In general, while a fair trade opportunity can be a good (and protected) learning step for a new business, it would be mistaken to focus exclusively on the fair trade market as this could limit the overall scope and scale of the total commercial opportunity available to producers.

BOX 2. What does fair trade mean in practice?

From a practical perspective, the concept of fair trade can be envisaged in terms of:

- The package of assistance offered by fair trade companies, e.g. credit, product development support, business capacity building and so on.
- Risk sharing: Proportionally, a poor farmer or artisan has to invest a large percentage of his or her assets to enter into trade, and on conventional terms, this carries no guarantee of a return. By sharing some of this risk through the provision of support services, buyers can make a considerable difference in the lives of producers.
- A reasonable correlation between costs incurred by a company and the value added to the product by the activities of that company, i.e. there are no organisations along the supply chain which add little or no value but drastically increase the price to reflect their bargaining power.
- Social benefits to the producers: Communication about the improvements in the lives of the producers helps consumers and buyers to visualise the merit of trading for development objectives.
- A simple assurance to buyer and consumer that the product has not involved someone being 'ripped off'.

(Humphrey, 2000)

A second approach to improving relationships between actors in the commercialisation process is the movement for corporate social responsibility (CRS). Even where fair (or ethical) trade are not specific objectives within a trading relationship, there is a growing interest in the mutual benefits brought about by CRS. Managing social performance in value chains allows companies (of all sizes) to protect their reputations and ensure stable supply, while optimising the well-being of producers and workers within the chain (Blowfield *et al.*, 2001).

Some companies have developed their own fair trade guidelines. This is the case of The Body Shop, which applies the following criteria to all products sold under its 'Community Trade' label:

1. Community: We are looking to work with established community organisations which represent the interests of their people.
2. Community in need: We target those groups who are disadvantaged in some way, those whose opportunities are limited.
3. Benefits: We want the primary producers and their wider community to benefit from the trade, socially as well as economically.
4. Commercial viability: It has to make good commercial sense meaning that price, quality, capacity and availability are carefully considered.
5. Environmental sustainability: The trade has to meet The Body Shop standards for environmental and animal protection.

(www.thebodyshop.com)

A useful checklist of criteria for assessing the 'health' of partnerships in the fair trade movement is shown in Table 2. Negotiating a shared understanding of relationships between marginalised rural producers and international buyers, neither of who have anything but the vaguest understanding of how the other's world works, may be difficult. Typically, therefore, fair trade arrangements require the services of an intermediary NGO or for-profit service provider with which the producers and buyers can negotiate separate relationships. Getting these right may be a time-consuming 'transaction' cost but will help to ensuring the sustainability of the future business.

Table 2. A checklist for assessing partnerships in fair trade

Necessary conditions	
<i>Shared understanding</i>	Does each partner understand the rationale for the partnership and the issues?
<i>Mutual commitment</i>	Is each partner equally committed to the partnership?
<i>Distinct contribution</i>	To what extent does each partner offer something distinctive?
<i>Shared objectives</i>	Are objectives for the partnership shared?
<i>Trust</i>	Do the partners trust each other?
Processes	
<i>Shared time frame</i>	Does each partner understand the different phases of the partnership, especially when it will end?
<i>Participation</i>	Does each partner participate in setting the objectives and framework for the partnership?
<i>Balance of responsibilities</i>	Does one partner bear all the responsibility for the outcome?
<i>Clear boundaries</i>	Is there a clear understanding of what the partnership does and does not over?
<i>Autonomy of partners</i>	Is each partner fully independent from the other?
<i>Accountability</i>	To what extent is each partner accountable to the other?
<i>Transparency</i>	Is the partnership transparent?

Source: Tallontire (2000)

2.4 Understanding the market opportunities for natural products²

The previous sections outlined the functions, actors and types of relationship that may exist in any value chain. In this section, I present some of the challenging characteristics of natural product markets that must be understood if promotion of natural product-based enterprises in Namibia is to succeed.

Destinations are diverse and faddish, development is long

NTFPs are widely used in sectors as diverse as pharmaceuticals, botanical medicines, cosmetics, and food and beverage industries. Industry is interested in these products for three main reasons (Lombard, pers.comm.):

- because of their new properties;
- because they can provide a cheaper or more effective substitute for existing products;
- because they can be marketed as 'exotic' products.

The last of these reasons is particularly true in the botanical medicine and cosmetics industries, both of which are extremely fickle and trend-driven (Laird and Guillén, 2002). In direct conflict with the often faddish nature of NTFP markets is the fact that the development of a new product requires at least 5-10 years and a significant investment of resources (Clay 1992). In addition, such efforts are often small scale and experimental with many mistakes made along the way. Once the product is developed, larger operations can easily duplicate the process for less cost, in less time and with more efficiency of scale (Ervin and Mallet, 2002).

Small-scale technology may not be sufficient

There is a misunderstanding about the level of technology required to get NTFPs to market. This is in part due to the predominance in the literature of work on products which are exported with only minor processing (e.g. brazil nuts, vanilla, wild harvested rubber, baskets, etc.). However, as outlined above, NTFPs are today being used as ingredients in very sophisticated industries. While hand-powered presses may be the 'appropriate' technology for intermittent small-scale production of oils for own consumption and sale on local markets, they are unlikely to be the most effective way of achieving large-scale throughput of refined oils of assured quality. A higher degree of technological innovation is necessary to achieve value-added in the country of origin at the same time as meeting the standards of demanding international clients.

Barriers to entry may be high

A major stumbling block for new traders is that each destination industry has its own research, manufacturing and marketing requirements which must be taken into account during product development (Laird and Guillén, 2002). This is also the case in the international trade in tropical fruits, where it has been middle-income countries such as Mexico, Philippines and Brazil, which have been the main driving forces in expanding the international trade. Very few low-income countries have the high degree of infrastructural and institutional development, strict product quality and sophisticated supply chain management practices necessary to enter these markets. These entry barriers are increasingly due to the private commercial practices and phytosanitary standards of advanced retail systems rather than public (i.e. state) barriers to trade (García Martínez and Poole, 2002). Because of these concerns, Laird and Guillén (2002) argue that selling products to mainstream markets is

² Note that throughout the text the term 'natural products' is used to mean products based on indigenous plants which are not the subject of conventional agriculture (i.e. not including mahangu). The term is used synonymously with NTFP – non-timber forest product.

probably beyond most NTFP producers, and that therefore a variety of 'green' and 'fair trade' niche markets will be the most useful starting point. However, as noted above, consideration needs to be given to how to move beyond the protected arena of fair trade markets, particularly for those products with a high volume production potential.

Certification is a mixed blessing

Certification of natural products is a rapidly evolving field and may focus on a range of different criteria:

- Environmental – e.g. Forest Stewardship Council (FSC) which promotes ecologically sustainable as well as socially responsible forestry
- Health – e.g. International Federation of Organic Agriculture (IFOAM) which focuses on the avoidance of exposure to, and contamination by, chemical pesticides and fertilizers
- Social – e.g. Fairtrade Labelling Organisations International (FLO), which aim to ensure fair and equitable distribution of benefits to producers
- Quality – e.g. International Organization for Standardization (ISO) and Good Manufacturing Practices (GMP)

(Ervin and Mallet, 2002; Laird and Guillén, 2002).

However, certification requires a high level of organisation and technical sophistication from producers, especially with regard to management planning, monitoring, product tracing and marketing. In addition to the costs involved in obtaining certification (particularly if there is no local certification expertise available), this will prevent most NTFP harvesters around the world from participating in such initiatives unless they have access to sustained technical and financial assistance (Shanley *et al.*, 2002). And, as has been shown in the timber sector, certification is by no means a guaranteed way of obtaining a better market price, as markets may be limited in size.

Intellectual Property Rights issues

As is highlighted by the *Hoodia* and Sangre de drago cases described in the next section, the commercial development of many NTFPs builds on indigenous knowledge of how plants are used. There is growing concern about how to compensate the holders of that indigenous knowledge. Furthermore, given that product development often occurs far from where the plant originates, there is equal concern about how to avoid so-called 'biopiracy' and ensure proper compensation for the nation where the plant has been collected. The 1992 Convention on Biological Diversity (CBD) marked a milestone in how biological resources, and more specifically genetic resources, are viewed in today's global economy, providing a broad legal framework to structure access and benefit-sharing (ABS) agreements (Alexiades, 2002).

Implementing the CBD raises difficult issues, however, as nation states seek to define genetic resources, establish proprietary rights over these resources, and develop legal and institutional frameworks to articulate these proprietary rights. The CBD agenda has come into conflict with the intellectual property regimes espoused by the WTO and its Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) (Alexiades, 2002). In 1999, in an attempt to resolve this impasse, the Organization of African Unity (OAU) approved an African Model Law that comprehensively covers IPR issues for biodiversity and indigenous knowledge.

However, few African countries have passed domestic laws to comply with it³ (Sayagues, 2003).

How the CBD is implemented nationally and regionally is critical to the development and certification of plants such as Sangre de drago, whose status as a biological or genetic resource is open to debate (Alexiades, 2002). Clear national biodiversity legislation may be a deciding factor both in terms of encouraging certain practices, as well as by encouraging companies to seek nations and regions offering more favourable conditions for purchasing plant products. Costa Rica's early start in dealing with these issues, for example, has led to a steady influx of benefits from bioprospecting agreements. On the other hand, delays in the finalisation of relevant legislation in Ecuador meant that imports of Sangre de drago by the US-based company, Shaman, were put on hold in 1994 (Borges *et al.*, 2000, cited in Alexiades, 2002).

Volumes are typically small

Many NTFP markets are small in scope and value, and therefore attract limited attention or investment (Shanley *et al.*, 2002). When they do hit the big time, supply may be a serious problem. Clay (1992) emphasises the importance of volume to NTFP marketing, stating that no single Amazonian producer can provide enough commodities to meet the needs of even a small company in North America or Europe. Product development must include detailed planning of how to meet possible future demand, including looking into how different producers can collaborate through market cooperatives to provide adequate supplies of NTFPs to major markets (Ervin and Mallet, 2002). Where products derive from threatened plant species, supply issues are complicated by conservation considerations.

On the other hand, niche and fair trade-type markets may be small relative to potential production, as in the case of marula oil, the supply of which is far greater than can be absorbed by The Body Shop's community trade products.

Product lifecycles may be short

Getting products into the market is one problem, keeping them there is another. NTFP markets are notoriously fickle. The South American continent has a particularly high share of 'boom and bust' experiences to report including the classic case of natural chicle. Chicle fuelled the modern chewing gum industry and its extraction was the main industry in the Yucatan Peninsula of Mexico in the mid 20th Century. But, by 1960, the development of much cheaper petroleum-based gum had almost eradicated demand for natural chicle (Laird and Guillén, 2002). In addition to substitution by synthetic products, NTFP producers may have to compete with large-scale cultivation in other countries as in the case of the Brazilian natural rubber harvesters, whose livelihoods were turned upside down by the massive production of plantation rubber from South-East Asia.

Improving the odds

Are there any ways of facilitating market entry and improving the staying power of a product? A number of key points, mostly drawn from Laird and Guillén (2002), are listed below:

- Knowledge is power – anticipate trends and stay ahead of the game by keeping a close eye on all aspects of market development.

³ The South African government is considering a draft bill that requires proof of prior informed consent of communities before granting patents for products or elements derived from their traditional knowledge (Sayagues, 2003).

- Focus on products with new properties or which can provide a cheaper or more effective substitute for existing products, rather than the more fickle 'exotic' markets
- Be aware of pricing and other issues that inform the private sector and consumer selection of products for purchase.
- Do not price the product out of the mainstream market.
- Understand a product's marketing niche and relationship to synthetic and alternative products.
- Understand the nature of raw material resources against which certified products and material will compete, e.g. can large-scale cultivation squeeze out smaller producers?
- Work within (or promote) a legal environment that recognises local rights to control the use of, and benefit from, traditional knowledge; as well as rewarding the innovation necessary to develop a product for the market.
- Understand the quality control requirements of importing countries and companies.

The above points will be supplemented with lessons learned from the case studies presented in the next section.

3. LESSONS LEARNED FROM NAMIBIAN AND OTHER INITIATIVES TO DEVELOP NATURAL PRODUCT-BASED ENTERPRISES

This section consists of two parts. The first presents a selection of case studies from Namibia and elsewhere, mostly related to the marketing of natural products (or, in a few cases, agricultural niche products). Each case illustrates a number of points pertinent to the overall theme of this report. The lessons learned are brought together in the second part of this section.

3.1 Presentation of case studies

Case 1. Devil's Claw: direct contact between producer and exporter

The roots of Devil's Claw (*Harpagophytum procumbens*) are traded as an ingredient in both traditional and western treatments for a number of ailments, particularly arthritis and rheumatism. Growing in some of the driest areas in southern Africa, the roots are mostly harvested from the wild, sliced and dried before sale, with all further processing carried out in the importing country. Most Devil's Claw in Namibia (as also in South Africa) is sold through what Rachel Wynberg (2002) calls the 'Free Enterprise Model' in which producers sell to a local trader who sells the product (still unprocessed) on to a Namibian exporter.

To increase the value-added in Namibia, CRIAA SA-DC tried to interest overseas extractors to procure locally semi-processed raw materials (as basic as crushing the dried root) in Namibia. When this initiative failed, the focus turned to improving benefits for the producer by bypassing one level of intermediary and investing in sustainable harvesting. In its 'Sustainably Harvested Devil's Claw Project' (SHDC), CRIAA SA-DC has promoted what Wynberg (2002) calls the 'Honest Broker Model' of trade. In this initiative, a community liaison officer is employed to work with just over 300 harvesters to improve sustainability of the resource use and initiate direct negotiations between the producers and a local exporter. The latter has agreed to buy all their production as well as redistributing some of the benefits which, because of organic certification by the UK Soil Association, have increased by nearly 50%.

Unfortunately this premium is swallowed up by the cost of obtaining the certification (currently paid by the project). Expanding the certification to include a larger share of the production would help to lower per unit costs and deliver a profit premium. In the future, it is hoped that the role of CRIAA SA-DC may become redundant if the exporter and the producers can share the costs of the community liaison officer and the certification between them.

Lessons learned:

- Even when all processing is in the importing country, it is possible to improve the conditions for the producer.
- Resource ownership is a key issue. CRIAA SA-DC works with harvesters who have some form of customary control over specific parts of communal areas. The issue of how organised groups in a community can effectively exercise management control over an open-access resource is a difficult one to resolve.
- The private sector (exporter) can be convinced to support social benefits if it makes good business sense.
- CRIAA SA-DC can play an important role, not as an intermediary trader but as a negotiator of conditions and provider of expertise (e.g. on sustainable harvesting and certification).
- CRIAA SA-DC's exit strategy will involve handing over responsibility for the project activities to the exporter and the more or less organised group of producers.
- The lack of national certification expertise means that certification (and the price increases expected as a result) can rarely be achieved in a cost-effective manner.

Case 2. Oil presses in Zimbabwe: distinguishing profit and non-profit activities (based on Dawson, 2002b)

EnterpriseWorks Worldwide (a US-based NGO) started the Zimbabwe Oil Press Project in 1989 to produce affordable oil, improve nutritional standards, create opportunities for adding value to agricultural crops, produce seedcake and stimulate production of high-value crops like sunflower, groundnut and sesame. In 1998, it was decided to make the project sustainable by splitting off two commercial enterprises:

- Rural Associated Manufacturers (RAM) Pvt. Ltd. was constituted to make commercial oil presses. This was a joint venture between EnterpriseWorks (56%) and a Zimbabwean entrepreneur (44%);
- ZOPP Pvt. Ltd. was set up to distribute and market RAM presses, peanut mills and seed. ZOPP staff were paid on commission and the gross margin for presses was 35% over factory price to cover costs.

The not-for-profit development activities were retained via a Zimbabwe-registered affiliate, Appropriate Technology Zimbabwe (ATZ). This was responsible for product innovation and development activities. In mid 2001, donor support for ATZ ended and it suspended operations, while RAM and ZOPP continued operating – “this shows the critical importance of for-profit spin-offs in ensuring sustainability because NGOs eventually exit from project activities.” The most serious factor that threatens the long-term sustainability of RAM Ltd and ZOPP Ltd is the need for continual product innovation, for which they have relied on ATZ/EnterpriseWorks.

Lessons learned:

- NGOs are vitally important in helping to develop and promote new income-generating activities in the rural community. The domestic private sector does not usually have access to critical information on successful project

interventions elsewhere or the availability of potentially appropriate technologies; they are generally unwilling to invest in the overhead and development costs of small-scale technologies since they find it difficult to protect their products from imitation by others; and few have the expertise or capital to undertake parallel interventions in various different fields as is often required when promoting new rural activities (i.e presses, seed distribution, etc).

- Complete transfer of the initiative to the private sector may not be possible, or indeed desirable. Even if RAM Ltd could raise sufficient revenue to fund its own technology development work, could it do so effectively? One of the strengths of NGOs relative to private companies is their connection to international networks with information.
- Creating an institutional distinction between project activities that can be commercialised (e.g. manufacture and distribution) and those that cannot (e.g. product innovation) is at the core of the project's success. NGOs have a poor record of economic proficiency in the marketplace. By creating for-profit companies, the project has created the conditions in which its manufacturing and distribution elements can adopt fully commercial working methods, thus promoting their long-term sustainability.
- Fledgling for-profit companies do better if focused on a clearly defined set of objectives.
- EnterpriseWorks invested in RAM Ltd and ZOPP Ltd on conditions that would have attracted few private entrepreneurs. Currently press production and marketing costs are being recovered, but the costs EnterpriseWorks and ATZ incurred in developing the technology and marketing the machines have not been recovered – nor is their recovery expected, as these are considered to have been 'public good' functions.

Case 3. Kalahari wild silk: involving producers as shareholders

A joint MAWRD/Oxfam project, implemented by CRIAA SA-DC, has developed a business model for using moth cocoons found on Camelthorn (*Acacia eriloba*) and other trees in the Leonardville area to produce wild silk. Having demonstrated that there were sufficient cocoons and sufficient technology to make silk production feasible, the project has been pioneering ways of handing over its assets (both 'hard' assets such as premises and tools, and soft 'assets' in the form of the business idea and expertise) to a company.

As shown in Figure 2, the intention is to set up a company in which producers are encouraged to buy shares (payment is possible in cash or kind). The process of selling the shares is still being discussed but the hope is that a combination of education (about the value of shares, the rights and responsibilities of shareholders, etc.) and high-level support will result in a well-balanced group of shareholders and Board (including representation of producers). In the longer term, however, it is just as possible that the Company moves towards becoming a producer-dominated company working on co-operative principles, as that it becomes dominated by one or two individuals with no producer representation.

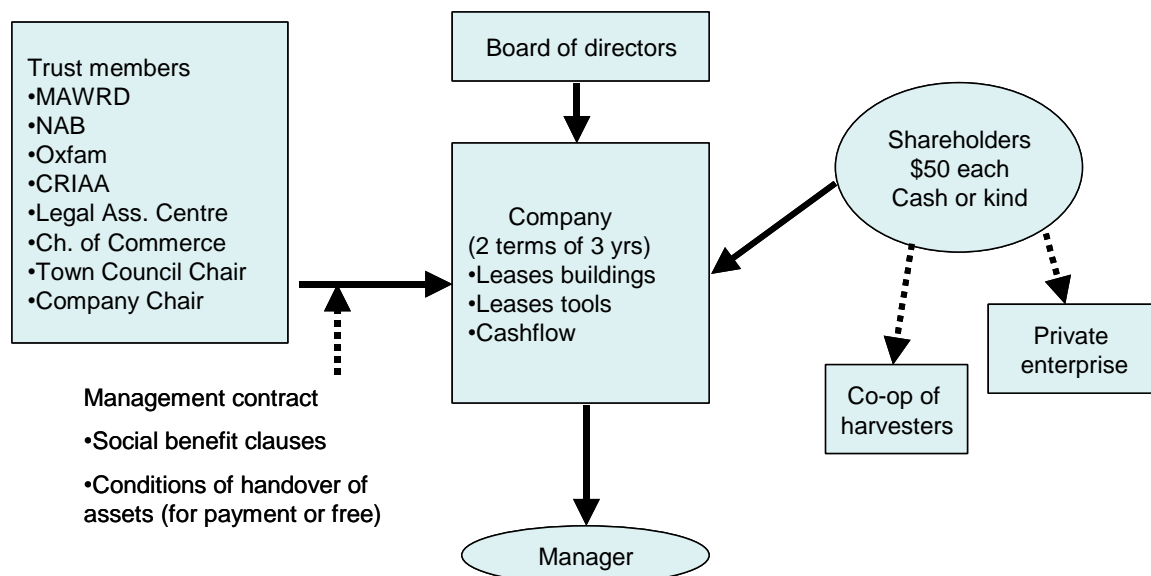


Figure 2. Establishing a Kalahari wild silk company

A Trust representing a wide range of interested parties has been set up to oversee the handover of the business to the company. The company will employ a manager and will receive development funds as a loan (at cost of inflation). The aim is to manage the company as a business and not as a community development project. Nevertheless, the extent to which the company eventually works in the interests of the producers may determine whether the Trust sells or donates the assets to the company at the end of its lease, at which point the Trust too would be dissolved.

Lessons learned:

- This innovative approach shows that it is possible (at least in theory) to hand over a business developed with public funding to the private sector in such a way that the interests of producers are safeguarded.
- Objectives must be very clear – business success comes first and social benefits are secondary.
- Setting up a new company in this way is a complex process, requiring time (6 years) and funds (for a Trust) during the process of supervision.
- There is still uncertainty regarding the desire of producers to become shareholders, as this involves a new kind of ‘transaction’ cost for them in exchange for a say in decision-making. However, the possibility for primary producers to acquire equity in the business through in-kind contributions is a novel way of enabling them to participate in any equity growth that may result.
- Even a private business with no producer shareholders could bring benefits to the community in the form of employment of the 20 or so people needed in the factory, and by providing a market for their produce for the 350 harvesters.
- The new company is not expected to fund strategic research, e.g. on the resource base and training issues. This kind of support will be assured by the MAWRD/OXFAM project which will continue alongside the company.
- While the company will lease the ‘hard’ assets, the donors are willing to hand over the soft assets (namely all the preceding development costs) for free.

Case 4. ASOMEX: Providing specialised marketing services (based on Rawlinson and Fehr, 2002)

In Bolivia, MEDA (Mennonite Economic Development Associates) had worked with ASOPROF (National Association of Bean Producers) for nearly 10 years to develop dried beans as a new export crop. Amongst other things, MEDA had performed an important marketing role for ASOPROF and found that there was no existing organisation to which to hand over this role. Although standard Business Development Services (BDS) and micro-credit schemes were well catered for in Bolivia, there was no intervention in the area of marketing. In 1993, therefore, MEDA and ASOPROF jointly established ASOMEX, an independent for-profit company which provided specialised BDS with the aim of increasing the incomes of small-scale urban and rural producers by offering competitive marketing and export services. Set up with an initial capital of \$40,000, ASOMEX shares were owned by ASOPROF (58%), MEDA (17%), and individual shareholders (25%).

To meet its clients' needs, ASOMEX diversified to provide three main types of customised marketing services:

- *Export processing service:* ASOMEX handles details of transferring sale-ready products to their final destinations (e.g. documentation, logistics, transport and financial arrangements with the buyer). The sale occurs between the client and the buyer and ASOMEX is paid on a fee basis.
- *Intermediary trader service:* ASOMEX buys the product and sells it at a higher price. This service meets the needs of clients who want a lower risk option and freedom from responsibility in the export process.
- *Brokering service:* ASOMEX does market research and brings buyers and sellers together, collecting commission on resulting sales. This service responds to the needs of clients who want research and contact information while maintaining complete autonomy and control over the sale of their product.

Lessons learned:

- ASOMEX filled an important niche: although standard BDS and micro-credit were well catered for in Bolivia, there was no intervention in the area of marketing.
- The bottom line is that the business must make a profit in order to be sustainable.
- Nevertheless, ASOMEX maintains a concern for the welfare of producers and aims to give them the best price for their products.
- The company had a long gestation period. MEDA worked with ASOPROF for seven years before setting up ASOMEX.
- Once the company was set up, MEDA changed its role from donor to business partner.
- MEDA's exit strategy involves waiting until the company achieves sufficient profitability and stability to attract other investors interested in buying it out.
- ASOMEX works mainly with producer groups and associations due to the costs of working with small producers and individuals.

Case 5. Sangre de drago (*Croton lechleri*): trials and tribulations of drug development (based on Alexiades, 2002)

The striking red latex of this neo-tropical tree genus is used to treat a wide variety of health conditions in tropical America, by both rural and urban dwellers. It first became an international commodity in the 1990s, with official exports to the US rising from just 320kg in 1990 to over 26 tonnes in 1998. As with another Latin American

product, uña de gato, corporate, scientific, media and government interest in sangre de drago has led to its 'legitimisation' among middle- and upper-class consumers.

The popularisation of sangre de drago is clearly related to the well-publicised interest and activities of the US-based company Shaman Pharmaceuticals which, in 1992, filed a patent for the production of SP-303, a large proanthocyanidin oligomer, obtained from *Croton lechleri*. Shaman Pharmaceuticals began developing two drugs based on *Croton lechleri* latex. Clinical trials for one were suspended but the other underwent Level I, II and III clinical testing for the Food and Drug Administration (FDA) in 1998. Following an FDA request for more trials, however, the company had to reorganise, suspend the drug development, and move its assets into the more loosely regulated nutritional supplement and herb industry where, under the name of ShamanBotanicals.com it released a *Croton*-based remedy for diarrhoea in 1999.

Lessons learned:

- Product development takes time – in this case 7 years from patent to herbal remedy product;
- Obtaining approval for drugs is a difficult and costly process.
- International interest in a product can also stimulate national interest. Thus, in the case of Peru, the international interest has led to a boom in domestic production of a variety of unregulated tinctures, creams, soaps, etc.
- IPR legislation can be a deciding factor in determining where a product is sourced. Shaman's *Croton* imports from Ecuador were put on hold in 1994 while the company waited for the government to finalise its legislation.

Case 6. Hoodia: whose intellectual property? (Based on: Barnett, 2001; Kahn, 2003a, 2003b, 2003c; and Sayagues, 2003)

Hoodia is a succulent plant which has long been chewed by the San people in southern Africa to suppress hunger. The active ingredient, known as P57, was isolated and patented in 1996 by scientists from CSIR (the parastatal South African Council for Scientific and Industrial Research). In 1997, CSIR licensed Phytopharm, a UK-based drug development company, to develop and commercialise P57, though CSIR retained the patent. In 1998, Phytopharm in turn, sold the rights to license the drug for US\$21 million to the US-based pharmaceutical giant Pfizer. Given current concerns about obesity, the potential for an appetite suppressing drug based on P57 is great.

In 2001, media reports on the deals between CSIR, Phytopharm and Pfizer, led to a huge increase in the share price of Phytopharm. They also alerted the San to the potential use of their traditional knowledge. An uproar ensued as a Pfizer spokesman announced that the San were extinct. A few months later the South African San Council was selected to represent the interests of the more than 100,000 San people in Angola, Botswana, Namibia, South Africa, Zambia and Zimbabwe in discussions with the CSIR on options for sharing the benefits emanating from their knowledge. In March 2002 a Memorandum of Understanding was signed between the CSIR and the San under which the CSIR formally acknowledge the San as the custodians of their traditional knowledge. In return, the San acknowledge the CSIR's need to protect its investment in isolating the *Hoodia*'s appetite-suppressing ingredient by patenting it in the CSIR's name.

Having been prompted into negotiations only because of the public outcry over the initial handling of the case by the CSIR, the South African government now sees the Memorandum of Understanding signed between CSIR and the San as a model for

other countries to follow. The MoU led to an agreement in March 2003 outlining how any benefits will be shared. The CSIR will pay the San 8% of milestone payments made by Phytopharm during the drug's clinical development over the next 3-4 years. These could amount to over US\$1 million. If and when the drug is marketed (possibly in 2008), the San will get 6% of the royalties paid to CSIR, which could exceed US\$7 million per year for the 15-20 years before the patent expires. The potential income will be deposited into a San Hoodia Benefit Sharing Trust established by the CSIR and the San and will be used for the 'general upliftment, development and training of the San community'.

If the drug is successful, it is not yet clear whether it will be derived from commercially grown *Hoodia* or whether P57 can be synthesised in the laboratory.

Lessons learned:

- The importance of benefit-sharing agreement (ABS) legislation being in place.
- Importance of knowing about resource ownership (both of the physical resource and the knowledge of its properties) before starting product development.
- Possibility for high returns for producers even during the drug development phase and when processing (including some R&D) takes place outside the country. This may be true particularly for medicines which require sophisticated drug development and trial procedures.
- Drug development companies bear a high risk that their investments will not pay off in the form of a marketable drug. However, if relationships and information are well managed, profits can be made early on (e.g. Phytopharm's shares rocketed when the announcement of their deal with Pfizer was first made).

Case 7. Marula oil: A long journey from Ondangwa to The Body Shop

The marula tree (*Sclerocarya birrea*) grows widely across southern Africa, usually scattered in farmlands. It has a wide range of local uses including consumption of the fresh fruit, use of the fruit flesh to brew beer, crushing of the kernels to produce an oil that is used both for cooking and as a skin moisturiser, medicinal properties of the bark, etc.

Over a period of years, CRIAA SA-DC negotiated with The Body Shop (known only as 'the client' until the product finally reached the shelves) to use the marula kernel oil in its cosmetics. Although it has taken 6 years, The Body Shop now advertises the use of 'community traded' marula oil in its whole make-up range, sold in over 50 countries.

The value chain begins with rural women, who collect the marula fruit and extract the kernels by hand. The original five or six kernel producer groups were supported by CRIAA SA-DC, the Department of Women's Affairs in the Office of the President (which later became the Ministry of Women Affairs and Child Welfare), the Namdeb Social Fund, the Ministry of Trade and Industry and the MAWRD Division of Co-operatives to form the Eudafano Women's Co-operative (EWC) in order to improve business prospects. The EWC acts as a service provider to its now 14 member associations (representing over 3000 women) by providing a single legal point of contact for the external buyer. Projected kernel demand is determined annually by CRIAA SA-DC and the EWC on the basis of the volume of oil required by The Body Shop. At its AGM, the EWC allocates kernel quotas to its member associations. These, in turn, set household quotas. Kernels from non-members are not accepted.

CRIAA SA-DC operates as a marketing intermediary, negotiating the contract between The Body Shop and the EWC, and organising for the kernels to be processed into oil by the Katutura Artisans Project (KAP), an off-shoot of CRIAA SA-DC in Windhoek. Each association transports its kernels to the EWC, where they are weighed and the volumes provided by each woman recorded. From the EWC, the kernels are transported to KAP, where they go into cold storage until pressed. KAP owns several presses (which it researched, developed and manufactured) to cold-press marula oil, which is sold to The Body Shop. At present the seed-cake by-product is being sold as an animal-feed ingredient. The original system saw the money for the oil being channelled back via CRIAA SA-DC to each of the Associations with a mark-up to the EWC. More recently, however, The Body Shop pays the EWC, which is responsible for paying the associations for the kernels and CRIAA SA-DC for the processing.

There can be a delay of around six months (and even up to a year) between when the women deliver their kernels (June), and when the EWC receives the money for the processed oil from The Body Shop. This is due to the long sea shipping time (around 2 months), long processing time (depending on quantities involved this can take place over a 10-month period) and the time taken to confirm orders and receive payments. In the early stages of the project, project funds were used to roll over these unavoidable delays. However, in 2002, the EWC provided more kernels than agreed and CRIAA SA-DC accepted to turn these into oil in the hope that another buyer could be found. The resulting 10t of oil are still in a cold store at KAP and may suffice to cover The Body Shop needs for this year and even next. With this volume of raw materials, it is no longer possible for the project to advance payments, leading to the serious problem that the women may have no market for their kernels this year and will not receive the money for the kernels already processed into oil until that oil is sold. EWC had planned to advance the money to the women out of a donation it expected, but the funds were apparently misappropriated. Inevitably this situation has led to a great deal of frustration amongst all concerned and has hindered the efforts to develop the EWC's business plan, tighten its financial management and access the necessary bank loan facilities to provide sufficient cashflow to take account of the long business cycle time.

Many of the women would like to process the kernels into oil nearer to home and argue that there is potential for selling the oil on the local market both in the form of simple cosmetics (massage oil, soap) and for cooking. Apparently the few women who sell oil made in the traditional manner receive a good price (around N\$28 per litre in Oshakati market). This price, however, translates into a return of just over N\$9 per kg of kernels, compared to the N\$17 per kg obtained through the cold-pressed oil project, and does not reward the labour involved in making and marketing the oil. Processing would be possible using an adapted juice press (see below), but the women feel they need more help to produce the oil in a hygienic manner, and in marketing it (obtaining glass bottles is a particular problem). However, research by CRIAA SA-DC suggests that there is very little potential in the local market as all households in the North make and use marula oil, and there is an active practice of informal barter and gift exchange of oil. There is also a question-mark over whether the different taste of cold-pressed oil would be accepted by customers and whether it could compete with sunflower oil (N\$10-12 per litre) for sales of any significant volume. There would be very little justification therefore, for prioritising such local processing for development interventions.

Another potential product is marula juice. At international level, CRIAA SA-DC is in the early stages of investigating possible markets for the juice or other fruit products

(jams, syrups). KAP has developed presses (operated by a hydraulic jack), which can facilitate the traditional process of juice extraction from the fruit. Traditionally the juice is used by women to brew omaongo beer. Many of the EWC associations have bought presses, the cost of which (N\$4000) can be recouped within 2-3 years of use. The press gets moved around and people pay per bucket of omaongo produced. As marula beer plays an important cultural role, customary control over the juice resource is still strong. There is some concern, therefore, that the tensions over the ongoing process of women beginning to charge for the beer may be aggravated by the use of juice presses.

Lessons learned:

- Making the initial link between the traditional use of a product and international market interest requires a good understanding of the potential market opportunities for natural products.
- Marula oil is the first of the PIF products⁴ to reach the international market and has shown that an integrated approach is necessary to deal with the challenges arising at all points in the value chain (from researching the characteristics of the oil, to organising the supply, developing effective processing technology, negotiating with an international commercial buyer, etc.)
- In spite of the difficulties faced, the case shows that it is possible for a co-operative to provide the quantity and quality of resource a commercial partner needs (and much more than one partner requires).
- It may take some time to perfect the balance between supply and demand (or grow the demand/market sufficiently), during which time the expectations of producers must be carefully managed.
- A period of commercial confidentiality may be necessary to ensure that the company making the investments in product R&D (and registering the product as a commodity in the appropriate markets) reaps the rewards before its competitors.
- Reliance on a single buyer – although perhaps unavoidable as a way of clearing regulatory hurdles – is very risky, particularly if, as in the case of The Body Shop, that buyer is still in the process of trying out the product and cannot guarantee a fixed order every year. CRIAA SA-DC is tackling this situation and a deal has just been signed with a French product developer for marula oil.
- Development of several products from the same resource improves the overall returns but also needs to be managed carefully to ensure that traditional uses are not disadvantaged.

Case 8. Melon seed oil: competing supply chains

Citrullus lanatus is a wild melon that is the progenitor of all improved watermelons. It grows as an agricultural weed in North-Central Namibia and the seeds are traditionally used as an oil rich drought food, and as source of traditional moisturising oil. Commercial production of the oil was first started by two Ondangwa business women in 1992, now operating under the name of Oontanga Oil Producers cc. The idea came from the dissatisfaction of one of the women at having to use imported ingredients for her small cosmetic manufacturing business, and the other having been impressed by production of sunflower oil and derivatives on a Chamber of Commerce sponsored visit to Zimbabwe. Starting in 1992, they began by producing the oil using traditional means (boiling the seeds) and then bought a small Chinese

⁴ Note that most of its development preceded PIF.

press (using contacts from the Zimbabwe visit), scaling up in size in 1998. The current factory (established in August 2002) benefited from a loan from the Namibian Development Fund. Their original aim was to retail the oil themselves, but the complexity of getting involved in bottling, etc., led them instead to sell it to a buyer in Windhoek who packages the oil for retail in local craft centres, duty free shops and pharmacies.

In parallel, and on the back of its experience with marula oil, the Eudafano Women's Co-operative⁵ encouraged CRIAA SA-DC to begin negotiations with The Body Shop resulting in the launch of a new melon seed oil range of cosmetics in 2002. CRIAA SA-DC experimented with processing the oil in Namibia but found that it was barely possible to make a profit because extraction rates were low (around 10%). In addition, the low volumes required in the initial stages of The Body Shop interest were insufficient to fill a whole container, and half containers could only be sent from South Africa thus increasing the transport costs. Finally, the machinery available for extraction in Namibia could only produce a crude oil that would still need to be refined by The Body Shop's UK subcontractor, Statfold Seed Oils (SSO). There is a big price differential between refined and unrefined oil so establishing the oil refining technology in Namibia is a desirable objective, but the high cost of establishing it (at least N\$500,000) means that it could only be justified if a minimum level of demand could be guaranteed. A strategic decision was taken, therefore, to export the seeds direct to SSO, where extraction rates of 15% of refined oil could be achieved giving higher returns per kg of seed than local processing could achieve. An exchange of letters with SSO agrees that, as and when the volume of melon seed oil increases to a sufficient level, the company will assist CRIAA SA-DC in bringing the refining capacity to Namibia.

To supplement the oil sourced through CRIAA SA-DC, The Body Shop also began to purchase crude oil from Oontanga Oil, sending it to SSO for refining. Although the extraction rates achieved by Oontanga Oil appear to be only around 7%, a different form of transport (air-freight) and different staff costs may account for the apparent viability of this operation. Participation in trade fairs has been useful to attract potential customers, although the ability to follow through on one deal was damaged by the contamination of a batch of melon seed (and the resulting oil) with DDT by healthworkers spraying women's homes against mosquitoes. This highlights the vulnerability of natural product-based enterprises to all kinds of unexpected risks.

A big issue in the production of melon seed oil has been how to determine the price paid to the producers for a product (the seeds) with no previous market. The approach taken by Oontanga Oil was to pay what the market would accept, a reasonable commercial approach given the experimental nature of the business and the fact that the seeds would otherwise have remained unsold. The approach taken by CRIAA SA-DC was to work out the difference between the price obtained for the oil (the price of which was set to be close to its nearest competitor, hempseed oil) and production costs, and to pass on as much as possible of this profit to the producers. This resulted in CRIAA SA-DC offering producers N\$2 per kg, almost three times the original N\$0.7 per kg paid by Oontanga Oil. The resulting competition for seed was particularly bitter as Oontanga Oil had been buying its seed from a women's group, which later joined the EWC, one of the main suppliers (along with the King Nehale Resource Trust) of melon seed to CRIAA SA-DC. Fortunately the competition for seed is unlikely to be as high in the future as the melon is an easily cultivated annual plant.

⁵ The EWC supplied the initial 15 tons of seeds free of charge as their contribution to developing the business.

Lessons learned:

- Standard business promotion services provided by the government (e.g. exchange visits and trade fairs) have a role to play in helping small natural product-based enterprises.
- Technical capacity has been a serious constraint for Oontanga Oil. Although it was possible to buy a press to suit their requirements, it has been extremely difficult to find technicians to set up the machine and train their staff in its operation and maintenance.
- The lack of technical capacity is perhaps symptomatic of an underlying problem with the business plan. The sources of credit for the business did not check that the technology was appropriate and that the company's business would produce sufficient income to overcome any technological difficulties. This reflects a lack of understanding by generalist loan-providers of the specific needs of natural products-based enterprises.
- If private entrepreneurs are already involved in elements of a value chain, every attempt should be made to work with them from the outset. Furthermore, any publicly funded product R&D should be carried out in real-life conditions so as not to provide unfair (subsidised) competition to existing businesses. This case highlights, however, that even when such precautions are followed, misunderstandings may arise. If these are considered severe enough to hamper future business dealings, then an outside mediator may need to be brought in to resolve the situation.
- Difficult choices may be needed between immediate and local gains (e.g. through local processing to a crude product) and the possibility of a greater future income on the basis of current export of the raw material.
- Even a company interested in promoting community trade may not be easy to negotiate with. Thus The Body Shop did not agree to use the name 'Kalahari melon seed', which might have acted like an 'appellation d'origine' and protected the producers from competition by growers in other regions.
- The 'community trade' label may be the only buffer between small-scale rural producers and commercial plantations (the volumes of seed being produced could easily be produced by a commercial farmer). The key ingredient in the marketing therefore is to aim for the 'community trade' or fair trade niche.
- Low extraction rates may in part be due to technology and in part due to variable oil content of the seeds themselves. The species is now being researched by the National Botanical Research Institute to determine whether some kind of improvement programme could be justified.

Case 9. *Strychnos*: from monkey orange to liqueur

The fruit of several species of *Strychnos* (monkey orange) are traditionally used for distilling a strong alcohol (kashipembe). A private entrepreneur, Mr. Staal Burger, working in the Kavango region in the 1980s saw that *Strychnos* was extremely abundant, and wondered about using it to flavour a liqueur. In 1998, he finally followed up his idea and sent some fruit to the University of Stellenbosch where they were used to flavour liqueur by Mr. Loftie Ellis of Elsenburg College of Agriculture. The latter was so impressed with the product that he offered to produce a pilot batch for free in return for a share in the business. This batch was made from 5t of fruit bought in Rundu from producers responding to announcements made on the radio. Five permits (including a collection permit from the Ministry of Environment and Tourism, a phytosanitary certificate, and an import permit from the South African Ministry of Agriculture) were required before the fruit could be exported to South Africa.

The process used differed from the traditional one in that the fruit juice was used to flavour a cane and wine-based alcohol and then filtered. However, the standard wine-making equipment used initially failed to filter out the very fine fibres of the *Strychnos* fruit, leading to a slight but unattractive sediment in the first batch of bottles. A new filter has resolved this problem for any future batch. Problems encountered included the very high transport costs to South Africa and the difficulty of finding suitable glass bottles and corks. Costs were covered with a loan via the Small Business Credit Guarantee Scheme but more money is now needed to mount a serious promotion campaign. If a sufficient monthly turnover can be reached, Mr. Burger intends to set up a factory in Rundu.

Lessons learned:

- Initial trials were carried out in South Africa due to lack of suitable option in Namibia.
- Further investment (factory in Rundu) is stalled until a minimum monthly sale can be guaranteed. This, in turn requires better promotion and a perfect product (i.e. without cloudiness) – requiring further investment.
- The small business credit guarantee scheme was useful but insufficient to see the business through to full viability.
- Promotion is particularly crucial as competition from other liqueurs such as amarula is strong.

Case 10. “From Mexico to the World”: government endorsement of the natural product sector (based on Ramírez Farías, 2001)

In Mexico, the government has decided that a focus on niche markets will allow it the country to compete in international markets at the same time as pursuing poverty reduction objectives. It has therefore set up the Non-Traditional Agricultural Products Trade Promotion Programme (within the Ministry of Agriculture, Livestock and Rural Development) the aim of which is to identify market niches for higher value small-farm agricultural products. The Programme is implemented through the following government-sponsored actions and instruments:

- Market identification, by means of a National Commercial Intelligence System, which collects information from the internet, commercial information units, and private service bureaus supported by State governments
- Creation of an official seal of quality ‘From Mexico to the World’, and promotion of the seal at fairs and exhibitions for non-traditional agricultural and livestock products.
- The design and implementation of training programmes.
- International seminars and state-based fora on the promotion of non-traditional products.

The key lesson here is that governments can play an important role in creating a positive context in which the private natural product-based enterprise sector can develop, by indicating its high level support for the sector (in the form of a national logo) and establishing a strong market information service.

3.2 Summary of lessons learned

In this section, I pull together the lessons learned from the case studies together with further evidence from the literature to highlight the key areas for consideration in developing and ‘liberating’ new enterprises in the natural product sector.

1. Getting a new product from field to shelf takes time.

Establishing a new product value chain requires time for various different activities. These include everything from working with producers to ensure a reliable supply to developing and testing prototype technology, investigating product characteristics, complying with registration requirements of the import market, and screening and trialling new drugs, and eventually setting up (if necessary) new enterprises to take on aspects of the resulting business opportunity. As illustrated in the marula oil case, it helps to take an integrated approach allowing some of the problems to be tackled in parallel rather than one after the other. Even with such an integrated approach, however, quick results cannot be expected.

The NGO, MEDA, which aims to help the poor establish profitable businesses, does so in a three stage process (Rawlinson and Fehr, 2002):

- The project stage, where MEDA tests for 2 years the project's assumptions and potential for becoming a business;
- The programme stage (3-5 years) develops the project to the point where it can become an independent business, testing its capacity to recover its own costs;
- The business stage works to balance the different goals of profitability and development. The company assumes financial responsibility and MEDA terminates its role as donor and takes on the role of business partner.

Another NGO, TechnoServe, has found that it has to support village-level groups for at least seven years before they feel confident enough to operate independently, primarily because they lack the capacity to identify new economic activities and evaluate their likely profitability (Dawson, 2002a). In the case of the new Kalahari wild silk company, a lease of three (or possibly even six) years has been foreseen for it to get established, and this does not take into account the many years the development of the business opportunity has already taken.

In the case of cosmetics and pharmaceuticals, product development may be particularly time-consuming (e.g. 7 years to take Sangre de drago from patent to herbal remedy, probably around 10 years to take *Hoodia* from patent to registered drug, 6 years to get marula-based make-up on to the Body Shop shelf) in addition to any time taken to set up the rest of the value chain. In part because of the long time lag, and in part because of the actual costs involved in some of the drug trials, investments in product R&D may be high and only achievable through joint ventures or licensing agreements (as in the cases of *Hoodia* and Sangre de drago). But, as shown by the *Hoodia* case, if enough optimism exists about the market potential of a product, it can be possible to obtain benefits for producers even during the drug development phase.

As highlighted in the melon seed oil case, another time-related issue is the possible need to compromise between achieving immediate gains and holding out for longer term strategic benefits. Decisions in such situations are easier to make if the objectives of the venture have been clearly laid out at the start, and the costs and benefits (to each of the main actors) of different scenarios are calculated.

2. Choose the right product and market

The fact that product development may take so long makes it all the more important to choose the right product to invest in. This requires a very good understanding of the many potential markets for natural products and their trends (e.g. in terms of pricing structures, availability of substitutes, quality requirements, preferences for

certain types of certification) in order to stay ahead of the game. A key issue for example are pricing structures – is there a big mark-up for oil of a higher quality that might justify investment in expensive processing within Namibia? And how should a product be priced so that production costs are covered (without the need to exploit producers) while still maintaining the final price below that of its closest market competitors? Availability of substitutes and the changing quality requirements of importing countries are also trends to be followed, as are the potential benefits of different forms of certification. Taking melon seed, for example, the volume currently required could easily be produced by a commercial farmer so a client, such as The Body Shop, who is interested in a ‘community traded’ product may be an important way to safeguard the interests of small-scale producers. If the desire to support small-scale producers is a key factor in product choice, then a careful calculation of the returns of different production systems is also important. Taking melon seed again, the production costs of small-scale producers (consisting primarily of the labour required to extract the seeds) are much lower than could currently be achieved by a commercial grower, thus ensuring their place in the market.

Where possible the focus should be on products which have new properties, or which can provide a cheaper or more effective substitute for existing products, in order to avoid the ‘boom-and-bust’ risks associated with products marketed simply because of their ‘exotic’ appeal. To minimise the risks of a volatile international market, the strategy adopted by Traidcraft is to aim to support businesses with a balance of 70% domestic trade and 30% international trade (Bird and Snedker, 2002). However, this is not always realistic in the natural products sector in which some products have a predominantly export-oriented market, or in Namibia’s very limited domestic market. Other criteria used by Traidcraft to decide when a business is ready to export products are listed in Box 3. A business can be supported in meeting these criteria by a good service provider.

Box 3. Traidcraft criteria for export readiness.

In an ideal situation, a business will have proved its success in the domestic market before planning to export. In general, however, a business can be said to be export ready when it:

- Produces a consistent quality to the original sample or specification;
- Can compete at market price subject to research prior to market experience;
- Provides reliable information in advance, e.g. concerning production capacity, lead times and prices;
- Is willing to provide samples;
- Sets a minimum sales target, and can calculate direct costs;
- Demonstrates logistics competency, i.e. ability to deal with packaging, freight, legal requirements, export licences;
- Has an appropriate product development capacity;
- Has a maximum lead time of 3 months for non-food products;
- Is able to purchase raw material without advance payment;
- Is able to provide good customer services and communication (returning communication within 3 days).

(Humphrey, 2000)

3. Recognise that a value chain is likely to include a mixture of different organisation types.

The idea that a whole value chain (or even just the domestic part of it) can necessarily be achieved by a single enterprise is mistaken. The case studies have shown that successful value chains are likely to include a mixture of different

organisations, or alliances of organisations, each of which focuses on a specific area of competence. The important issue, therefore, is to clarify the role of each actor, and ensure that the relationships between actors are fair and transparent. Roles and relationships may evolve as is illustrated by the ASOMEX case, in which MEDA shifted its role from being a donor to becoming a business partner (joint shareholder) in the new venture. The marula and melon seed oil cases both illustrate how important it is that all actors in the value chain understand how its various elements interact to avoid raising expectations that cannot be fulfilled. This is particularly true in the early stages of developing the product when levels of demand and supply may fluctuate from year to year.

The development of an export-focused value chain involving one set of actors may also have positive spin-offs for actors involved in domestic value chains based on less sophisticated technology. Thus the high media profile of the Sangre de drago exports to the US increased its domestic market in Peru. Similarly a high level of international interest in marula or melon seed oil could stimulate the domestic (or regional) market for locally made cosmetics based on these oils.

4. Distinguish activities that can be spun off into private enterprises early on.

Both the Kalahari wild silk and Zimbabwe oil press examples show that not all the activities undertaken during the product R&D phase may result in viable business opportunities. In both cases, an element of strategic research still needs to be undertaken outside of the new business. Establishing which elements can be privatised early on is important to ensure that – even in the project stage – these elements operate under real-life commercial conditions. In addition to research, capacity-building is another area which may need to be supported by a non-profit organisation. Many large fair trade organisations, such as Traidcraft for example, have a commercial trading branch (Traidcraft plc) complemented by a charitable branch (Traidcraft Exchange) to focus on building the capacity of partner organisations to improve the marketing and business development services they provide to marginalised producers (Bird and Snedker, 2002).

5. For these enterprises, focus on a few objectives.

Already in 1993, Buvinic pointed out that many projects supporting women's enterprises have multiple objectives: economic/production objectives, gender-related individual objectives, social and family welfare objectives, and organisational ones. As a result, she argues, "While responding to the many problems that poor women actually face, this plethora of goals makes project implementation difficult and justifies project continuation when social aims are achieved, even if the economic activities fail." The Zimbabwe case highlights the fact that setting up two separate businesses, each with limited but clear objectives, may be a better option than expecting one enterprise to excel in too many areas at once. Applying this to the still evolving case of the Kalahari wild silk, for example, would mean that the new company should focus on its primary economic activity – namely production of good quality silk thread. Adding further value (and achieving vertical integration of the business) through the production of silk cloth and clothing is a desirable next step but requires a solid basis of silk thread production, and may be achieved more effectively by working with other businesses (e.g. weavers and tailors).

Many of the cases also highlighted the fact that, even for producer-owned enterprises, sustainability depends critically on business success. Only once this is achieved, can social benefits be taken into consideration. This does not mean that

social benefits cannot play an important role in improving the chance of business success (as highlighted by the fair trade and corporate social responsibility literature reviewed in Section 2.4), but they are not a sufficient factor in themselves to ensure business success.

6. *Be aware that participation may not promote economic success.*

Tendler (1982, cited in Buvinic, 1993) stated boldly that “it is well known that participatory management is not conducive to effective economic performance”. Not perhaps the most palatable truth for idealistic development workers but a serious issue nonetheless. What is important is to distinguish between participation in the ownership (and resulting benefits) of a business and participation in its management. The marula oil case, for example, shows that a cooperatively owned business can succeed in spite of difficulties in making participation work. Achieving equitable participation in the benefits of a business may not be easy, even in the co-operative sector. Gaidzwana (1993) argues that this is, in part, because funding for small entrepreneurs in the co-operative sector is usually contingent on registration and other procedures that are not appealing to most women because they rely on literacy and numeracy. These requirements force illiterate and innumerate women to stay out of these co-operative groups or to join them on terms of subordination and dependence on the more literate members of their communities – leading to problems of inequality, mixed motivation and multiple agendas in women’s activities in the small-scale sector. Inequality and capture of benefits by traditional elites has also been well documented in the community forestry literature both from Cameroon and Nepal (Brown *et al.*, 2002).

Another aspect of participation which Buvinic (1993) argues can constrain the economic success of women’s projects is their over-reliance on ‘volunteer female implementors’, who may be cost-saving in the short term but cannot replace technically competent personnel. The Kalahari wild silk case will be an interesting attempt to see whether the combination of a degree of participation by producer-shareholders and skilled management by an appointed professional can deliver both economic success and social benefits.

In an alternate scenario, however, there is no reason why a business managed in a non-participatory way could not also be encouraged or required to deliver social benefits to producers. Indeed, the NGO TechnoServe, which promotes the creation and strengthening of rural, agriculture-based enterprises has recently changed its strategy: in addition to its traditional focus on group enterprises, it has started supporting individually owned enterprises that deliver services to the rural poor. Such enterprises are often cheaper and simpler to launch and support than group-owned ones (Dawson, 2002a). The Devil’s Claw case illustrates that ‘win-win’ situations are possible and the emergence of the corporate social responsibility and fair trade movements argues persuasively for the benefits of a fair and transparent approach.

7. *Choose the right groups to support*

Both in the research and development phase and when the eventual business opportunity is ‘handed over’, the choice of partners is essential. At the producer level it may be useful to refer to the criteria used by TechnoServe’s Ghana programme to determine which groups it will support in a range of activities from non-traditional export crop development, to cereal crop storage and marketing, and palm oil production and marketing (Dawson, 2002a). To qualify for support, a group must:

- Have a constitution and democratically elected leaders, and regular meetings;

- Be recognised by financial institutions and have had a bank account for 6 months;
- Be willing to invest equity capital in group enterprises;
- Be willing to sign a formal management assistance agreement with TechnoServe and pay a fee for these services;
- Have a savings scheme for its members.

As one moves along the value chain, technical capacity becomes as important as the organisational capacity stressed at producer level. In the Zimbabwe oil press case, for example, EnterpriseWorks originally tried to set up half a dozen small press producing companies. However, the quality of production was so variable that the reputation of the presses was suffering and a decision was taken to focus on just one enterprise (RAM Ltd) with the required skills.

Box 4 lists the main criteria developed at the 2nd National Indigenous Fruit Workshop for deciding when and to whom a business opportunity should be handed over.

Box 4. Criteria for determining when and to whom a business opportunity should be handed over.

When should business opportunities be transferred?

- There should be clear and proven viability of the enterprise after public funds are withdrawn.
- There should be a willingness on the part of participants/community members to contribute to the enterprise, in either cash or kind.
- Producers/harvesters should be fully involved.
- Managerial capacity, technical skills and a sound business plan should be in place. Arrangements should be made for external auditing.
- There should be secure markets, signed contracts and a marketing plan.
- The enterprise should be able to sustainably supply products, have viable stockholding and cashflow levels, and have a contingency plan in place.
- The enterprise should be environmentally sustainable, and have a reliable certification system.
- Assets should be transferred on a phased basis subject to successful operation of the enterprise. Intellectual property assets should be licensed to the enterprise rather than transferred outright.

To whom should business opportunities be transferred?

- The recipients should be people or groups who are involved in the development process. Where possible, they should be as close as possible to the primary producers. Traders who are committed to fair trade should also be considered.
- Established institutions with proven track records, and those who are willing to invest should be given preference.
- The question of whether to give preference to local organisations above organisations based elsewhere should be dealt with on a case-by-case basis.
- Recipients should be willing to trade fairly.
- When considering whether to transfer an enterprise to an individual or a group, the probable success of the enterprise should be the guiding principle. It is often the case that grass roots joint ventures require considerable assistance.

(summarised from IFTT, 2003)

8. Consider issues of resource ownership and intellectual property when determining the best organisational set-up

Some of the criteria in Box 4 imply the need to consider both ownership of the resource and of the intellectual knowledge that has gone into developing the business opportunity when determining who to hand a business over to. In the

Kalahari wild silk case, the ownership of the resource is taken into account by giving producers the opportunity to become shareholders in the new company. In the Devil's Claw case, the resource is communal but part of the work has focused on harvesters with individualised access to parts of the resource. The need to deal with resource ownership issues, particularly in the case of communal resources, is also illustrated by the difficulties faced by the Topnaar community in excluding outsiders from harvesting their !nara resource.

The value of indigenous knowledge is finally being recognised although mechanisms for compensating it are still in their infancy. However, indigenous knowledge on its own is not enough. The San, for example, acknowledge the right of CSIR to patent the P57 active ingredient isolated from the *Hoodia* plant. Similarly, neither melon seed nor marula oil would ever have made it to The Body Shop shelves without the specialist R&D carried out by CRIAA SA-DC. These kind of R&D contributions can be compensated by a variety of means such as patenting or fees, but also including partnership in any new enterprise arising from the research.

9. Design, agree and adapt exit strategies from the start

As highlighted in the fair trade partnership checklist (Table 2), it is essential that all partners know why they are working together and at what point they will have achieved a given set of objectives (always recognising that partners may undertake further activities with new sets of objectives as their relationship progresses). In this way, exit strategies can be designed and agreed early on, and then amended as necessary (Bird and Snedker, 2002). The fair trade organisation, Traidcraft, for example, wants to begin to 'liberate' its successful (and therefore less poor) groups in order to reinvest in other poorer groups. A key indicator it uses to assess whether a supplier group has a sustainable set of activities is its ability to sell to buyers other than Traidcraft (Page, 2003). In the case of ASOMEX, in which the donor MEDA is a shareholder, MEDA's exit strategy involves waiting until ASOMEX is sufficiently attractive for other investors to want to buy it out.

Exit strategies need to include a simple system of monitoring and evaluation to assess the extent to which exit criteria have been reached. Such a system should also allow either partner to suggest breaking off a relationship if agreed objectives are not being met and no remedial action appears possible. Given that any two actors may have relationships relating to a number of products (e.g. in the case of CRIAA SA-DC and the Eudafano Women's Co-operative), it should also be clarified from the start whether the relationship has the same objectives in all cases or whether different exit strategies apply to different products.

10. Recognise the crucial role of intermediaries

One of the defining features of poverty in the developing world is isolation from profitable economic opportunities and from information about such opportunities. The twin processes of liberalisation and globalisation are opening up many domestic and international market niches that, with appropriate assistance, small producers could occupy (Dawson, 2002a). As is illustrated by the example of CRIAA SA-DC in the marula and melon seed oil cases as well as the Devil's Claw case, intermediary organisations play a vital role in linking their clients with such new markets and building their capacity to compete successfully in them. But encouraging clients to move into new market opportunities carries a huge responsibility. If the prospective benefits are miscalculated, or some threats to the profitability overlooked, the clients can sustain substantial losses (Dawson, 2002a). These may be both material and, less tangibly, in the form of a loss of confidence to enter into new opportunities in the

future. Intermediaries, whether NGOs, private companies or government enterprise promotion schemes, need to recognise the limits of their market promotion role. In the case of NGOs, it is often argued that their forte lies in identifying and exploring the profitability of market opportunities, building the capacity of their clients to exploit the opportunities, and linking them with private sector partners (input providers, marketing companies, and so on) and that they should avoid getting sucked into the role of active market players – a role they have traditionally played poorly (Dawson, 2002a; Kapila *et al.*, 2002).

Many value chains rely on the risk-taking capacity of intermediary traders to hold large interim stocks, and advance cash flow. Rather than trying to replace or bypass such intermediaries, producers must be strengthened in their ability to recognise and work with what Traidcraft calls 'benevolent' intermediaries, avoiding those that are likely to lead to exploitative relationships (Page, 2003; Humphrey, 2000).

11. Accept that there may be an important ongoing role for the lead agency even after the project has formally ended

In many of the case studies it is clear that exit strategies usually involve a change in the relationship between partners rather than a complete break. In the Kalahari wild silk case, the donors and CRIAA SA-DC will all be represented on the trust set up to guide the process of handing over the business, as well as being involved in the MAWRD/Oxfam project which will continue to support the new company with strategic research. In the *Hoodia* case, CSIR will maintain a role as a member of the trust established to distribute benefits to the San. In the case of ASOMEX, the donor has turned into a business partner. A continuing input from the lead agency seems to be particularly important where further external inputs are required in identifying new economic opportunities (Kapila *et al.*, 2002).

12. Continual product innovation may require the services of professional researchers

To stay successful, businesses must innovate both in the products they produce and the markets they target. But poor farmers themselves do not generally have access to the information or resources necessary to identify and test market opportunities. Similarly, small-scale enterprises are usually too small to carry out the technological development and innovation involved in upgrading local technologies or designing and manufacturing various equipment and other production facilities (Wangwe, 1993). Professional researchers have much better access than farmers or project staff to information on macroeconomic trends, potential market niches and appropriate technology. They are also better placed for the financial analysis required to gauge the profitability of potential activities (Dawson, 2002a).

If markets were perfect, the private sector could be expected to achieve all elements of product development on its own. As shown by the Zimbabwe oil press case (Dawson, 2002b), however, the domestic private sector is constrained by (i) limited access to critical information on successful project interventions elsewhere or the availability of potentially appropriate technologies; (ii) an inability to take the high risks required in investing in the development costs of new technologies; (iii) limited capacity or expertise to undertake parallel interventions in several fields as may be needed for the development of a new product value chain (e.g. organising producers, innovating processing technology, negotiating with clients, etc.).

When handing over a new business opportunity the key issue is to distinguish which research issues are truly strategic (and might also yield information of benefit to more

than just the new enterprise) and therefore deserving of ongoing public support, and which issues should be the subject of normal commercial research which a company can be expected to carry out with its own funds.

13. Product development may require a careful compromise between transparency and commercial confidentiality

The *Hoodia* case illustrates the importance of careful management of information. Thus the share prices of Phytopharm rose dramatically when they first released the news about their deal with CSIR, only to fall again following media reports about mishandled relationships with the San, and rising again when the CSIR and the San signed their Memorandum of Understanding. In the case of marula oil, The Body Shop preferred to keep the period of product development under wraps (and insisted that CRIAA SA-DC referred to it only as 'the client') to ensure that other companies did not immediately benefit from its investment (in developing, testing and registering the product for the international market). Maintaining such commercial confidentiality does not come naturally to a project supported with public funds and may not sit well with the need for transparency at other levels in the value chain. It can only work if the intermediary, e.g. CRIAA SA-DC has a very clear mandate to be entering into commercially confidential agreements on behalf of clients and a high level of trust exists between partners.

In Namibia, the IFTT can play a very important role as a reference group for deciding whether and how to release information from publicly funded research into the public and/or the private domain. How this issue is resolved depends very much on the overall objectives for the Namibian natural products-based sector (see also Section 5.1 below), as the decisions taken could result in benefits from a new business accruing predominantly to the private sector rather than to producer organisations. It might be useful to draw up guidelines on how to deal with different types of information, as information on resource location and management, and even on processing, may be less vulnerable to being used by 'elites' for their own benefits than information relating to commercial contacts/networks and business plans. Nevertheless, each case will need to be reviewed in relation to the objectives for that particular product and the potential benefits it could bring to producers, individually-owned enterprises and the government (taking a strategic viewpoint) under different ownership scenarios.

14. Provide training in marketing, packaging and other processes necessary for sustaining an enterprise

There has been a tendency among aid agencies, particularly with respect to women entrepreneurs, to assume that the biggest hurdle they face is obtaining credit and inputs. This has resulted in the provision of start-up capital and very little training in marketing, packaging and other processes necessary for sustaining an enterprise or reading changes in market trends (Gaidzwana, 1993). As discussed above, it may never be possible for producers to keep ahead of sophisticated international markets without support from professional research and development organisations. But producers, or the managers of producer organisations, can be provided with sufficient training concerning market options, quality requirements, etc., to enable them to be active decision-makers within the value chain. This can be supplemented, as in the Bolivian ASOMEX case, with the establishment of a company with the specific aim of providing specialised marketing services for rural producers.

15. Donors shouldn't expect full cost recovery: many outputs are 'public good' functions

If business opportunities are really viable and the right arrangements are in place, service providers may be able to recover a large part of their costs, given sufficient donor support to cashflow in the early stages of establishment. Nevertheless, some activities may never be fully viable as independent enterprises. Humphrey (2000) argues, for example, that donors should not expect marketing intermediaries working with marginalised producers to be viable independent of external funding because the service they provide is correcting a market failure.

In some cases, donor investments can be written off as contributions to establishing wider development benefits beyond those directly related to the business concerned. For a few products, such as !nara, there is a close link between the geographic spread of the plant and a particular group of people (the Topnaar in this case). This makes it easier to decide that public funding for development of !nara should be seen as a contribution to improving the livelihoods of the Topnaar group and need not be recouped at the end of the process. However, similar decisions have also been taken where a resource is more widespread or its use is less linked to the indigenous knowledge of a particular group. In the Zimbabwe oil press case, the donor EnterpriseWorks did not expect to recover the costs incurred in developing or promoting the technology. Similarly the new Kalahari wild silk company is expected to lease the 'hard' assets of the business opportunity but will essentially be getting the preceding business development costs for free. The costs of demonstrating that a focus on sustainable harvesting and achieving certification can benefit all actors in the Devil's Claw case will also be written off. In all these cases, the investments are considered worthwhile because they demonstrate a model that can be followed by others and that clearly results in benefits for a wide range of people, often well beyond the limits of the original project participants.

16. Improve the external environment

In addition to research and development on specific products, and appropriate support for individual enterprises, successful value chains depend on a supportive policy and legal environment. As is illustrated by the *Hoodia* and *Sangre de drago* cases, the existence of IPR legislation which recognises local rights to control the use of, and benefit from, traditional knowledge is an important ingredient. Another element that is important at national level is the promotion of standards, e.g. of manufacturing practice or environmental sustainability. This is closely linked to the need for certification expertise (with respect to various different forms of certification), the potential benefits of which have been highlighted by the Devil's Claw case.

More generally, the Mexican case highlights the benefits of an integrated strategy at national level to promote natural product-based enterprises. Government support in coordinating the provision of marketing information is particularly key. Participants at the 2nd National Indigenous Fruit Workshop (IFTT, 2003) suggested that successful enterprises could be asked to pay into a fund which provides more coordinated assistance for the sector. In particular, the possibility of a one-stop shop to expedite the various permit procedures, support research and development, carry out marketing and generic promotion, help with technology intelligence and generally provide advice to the sector was put forward.

4. EXISTING POLICY, LEGISLATIVE AND BUSINESS SUPPORT AVAILABLE IN NAMIBIA

This section will review the current policy and legislative environment in Namibia and the types of support currently available to small and medium-sized enterprises based on the sustainable exploitation of natural resources.

4.1 Policy context for SME development

Namibia has an estimated 30,000 small businesses (Dahl and Mohamed, 2002). Most of these are much smaller than the MTI definition of a small business (Table 3) would suggest. In general they are sole proprietorships with only 2-3 employees (including the owner) and over 50% have a monthly turnover of less than N\$1,000. Their contribution to GDP is roughly 7.5% (Dahl and Mohamed, 2002). Nevertheless, given that small businesses tend to be more labour intensive and provision of employment is a priority in Namibia, there is strong government support for the sector.

Table 3. MTI definition of small businesses in the Namibian context

Sector	No. of employees	Annual turnover	Capital employed
Manufacturing	< 10	< N\$1 million	< N\$500,000
All other	< 5	< N\$250,000	< N\$100,000

Source: Dahl and Mohamed (2002)

The main thrust of Namibia's policy on Small Business Development (GRN, 1997) is:

- To increase the rate of growth of existing small businesses so that they can employ additional labour and help the self-employed to develop into businesses that will employ others;
- To reduce the rate of business failure, while increasing the rate of new business formation;
- To diversify the activities of the sector's business.

The policy framework assumes that the lead role in the development of the small businesses will be played by the sector's progressive entrepreneurs. It is on their ability to identify and exploit opportunities that the sector's future rests. The Government's role in the sector's development is seen as being one of *catalyst* and *enabler*. However, it is accepted, that the Government may have to intervene strongly in the initial stages in order to overcome the constraints to development imposed by the past. But this intervention will be in the form of de-regulation and incentives to improve the conditions for businesses to flourish; the Government has no intention of running business activities. The policy makes no specific mention of natural-product based enterprises.

Within the Ministry of Trade and Industry it is the Directorate of Industrial Development that oversees and co-ordinates the development of small and medium-sized enterprises. This includes inputs into the six areas that comprise Government's SME development programme: facilitation of access to finance, construction of sites and premises, technology transfer, purchasing of raw materials, marketing, and entrepreneurial training.

The Directorate of International Trade facilitates participation of Namibian companies in trade fairs, etc., and provides information on trade-related issues through its Trade

Information Centre (TIC). This is an open-access information centre and research facility provided by the Ministry to enable Namibian companies to research existing and potential export markets. The Namibia Investment Centre is Namibia's official investment promotion agency, with the aim of attracting, encouraging and facilitating both domestic and foreign investment in Namibia.

4.2 Biodiversity policy

Namibia has a 10-year strategic plan of action for sustainable development through biodiversity conservation (Barnard *et al.*, no date). This plan rests on the recognition of 15 basic principles, including three that are particularly pertinent to this consultancy:

- **Basic principle 6.** Traditional knowledge of biological resources and sustainable resource management deserves recognition, respect, and equitable treatment especially where benefits from the use of this knowledge arise.
- **Basic principle 8.** Decision-making about the allocation and use of Namibia's resources should be efficient, fair, honest, transparent and above all, objective.
- **Basic principle 10.** Effective, innovative partnerships and coalitions of government, individuals and organisations that use and manage biological resources are required to meet conservation and development goals.

The plan also highlights two strategic aims of relevance to the promotion of natural product based enterprises:

- **Strategic Aim 2.1** is to "Enhance capacity to harvest biological resources sustainably", including the development of markets for the sustainable harvest of natural resource products.
- **Strategic Aim 2.5** is "Promote and control bioprospecting and biotrade to generate sustainable benefits for Namibia", including 'improve national and local capacity to benefit from and control biotrade'. Key activities are the development of national scientific facilities and private enterprises to add value to genetic resources (target of 3 new value-addition enterprises or facilities established by 2005).

Following on from basic principle 6, amongst others, it is clear that the development of any enterprise based on products (or new versions of them) used by local people, needs to recognise the intellectual contribution of these people (or their ancestors) in some way. To ensure that this happens, Namibia has developed draft legislation on Intellectual Property Rights⁶ which attempts to protect local people's rights at the same time as not stifling research or enterprise. It also seeks to be in harmony with legislation and initiatives across the region, such as the Southern African Biodiversity Support Programme which is looking at trans-boundary sharing of resources. Namibia is proposing to adopt a *sui generis* system (i.e. of its own kind) that will meet national interests as well as those of the World Trade Organisation and its Trade-related intellectual property systems (TRIPS).

Unfortunately the legislation remains in draft form, in part because it is linked to a new Environmental Management Act (EMA), which has also been stalled. Namibia

⁶ This consists of two separate pieces of legislation on (i) Access to biological resources and associated traditional knowledge; and (ii) Access to genetic resources and the protection of associated traditional knowledge (Krugmann, 2001).

does already have a strategy for biotrade, as well as a working group on biotrade and indigenous knowledge. There is also discussion around the possibility of setting up a Bioprospecting Council which, in the absence of an agreed access and benefit-sharing regime, could appoint a negotiating team to support community rights. The proposed new law suggests the creation of an Indigenous Knowledge Fund, which would receive the money from royalties, etc. This would get around the problem of deciding who should benefit from indigenous knowledge that is held by a number of different communities or linked to a plant that is widely distributed around the country. It would provide funds to communities wanting to engage in value-addition activities, such as quality analysis of different varieties, preservation of stores, etc.

Linked to the IPR issue is the question of who owns and is responsible for resource management. Legislation passed in 1996 granted exclusive rights over game animals to communal-area institutions called 'conservancies'. The current trend towards more Community-Based Natural Resources Management extends the use of management plans and benefit-sharing mechanisms to all resources, not just animal wildlife (Krugmann, 2001). The new 'community forest' status is an important step towards giving communities formal control of their forest areas. The new Forest Bill requires that the Traditional Authorities approve any local application for gazetting community forests. It also requires that the forest management plan responds to the needs of the community in an equitable way (Shitundeni and O'Brien, 2001). Community forests will be multi-purpose areas (not conservation zones) with livestock and some mahangu fields, and would also cater for managed exploitation of other natural product resources such as marula and manketti.

4.3 Support available for small businesses

The support available is mostly general to all small businesses with none being specific to the natural product sector. A NEPRU study of over 200 small businesses found that financial support was by far the most critical issue. Although there appear to be various sources of credit, only 10% of the businesses who had tried to obtain financial support had in fact succeeded (Dahl and Mohamed, 2002). Most support is either in the form of credit or business planning (often required in order to obtain credit). Some of it is supported by the government and the rest by donors and NGOs.

Government services include:

- The Small Business Credit Guarantee Trust of the MTI. This is one of the better known financial services available and enables small businesses to obtain commercial loans by providing a guarantee for up to 80% of the principal loan amount.
- Business Plan support. In order to obtain any kind of business loan, a business plan is needed. The MTI runs a Feasibility Study and Business Plan Support Programme. Unfortunately the quality of the resulting business plans is variable and there are few resources to mentor entrepreneurs during the implementation phase.
- The MTI's Vendor Development Programme is designed to help small manufacturers negotiate a deal with their retail customers (e.g. in case of language problems), but again cannot help the manufacturers actually meet the terms of their deal.
- Business Sites and Premises. This MTI scheme creates industrial parks on the outskirts of towns, where people can rent premises at a reasonable rate.

- Networking and linkages. Some of the most important support to business involves putting people in touch with each other through support to trade fairs, 'Women in Business' associations, business exposure visits, etc.
- Support to co-operatives. The lack of middlemen in Namibia is one justification for the push to establish more co-operatives. The Division of Co-operatives in MAWRD can provide training in leadership, business plans, accounting and audits to nascent co-operatives. Some mentoring has been available during the development of the business plan but none during the implementation phase. Currently there is no apex organisation to provide support for co-operatives so the government has to provide these services, for better or worse, in addition to its statutory role of monitoring compliance with legislation.

The quality of much of this support is variable and monitoring of its impact almost negligible. Given the low percentage of businesses that actually export, it is not surprising that the services provided are not tailored in any way to meet the specific needs of natural product-based enterprises. To be really useful, such services would need to cover all aspects from resource management to processing technology and market research, requiring good coordination between MTI and MAWRD.

Non-governmental services include:

- Various microcredit schemes. These include STEAR, a new regional project being set up by DFID and MAWRD with a small grants fund of N\$750,000 to help set up businesses in Kavango and Caprivi. FAO also has a small microprojects fund just starting.
- SUFEI project (Support to Farmers' Economic Initiatives). This is a project of the Namibian National Farmers Union, funded by French Co-operation. Amongst other things it provides institutional support to the four regional co-operatives in the North-Central region.
- Probably the most relevant type of support currently available for natural product-based enterprises comes through Phyto Trade Africa (previously SANProTA, the Southern African Natural Product Trade Association). This organisation provides access to information about how various natural resources are managed and marketed in other countries in the region. Information is available to all members, of which the most important (in terms of being able to pass on relevant information) in Namibia are CRIAA SA-DC and the IFTT.

5. RECOMMENDATIONS

5.1 Why promote natural product-based enterprises in Namibia?

Recommendation 1: Aim for the top

Inexorable trends towards liberalisation and globalisation are raising the pressure on countries to compete in international markets, or suffer increased marginalisation (Ramírez Farías, 2001). In theory many opportunities (as well as problems) are opening up for small producers (Dawson, 2002a). At the same time, poverty reduction is a growing priority for governments and donors alike. An increasingly popular approach to succeeding in international markets as well as reducing poverty is, therefore, to promote niche markets.

It is within this context that the IFTT was established, representing a national desire to diversify exports away from meat, fish and mining in a way that would also benefit the poor. Given the combination of Namibia's extreme geography and its relatively limited human capacity, the obvious niche sector to focus on was one based on natural products that are unique to Namibia. The Strategy and Action Plan for Promoting Indigenous Fruits in Namibia (du Plessis, 2001) proposed the following long-term goal for the promotion of indigenous fruit in Namibia:

“Stable and sustainable production systems and long-term markets have been established for a range of indigenous fruits and/or indigenous fruit products, on terms advantageous to the livelihoods and food security of rural harvesters and producers in Namibia.”

A key element of this vision is the desire to achieve commercialisation in such a way that it benefits the rural poor. But how to do this can be approached in rather different ways. Discussions with members of the IFTT made clear that this has been a point for ongoing debate. There is a justifiable interest in providing small improvements for producers and small-scale entrepreneurs in the immediate term. But is it sufficient to help a few producer groups find new markets for their raw materials and possibly promote a small amount of local-level and small-scale processing to bring in employment? A strategy aiming in this direction will sooner or later run into the problem that local-level processing is unlikely to ever be able to meet the quality and quantity requirements of international markets. It is therefore restricted to supplying the domestic market. However, the Namibian population is small and the proportion that has any kind of disposable income is smaller still. The domestic market will, therefore, always be a very limited destination for non-staple natural products.

To achieve any kind of widespread beneficial effect, the product must therefore be exported to the much larger international market. Given the high transport costs from Namibia, a key point must be to achieve a high value to volume ratio, most obviously through technically innovative local processing. Here Namibia will have much competition, particularly from its two large neighbours, South Africa and Zimbabwe. Both countries have similar natural resources, larger labour forces and more powerful economies (albeit 'on hold' in the case of Zimbabwe). To stay ahead of the competition, the only obvious course of action is to be the best and, in this way, to attract high-level investment into innovative technology enabling a thriving Namibian natural products industry to stay one step ahead of the game. This would ensure a degree of stability and bring in benefits to rural producers through guaranteed markets, better prices and employment. Knock-on impacts on agriculture would lead to the creation of a diversified and profitable resource base including plants such as marula, wild melon, manketti and others specifically adapted to the Namibian environment.

This may sound like a grand vision for Namibia, but the timing is right with a strong start having been made on some products by PIF I and the advantage of a good coordinating mechanism (the IFTT) in place. A coherent and sustained strategy is now needed to capitalise on these assets and take the process forward. Coherent does not mean that the strategy should be prescriptive. Given the wide range of products being investigated (from snack foods to cosmetic oils, drugs, fruit juices and liqueurs to name but a few), it is clear that the full spectrum of issues, all the way from resource management to production technology and market features, is very different for each product. An appropriate strategy must, therefore, be differentiated enough to cope with all kinds of products but nevertheless take a generic approach to key issues that arise almost regardless of product type.

5.2 Successful R&D of new product value chains

Recommendation 2: From IFTT to IPTT

The IFTT has been very effective in coordinating the first phase of the PIF project. Its members have, between them, accumulated a large body of relevant experience, enabling them to reach informed decisions on most issues. One of the advantages of having a small population is that this kind of relatively informal coordination is feasible. The downside is that it is often the same people who are called upon to contribute to several related working groups. To avoid any duplication of effort for non-fruited plants, I therefore strongly support the recommendation of the Second National Indigenous Fruit Workshop, that the IFTT should open up to all indigenous plants and become an Indigenous Plants Task Team (IPTT⁷). The new task team needs to have very clear terms of reference to enable it to focus on fewer plants and issues rather than dissipating its energies on too wide a range of topics.

Although the IFTT made excellent progress on coordination, the IPTT should try to obtain greater involvement from the MTI, civil society groups (including the NNFU) and the private sector wherever possible. The lack of participation of these stakeholders may in part have been due to the IFTT's success in having meetings at almost monthly intervals, which could be a serious obstacle to the attendance of people from outside Windhoek and from the private sector. My suggestion would be to consider more work in sub-groups either by region and/or by theme. In the case of thematic sub-groups these can be set up to deal with very specific issues with clear sunset clauses. A good one to attract more MTI participation might, for example, deal specifically with 'how to promote natural product-based enterprises' (see also Recommendation 4). Full meetings of the IPTT could then be held at less frequent intervals and focus more on new and overarching issues.

The IPTT needs to think about establishing a process that will outlive the task team itself. It currently carries out some of the activities that might be expected from a Research Council. These include coordinating research, providing a focal point for reports from foreign researchers, and even brokering a deal between Namibia and the CSIR in South Africa giving CSIR permission to screen a range of plants for cancer drugs. It is hoped that a Research Council might be set up in a few years time, at which point many of these activities could be handed over.

Recommendation 3: Implement a sustained and comprehensive programme

Section 2 highlighted the many different functions that may be required within a value chain, as well as the types of organisations that can be involved. Together with the lessons learned in Section 3, these outlined a number of activities that need to be carried out for any new product. These are summarised in Box 5. Taking an integrated approach to these activities is very important if a new value chain is to be developed effectively. It is all the more true if several new value chains are being developed at once. Not only may there be actors (e.g. producer groups or processors) operating in more than one chain, but the reputation (good or bad) developed with one product may make clients and partners more or less likely to engage with Namibian producers again in the future.

My suggestion would be to set up a sub-group of the IPTT to take a decision on the best mechanism for achieving such an integrated approach. Here I give three possible scenarios for consideration.

⁷ I use IPTT here for simplicity's sake although it may be that the new task team decides to change its name.

Box 5. Activities to be carried out in the development of a new product value chain

- (i) Define the resource/product. This is particularly important where related species have slightly different characteristics (e.g. in the case of *Strychnos* fruit or *Ximenia* seeds).
- (ii) Map out the potential market chain, any existing actors and relationships between them.
- (iii) Diagnose bottlenecks for existing actors and design/carry out research to overcome these (including resource assessments, prototype technology development, product characterisation, etc.).
- (iv) Highlight gaps in the market chain where necessary functions are not being performed by any actor.
- (v) Carry out SWOT-type analyses to determine whether these functions could be carried out by existing actors.
- (vi) Ensure that there is a recognised entity that can deal with international buyers in a professional way.
- (vii) If there are functions in the chain that cannot be catered for by existing organisations, then consider establishing new ones and attracting external funding to support them as appropriate. These new organisations should have very focused objectives and might include any or all of the following:
 - Producer organisations (e.g. informal associations or co-operatives with a focus on facilitating production and quality control, including provision of extension advice, inputs on credit, etc)
 - Intermediary traders of raw material (focus on bulking up, grading and moving raw material from one place to another. Activity may be carried out by the producer organisation.)
 - Processors
 - Intermediary traders of processed product (responsible for bulking up and moving processed product from one place to another.)
 - Marketing organisation (responsible for making links between producers and buyers)
- (viii) Provide support to existing and new enterprise(s) in the market chain. Depending on the degree of formality of the enterprise, whether it is a group or individual enterprise, the degree of experience of its managers, etc, this might include financial support, BDS, management of relationships with other actors (including international buyers) in the chain, etc.
- (ix) Distinguish activities that may be 'privatised' and those that will need ongoing support.
- (x) Design exit strategies for public support.
- (xi) In addition to work on individual value chains, consider how to improve the overall context for development of natural product-based enterprises.

Scenario 1. CRIAA SA-DC does business as usual

For a new product, it makes sense for the government to pay a single organisation to coordinate all the activities in Box 5, with different elements of the process being carried out (as subcontracts) by different organisations. Thus the research element might be carried out by a number of different academic and NGO organisations, both Namibian and foreign as appropriate. Similarly the support for new enterprises might in part be provided from existing government schemes (e.g. those for co-operatives, small business credit guarantee schemes, trade fairs, etc). An important requirement should be that the organisation asked to coordinate the process should not itself get involved as a commercial actor in the production to consumption system.

One option would be to continue with the hitherto very effective model and provide further funds for CRIAA SA-DC to coordinate the R&D for new products. However,

the fact that several CRIAA SA-DC members have expressed dissatisfaction with the current system suggests it may be time for a change. This model causes problems for CRIAA SA-DC when it – almost unavoidably – finds itself caught up in playing the role of a commercial actor in the chain. In the case of melon seed oil, for example, CRIAA SA-DC could only make the whole system work by advancing cash-flow and buying the product itself. In general, the difficulty of an NGO working in a commercial domain means that misunderstandings about whose money is being used and who is making profits arise too easily. It is also not clear to what extent CRIAA SA-DC always has a formal mandate to take decisions (and sign contracts) on behalf of producer groups, and this may deter potential international partners from getting involved. Finally, the current system with current levels of funding is unlikely to be sufficient to enable the Namibian natural products sector to capitalise on progress made to-date and move ahead of its competitors.

Scenario 2. Establish a specialised natural products marketing company

In this scenario, overall coordination of activities would rest with the IPTT as in scenario 1, and CRIAA SA-DC would continue to be involved in much of the product research and development. A new for-profit organisation would be set up, however, to fill the particular gap in the area of marketing expertise specific to natural products. Such an intermediary organisation could play a vital role in linking producers to new markets and building their capacity to compete successfully in them. This is particularly true for products entering the international market. In the case of marula and melon seed oil, this role has been filled by CRIAA SA-DC. But, as outlined above, this has led to confusion about the distinction between its role as an NGO and as a commercial actor in the marketing chain.

Given that the volumes of indigenous natural products reaching the export market from Namibia are small, and that the marketing issues (in terms of finding an international buyer) for many natural products will be similar – but rather different from those facing conventional products – there seems to be a strong case for a single natural product-based marketing organisation (rather than one per product)⁸. This could provide specialised BDS to a number of different natural product-based enterprises. Rather as in the ASOMEX case study from Bolivia, it could offer a range of services depending on the needs of the clients:

- (i) *Intermediary trader (middleman)*. Buys from the primary producer and sells on to processor, exporter, etc.
- (ii) *Export processing service*. Facilitates links between producers and commercial buyers.
- (iii) *Intermediary marketing organisation*. Identifies market linkages with appropriate buyers. Plays a key role in understanding both how the destination market works and the social development needs of the producer businesses.

Depending on the services offered, the marketing organisation would have a variety of ways of bringing in income. However, given the lag time between the early marketing of a product and achieving a sustainable level of profits, the organisation could not be expected to be fully self-funded from year one. It would need venture capital from a source that is supportive of the general ideals of natural product-based businesses, i.e. that they are often justifiably concerned with producer welfare and not just business profits. Such venture capital could come from:

- Government – as an indication of national support for the sector;

⁸ To avoid the risks of inefficiency and monopoly associated with a single company, consideration might also be given to encouraging the establishment of several companies, perhaps specialising around particular product groups, producer regions or types of service.

- Charitable sources – in addition to conventional charities, a good source of finance might be large companies which are keen to show their shareholders that they reinvest some of their profits in activities that benefit disadvantaged sectors of society;
- Commercial sources – e.g. the growing number of pension and equity funds interested in promoting ethical business.

In practice, within Namibia, the most obvious solution might be for CRIAA SA-DC to split off a commercial arm and for this to form a joint venture with government and commercial partners. Though focusing on Namibian products in the short term, it could also extend to cover other countries in the region.

Scenario 3. Establish an incubation unit for natural product-based enterprises

Since the concept was first developed in the 1980s, business incubation has become increasingly popular in the industrialised world and in developing countries. Business incubators aim to maximise the chances of success of start-up companies by creating a supportive environment. Typically this involves offering management assistance, mentoring, access to financing, flexible and low-cost leases, office services, etc. (Klok, 2001). In addition to operating as model business operations themselves, they usually aim to have a positive impact on their communities (NBIA, 2003). The great majority of incubators are non-profit and are set up to help achieve development goals such as generating jobs, improving the economic climate, creating a regional technology infrastructure and commercialising new technologies. They usually pay their way by charging rent supplemented by consulting fees and subsidies. In developing countries, they often involve universities and are generally funded by governments (Klok, 2001). A few for-profit incubators pay their way by taking an equity stake in their client companies in exchange for services provided.

Evidence from the US suggests that job creation through business incubators is far more cost effective than by other publicly funded routes (NBIA, 2003) but similar information is still lacking for developing countries. In the Namibian case, a business incubation unit could be set up with a combination of government and private equity funding, and would offer a mechanism for resolving many of the current problems in taking the natural product sector forward. This includes the fact that there is no identified identity or company for international buyers to deal with, and that the risks associated with developing most natural products are too great for private entrepreneurs to undertake.

It would need to:

- Deal with lots of products;
- Incubate both the business opportunity and the technological infrastructure (of how to convert the raw materials into final product);
- Be both commercially aware and proficient in science/technology;
- Maintain good bookkeeping to determine where profits are made;
- Maintain contacts between producer groups and consumers;
- Manage the relationship with a company in a trustworthy manner, and be able to deal with commercial confidentiality issues;
- Trade, send out samples, draw up contracts, understand material transfer agreements, patents, etc.;
- Understand Good Manufacturing Practice (GMP) standards, which are required to attract big buyers (e.g. nutraceutical companies), and other certification schemes.
- Manage all the activities in Box 5.

Once a process has been shown to work (e.g. oil filtration), it can be split off as a private enterprise, using some of the criteria developed by the working groups at the 2nd National Indigenous Fruit Workshop (IFTT, 2003).

There is a feeling among ITFF members that Namibia's greatest opportunities for growth lie in the small business sector and manufacturing of niche products for export. However, this is clearly a very specialised sector given that currently only 4% of small business in Namibia sell their products on the international market, and there is no mention of natural product-based enterprises at all in the 1997 SME strategy. Supporting an incubation unit or similar entity would help the sector succeed, and be in line with the strategy's acceptance that government may need to intervene heavily in the initial stages.

5.3 Creating a supportive policy and legal environment

Recommendation 4. Provide high-level endorsement for the sector

Although natural products are typically very important in subsistence livelihoods as well as bringing in incomes for a large proportion of people, they are almost always overlooked at the level of national statistics. In the case of marula in South Africa, for example, Wynberg *et al.* (2002) argue that the considerable support for it at the level of political rhetoric has yet to be translated into reality through concrete research, marketing and legal initiatives that promote and do not hinder its commercialisation and sustainable use.

As outlined in Section 5.1 above, the success of Namibia's natural product-based enterprises to-date owes a great deal to existing high-level government support from, amongst others, the President, the Minister of Agriculture and the Minister of Education. The establishment of the IFTT, as a nationally endorsed body, and the resources allocated to it have been instrumental in keeping Namibia one step ahead of its competitors. It is important that this support is maintained and that attention is paid to creating a favourable policy and legal environment in order to attract companies to invest in relationships with Namibian natural product-based enterprises. A symbolic gesture, which has been seen to work well in Mexico, might be to create a Namibian 'natural products' logo which could be used at trade fairs, on contracts and promotional materials, etc.

Recommendation 5. Promote expertise on standards and certification

The government needs to provide some support for certification and for monitoring standards. Many niche products will achieve better prices if they are certified as either organic and or community traded (fair trade). But the costs of getting certified are high, mostly due to the need to import the expertise of the certifier. If companies can be convinced that Namibian enterprises apply recognised labour, manufacturing and environmental standards, they are more likely to do business with them.

The key issue now is not to set up a separate certification body for natural product-based enterprises, but to ensure that the specific certification needs of the natural product sector are taken into account as other more general schemes are set up. Thus MAWRD is in the process of setting up a certification agency, beginning in the meat sector where volumes are high. The certification agency will be set up as a small unit depending on a new Agricultural Council, which will be registered as an independent institution with the WTO and will manage and oversee the Meat Board, Agronomic Board and Karakul Board. The certification agency may consist simply of a Board, a constitution and an administrator plus a roster of trained consultants who can be pulled in to certify various products. To be taken seriously by organic industry

buyers it must be seen to be independent of government, and will be capitalised by levies on the three Boards.

At present it is not quite clear how this certification body would link to the Standards Office set up by TIDP, but the latter should also ensure that Standards Office is capable of dealing with natural product-specific issues.

Recommendation 6. Expedite passing of Namibian IPR legislation

Updating and passing Namibia's draft legislation on (i) Access to biological resources and associated traditional knowledge; and (ii) Access to genetic resources and the protection of associated traditional knowledge would clarify some of the IPR issues related to natural products use. It is very likely that the first batch of *Hoodia*, a protected species, will soon be exported, creating a test-case for existing legislation. A particular issue for marula (and other species that may be included in farmer-led improvement programmes) is that any legislation must consider how to protect community-based cultivars from unfair exploitation and expropriation. In Namibia there is evidence that local people have, through years of selection, created trees with particularly good fruit characteristics. It is essential that associated commercial benefits (e.g. from vegetative propagation) accrue to the communities involved in selection and development of cultivars (Wynberg *et al.*, 2002).

In updating the draft legislation, efforts should be made to get the right balance between protecting against potential threats and creating an environment that promotes enterprise and attempts to valorise actual opportunities. In the absence of legislation, a good interim measure would be for the IPTT (or a sub-committee) to draw up guidelines on the essential principles relating to Access and Benefit-Sharing (ABS) which would need to be incorporated into any business contracts to ensure benefits are delivered fairly.

Recommendation 7. Provide support to ongoing strategic research and capacity-building

As highlighted earlier, there will always be an important role for government in supporting strategic research that provides benefits to more than a single company. At the same time there needs to be a serious investment in very specific capacity-building that focuses on the multi-disciplinary approach needed to carry out R&D for new products.

5.4 Providing support to the Eudafano Women's Co-operative

Recommendation 8. Aim to attract project support for the EWC

The EWC is at the end of its 4-year provisional registration period and needs to submit a business plan in order to achieve full registration as a co-operative. There are conflicting opinions about the scale of activities it should aim for in its business plan. One option would be to focus on collating produce (both marula kernels and melon seeds), while another would see it aiming to carry out a certain level of processing locally.

In spite of some support from the Division of Co-operatives, the President's Office and CRIAA SA-DC, the EWC currently has very limited administrative capacity and does not have sufficient funds to pay for a professional manager or book-keeper. It has suffered from many managerial problems in the last year, the possible misappropriation of funds, misunderstandings and recriminations, and the dismissal of several Board members during an extraordinary AGM in December 2002.

The 9-member Board more or less represents the member associations but is highly dependent on CRIAA SA-DC for help in managing the marula and melon seed value chains. In spite of frequent workshops organised by CRIAA SA-DC (four times a year over the last four years), some members still do not realise that CRIAA SA-DC has negotiated with The Body Shop on their behalf, and that payment for the kernels comes direct from the UK and not from CRIAA SA-DC's own funds. Association members are not aware of any written contract between CRIAA SA-DC and the EWC and are concerned that the level of 'profit' made by EWC (about 6.66%) is not sufficient. These concerns are based on several misapprehensions, which need to be dispelled:

- (i) Local women find it hard to believe that any organisation involved in business (in this case, CRIAA SA-DC) could really be not-for-profit;
- (ii) There is confusion about the current role of the EWC. It was, in fact, set up as a service provider – acting as a legal point of contact – for its member associations. The 6.66% is the proportion of export proceeds which the EWC management estimated could be drawn down (to cover the cost of the AGM and new activities) without jeopardising the revolving fund set up to cover the costs of kernel procurement, processing and export);
- (iii) It ignores the fact that a high proportion (35%) of the total value of the CIF price paid in the UK for the unrefined oil reaches the primary producers.

There is a feeling among some EWC members that they are not in control of the value chain process and would prefer to process the oil themselves in Ondangwa. Although the EWC could, in theory, buy out the marula presses and set them up in the North, it does not yet have the capacity to deal with all the technical issues (from dealing with electricity cuts and damage to cold stored oil, to selection and management of employees). One problem in terms of creating capacity in EWC is that both marula and melon seed have similar seasons, leaving the EWC with very few activities for the rest of the year. The first step in any business plan really needs to be to strengthen the co-operative so that it can control the *process* of marula kernel collation, processing and sale. Rather than attempting to deal with all the headaches of processing itself, the EWC should learn how to outsource the processing of its members' marula kernels to CRIAA SA-DC and KAP, or indeed to Oontanga Oil or any other company that might offer a good service. The essential ingredient is that the managers of the EWC should be given sufficient capacity-building to be able to differentiate between different possible service providers and assess the risks and benefits associated with each. Similarly, they need to be able to understand enough about the value chain and returns of different options to choose between selling their melon seed to SSO in the UK and having it processed in Namibia by, for example, Oontanga Oil. The latter option was suggested by The Body Shop but turned down by the EWC leadership, presumably because they believed that profits to their member were higher in the SSO scenario, but the reasoning underlying their decision has not been made sufficiently clear to the membership, some of whom are still convinced that local processing (whoever by) would inherently be more profitable.

The EWC needs general organisational skills, financial training and advice on drawing up and managing contracts. Rather than rely on the Division of Co-operatives for help or assume that CRIAA SA-DC can provide this capacity-building, it would be preferable to link the EWC with a project that specialises in providing support to farmers' organisations. A good opportunity might be the new phase of the SUFEI (Support to Farmers' Economic Initiatives) project which is in the process of being negotiated.

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Appendix 1. TERMS OF REFERENCE

Consultancy Looking Into Appropriate Ownership Models for Natural Product-Based Small and Medium Enterprises (SMEs)

1. Introduction

The project « Promoting Indigenous Fruits in Namibia » of the Indigenous Fruit Task Team (IFFTT) has approached the EU-funded Trade and Investment Development Programme (TIDP) within the Ministry of Trade and Industry (MTI) to sponsor this consultancy. MTI/TDIP has agreed in principle to fund this joint effort.

2. Background and outstanding issues

The Indigenous Fruit Task Team (IFFTT) was formed in May 2000 as a major output of the first Promotion of Indigenous Fruit workshop held in April 2000, which recommended « to develop a co-ordinated approach and strategy for the implementation of an economically sustainable promotion of indigenous fruits in Namibia ».

The objective of the promotion of indigenous fruits (PIF) programme, steered by the IFFTT, is as follows;

- To promote the sustainable use of indigenous Namibian fruits and plants for:
 - ⇒ greater household food security
 - ⇒ agricultural diversification
 - ⇒ income and employment creation
 - ⇒ innovative agro-industrial development

The IFFTT membership consists of representatives from relevant stakeholders in government departments, academic institutions and NGOs.

The first output of the IFFTT was the preparation and publication of a *Strategy and Action Plan for Promoting Indigenous Fruit in Namibia* based on the first workshop deliberations.

With funds from the Ministry of Agriculture, Water and Rural Development (MAWRD), the IFFTT has commissioned some consultancy work, particularly the Phase 1 of PIF project (to CRIAA SA-DC) which has been implemented from March 2001 to October 2002 (draft final report available).

PIF Phase-1 project has gathered, by way of applied research and multi-disciplinary development approach, environmental, socio-economic and commercial information required for planning further phases in the promotion of sustainable indigenous fruit utilisation in Namibia. The priority species of indigenous fruits for promotion have been identified as : Marula, Manketti, 'wild' watermelon seeds, *Berchemia* (eembe), *Strychnos* spp. (omauni), *Ximenia* spp., !Nara and Jackalberry (Eenyandi).

However, the IFFTT has failed to resolve the issue of appropriate ownership models for natural products (NP)-based SMEs that could result from its work. In short the following questions remain un-answered:

- Who is/are supposed to own the commercial opportunities created by PIF?
- How and under what conditions will this ownership be conferred?
- What are the implications of this for who gets access to which commercial information, and when?
- To what extent should PIF support private sector initiatives around indigenous fruits?

The consultants implementing PIF Phase-1 recommended that such questions will best be answered in an open forum with maximum stakeholders participation, which would coincide with the second national workshop planned for early 2003.

Because the issues revolving around appropriate ownership models for NP-based SMEs are complex, it will be more efficient to guide discussions at this 2nd national workshop with the results of a specific study investigating appropriate ownership models for natural product based SMEs in Namibia.

3. Objectives

- To present a critical review of options of ownership models for NP-based SMEs based on an assessment on the situation in Namibia and with reference to relevant international experiences.
- From consultations with local stakeholders in the promotion of NP-based SMEs, recommend on the most appropriate options to the Namibian context and document the best way forward for promotion by public-led and/or private-led interventions.

4. Tasks

The tasks are phased in two successive components. The consultant shall:

A. Investigation:

1) Review progress and results of IFTT work, including Phase-1 of PIF project, and consult key stakeholders, particularly IFTT members, but also NP actors at central and local level in different regions of Namibia

2) Review past (recent) and present experiences in Namibia of public-led interventions and private-led initiatives towards the commercialisation of natural resources and the creation/development of NP-based SMEs

3) From own experience and desk-top study, present key factors of success (and failure) of similar efforts to promote NP-based SMEs in other countries of Africa and possibly in other continent(s), which could be relevant to Namibia

4) Document relevant case studies of existing, emerging or promising NP-based SMEs in different regions of Namibia; provisionally the following are suggested:

- NCRs: individuals and village associations utilising small-scale marula fruit presses, Eudafano Women Co-op. (EWC) with Marula and melon seeds, Oontanga Oils (Ondangwa), King Nehale Resource Trust (Omuthiya) and Rossing Foundation, Okongo Community Forestry projects;

- Kavango: informal Kashipembe industry (manketti fruit brewing and distillation), Strychnos liqueur factory;
- 5) Review the Namibian regulatory environment for the promotion of SMEs based on the sustainable exploitation of natural resources
 - 6) Assess viable opportunities for the creation/development of NP-based SMEs along the supply/market chain of key natural products for local and/or international markets that maximise local value-adding, provide maximum benefits for NP primary producers in rural areas, and encourage sustainable use of natural resources
 - 7) Articulate sound business requirements and ownership models for such SMEs taking into account potentially conflicting dichotomy, such as:
 - supply versus demand situation for key NPs
 - local / export markets
 - low-tech / high-tech processing technologies (technologies in a broad sense)
 - high-value low-volume / low-value high volumes market opportunities
 - locally-centred enterprises / international commercial partnership
 - Foreign investments / local participation
 - location of SMEs close to / far from resources and communities
 - Equity participation of organised local communities / private sector ownership
 - 8) Conclude on a range of options with strength and weakness of each model in the Namibian context
 - 9) Present conclusions at the national IFTT workshop, guide deliberations and building consensus on appropriate options and way forward
 - 10) Consider issues surrounding start up capital (credit) and working capital for such organisations taking into account the seasonality inherent in production, variability in demand for natural products and absence of collateral amongst most stakeholders

B. The way forward :

From the resolutions of the national IFTT workshop, prepare a report on the way forward for selected ownership models to be promoted, which should include:

- Training needs (extension services) for SMEs, in the area of 'growing, collecting, processing, marketing'
- Financing and capitalisation of SMEs, sources of funds (public, donors, private, ...)
- Policy development needs (if any)

5. Outputs expected

- Report on the investigation phase
- Presentation of results, conclusions and options, at the national IFTT workshop
- Final report on the way forward incorporating comments from the workshop

APPENDIX 2: ITINERARY AND PEOPLE CONSULTED

Date	Name
21 st March 2003	Meeting in London with Cyril Lombard (CRIAA)
30 th March 2003	Flight from London to Windhoek (via Jo/burg)
31 st March 2003	Arrival in Windhoek
31 st March 2003	Introductory meeting with Mr.Klaus Handschuh (Coordinator, Trade and Investment Development Programme, Ministry of Trade and Industry)
1 st April 2003	8.30 Meeting with Mr. Klaus Handschuh, Mr. Michael Kehoe (Trade Promotion and Export Development Advisor, TIDP, MTI) and Mr. Pierre du Plessis (CRIAA SA-DC)
	Afternoon: background reading and sorting out Windhoek meetings
2 nd April 2003	8.00 Mr. Ipinge, Acting Director, Plant Research, MWARD
	10.00 Ms. Salmi Kaulinge, Partner in Oontanga Oil Producers cc.
	12.45 Lunch meeting with Klaus Handschuh and Eline van der Linden
	15.00 Ms. Patricia Keeja, Registrar of Co-operatives, MAWRD
3 rd April 2003	9.00 Mr. Steve Motinga, Industrial Development Directorate, MTI
	10.00 Mr Staal Burger (in private capacity as <i>Strychnos</i> liqueur entrepreneur)
	11.00 Mr. Christof Brock, Chief Executive Officer, Namibian Agronomic Board
	13.00 Ms. Mary Seeley, Desert Research Foundation Namibia
	14.30 Ms. Esther Lusepani Kamwi, Deputy Director, Forestry Research, Directorate of Forestry, Ministry of Environment and Tourism
	16.00 Mr. Sem Shikongo, Head, International Conventions Unit, Directorate of Environmental Affairs, MET
4 th April 2003	Morning: sorting out logistics for field trip
	12.00 Ms. Herta Kolberg, National Botanical Research Institute
	13.00 Mr. Pierre du Plessis, CRIAA
	14.00 Mr. Dave Cole, CRIAA
5 th April 2003	Completing logistics for field trip and background reading
6 th April 2003	Travel to Rundu
7 th April 2003	8.00 Mr. Henri Guillaume (Lux Devt) and Mr. Chris Smit (Manager of Mashare Agricultural Development Institute)
	10.00 Mr. Rolf Sprung (Forester) and Ms. Hirut Terefe (Agroforester), DED Community forestry project
	Afternoon: travel to Ondangwa
8 th April	Morning: organising meetings
	12.00 Mr. Roger Gamond, CRIAA (marula juice presses)
	14.00 Ms. Frieda Haufiku, Chairperson Eudafano Women's Co-operative (EWC)
	18.00 Ms. Priscilla Nashandi and Ms. Joanna Amutanya (Nkugoyepongo Association, part of EWC)
9 th April	9.00 Ms. Phenny Kalumbu, partner in Oontanga Oil Producers cc.
	12.00 Visit to Ondangwa market
	14.30 Mr. Bertrand Dayot, Extension Services
	16.00 Ms. Eтуhole Ingo, Program Coordinator, NNFU (Support to Farmers Economic Initiatives)
10 th April	10.30 Ms. Ndinelaо Weyulu, Agricultural Extension Technician for Ondobe
	12.00 Visit to Oshakati market
	14.30 Mr. Ananias Usiku, MTI Ondangwa Regional Office
	18.30 Ms. Julia Nepembe, EWC, Onungdewa
11 th April	11.00 King Nehale Resource Trust, Omuthiya (Chairperson – Mr. Emanuel Charly Johannes, and 20 committee and community

	members), also Mr. Metusalem Ashipala, The Rossing Foundation
12 th April	Return to Windhoek
13 th April	Background reading and drafting report
14 th April	08.30 Mr. Ben Bennett, Senior Economist (international trade negotiations and marketing), National Agricultural Support Services Programme, MAWRD
	10.30 Mr. Tileinge Andima, Deputy Director, Internal Trade, MTI
	11.15 Telephone interview with Mr. Keto Mshigeni, Regional Project Co-ordinator (Unrealised wealth in Africa's biological resources), UNDP, University of Namibia
	12.00 Mr. Christophe Rigourd, Namibian National Farmers Union
	14.15 Mr. Michel Mallet, CRIAA
	15.30 Ms. Stier, Stier Henke Associates
15 th April	Drafting report
	14.00 Departure for London
16 th April	Arrival in London
17 th April – 3 rd May	Intermittent work on Report. Further research with Body Shop, etc
5 th May	Flight from London to Windhoek (via Jo/burg)
6 th May	Arrival in Windhoek
7 th May	Travel to Tsumeb
8-9 th May	Participation at 2 nd National Indigenous Fruit Workshop in Tsumeb. Return to Windhoek.
10 th May	14.00 Departure for London
11 th May	Arrival in London
2-22 nd June	Intermittent work on Report
13 th June	Meeting with Cyril Lombard, London
22 nd June	Submission of draft report
13 th August	Incorporation of comments on draft report
14 th August	Submission of final report