

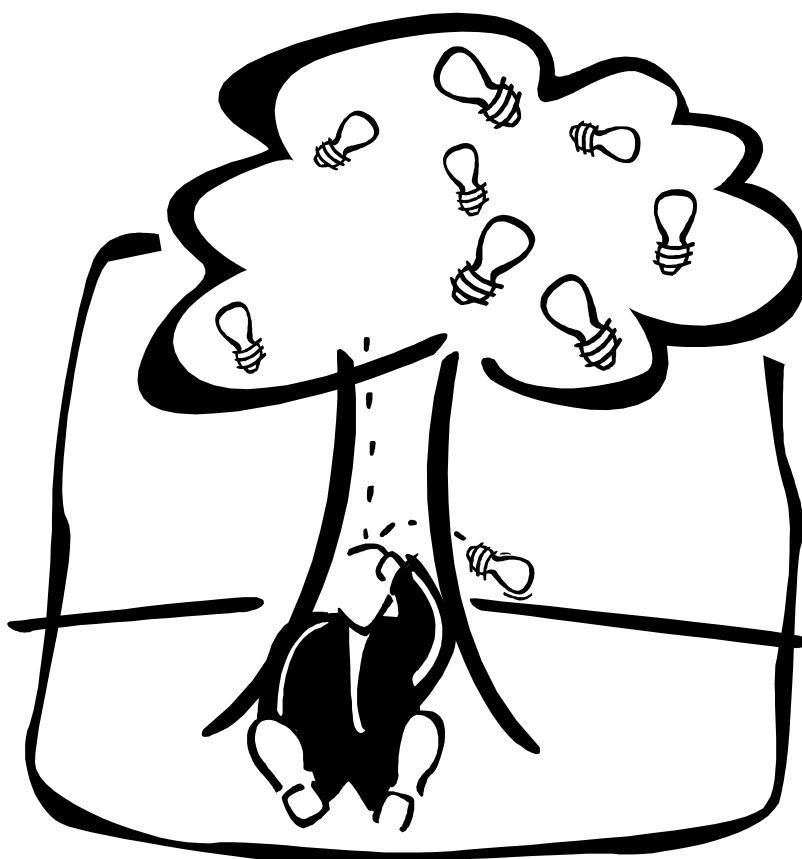
PROCEEDINGS

of the

WORKSHOP to DEVELOP a STRATEGY for the PROMOTION of INDIGENOUS FRUITS in NAMIBIA

17 and 18 April 2000

Greiter's Conference Centre, Windhoek



Prepared for

**Ministry of Agriculture, Water and Rural Development
Directorate of Agricultural Research and Training**

and

Namibian Agronomic Board

by

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Acronyms and Abbreviations

Agribank	Agricultural Bank of Namibia
CBO	Community-Based Organisation
CDB	Convention on Biological Diversity
CRIAA SA-DC	Centre for Research Information Action in Africa, Southern Africa Development and Consulting
CSIR	Council for Scientific and Industrial Research (South Africa)
DANCED	Danish Co-operation for Economic Development
DART	Directorate of Agricultural Research and Training
DCD	Division of Co-operative Development
DEA	Directorate of Environmental Affairs
DED	Deutsche Entwicklungsdienst (German Development Service)
DEES	Directorate of Engineering and Extension Services
DfID	Department for International Development (UK)
DFN	Development Fund of Namibia
DoF	Directorate of Forestry
DoP	Directorate of Planning
DoWA	Department of Women's Affairs
DRFN	Desert Research Foundation of Namibia
DRM	Directorate of Resource Management
DSSS	Department of Specialist Support Services
FAO	Food and Agriculture Organisation (United Nations)
FSRE	Farming Systems Research and Extension
FSTCU	Forest Sector Technical Co-ordination Unit (of SADC)
GDS	German Development Service
GRN	Government of the Republic of Namibia
ICRAF	International Centre for Research in Agroforestry
IF	Indigenous Fruit
IFT	Indigenous Fruit Tree
IPRs	Intellectual Property Rights
KAP	Katutura Artisans Project
KFSRE	Kavango Farming Systems Research and Extension
MAWRD	Ministry of Agriculture, Water and Rural Development
MDA	Mineworkers' Development Agency (South Africa)
MET	Ministry of Environment and Tourism
NFRC	National Forestry Research Centre
MHETEC	Ministry of Higher Education, Training and Employment Creation
MRLGH	Ministry of Regional and Local Government and Housing
MLRR	Ministry of Lands, Resettlement and Rehabilitation
MTI	Ministry of Trade and Industry
NAB	Namibian Agronomic Board
NBRI	National Botanical Research Institute
NDC	National Development Corporation
NGO	Non-Governmental Organisation
NNF	Namibia Nature Foundation
NPC	National Planning Commission
PIF	Promotion of Indigenous Fruit
PIFP	Promotion of Indigenous Fruit Project
RDC	Rural Development Centre
SADC	Southern African Development Community
SAFIRE	Southern Alliance for Indigenous Resources (Zimbabwe)
SHDC	Sustainably Harvested Devil's Claw project
SME	Small and Medium Enterprises
spp.	species
TSC	Tree Seed Centre
TSCN	Tree Seed Centre Network
UNAM	University of Namibia
VPR&D	Veld Products Research and Development (Botswana)
WAD	Women's Action for Development

Executive Summary

The Promotion of Indigenous Fruit workshop was requested by the Minister of Agriculture, Water and Rural Development, Hon. Helmut Angula MP, “to develop a co-ordinated approach and strategy for the implementation of an economically sustainable promotion of indigenous fruits in Namibia”. The workshop was called by the Directorate of Agricultural Research and Training (with the Namibian Agronomic Board as management agents and CRIAA SA-DC as facilitators) and was attended by about 40 participants from Government, academic institutions, NGOs and donor organisations. The workshop programme is attached as Appendix 1. A list of participants is attached as Appendix 2.

A *Background Document* and short questionnaire were circulated with the workshop invitations. Stakeholders were asked to provide input on past, current and planned activities related to PIF. Interviews and consultations were conducted with selected stakeholders. The data gathered was combined with information from published and grey literature to synthesise a *Summary of Information on Indigenous Fruit in Namibia*, which was circulated to participants before the workshop (additional copies of the *Background Document* and *Summary of Information* are available from CRIAA SA-DC on request). The information was presented to and discussed by the workshop during an interactive session.

The workshop divided into three working groups, which considered different aspects of the promotion programme and reported back to a plenary session. Each group also identified priorities for action, which are listed below:

Resources group

- Establish a database of species potentially suitable for promotion and use the selection criteria outlined to choose a shortlist of resources to promote first (also bearing in mind SADC priorities and work already done in SADC)
- Look at what still needs to be done to effectively promote the species shortlisted
- Establish how much money is available to do this work
- If funding is adequate, is there an agency in Namibia that can use the funds to take the work forward?
- Identify who is capable of implementing the next step(s) in the program
- Co-ordinate research efforts (around resources and around cross-cutting issues)
- Start investigating the genetic variability of promising resources and collecting germplasm for use in selection and improvement – actively involve farmers and communities in the selection of superior specimens (tie in with DoF project)

Technical and processing issues group

(ST = short-term, MT = medium-term, LT = long-term)

Marketing

- Market research on selected resources and products – national regional and international markets; identify rent-seeking in marketing chain; rank best-prospect products; labelling and packaging (ST)
- Investigate options for establishing marketing investigation unit – to do market matching, market information, market research (MT)
- Identify private stakeholders involved – possibly co-operation (ST)
- Identify bottlenecks in infrastructure/logistics for marketing (MT/LT)

- Develop a generic promotion strategy (LT)
- Establish quality and standards requirements of markets (MT)

Processing/technology development

- Identify potential test/pilot communities/projects with under-utilised resources (ST)
- Assess technologies available in Namibia and elsewhere (ST)
- Pilot and adapt selected technologies in a secure funded project (ST/MT)

Technology management

- Develop training packages (MT)
- Develop and disseminate extension messages and promotional materials (MT)
- Identify mentors (ST/MT)
- Identify and promote suitable sites for dissemination (MT)
- Special scheme in rural finance (MT/LT)
- Assessment and demonstration of financial viability – from economics of pilot projects for business plans (MT)
- Labelling and packaging (MT/LT)

Institutional arrangements working group

- An Indigenous Fruit Task Team should be established
- The main tasks of the Task Team should be
 - develop a national strategy through a consultative process
 - organise regular workshops for stakeholders to review progress
 - scrutinise and facilitate new strategic intervention for indigenous fruit promotion
 - look into establishing a “central information system” for indigenous fruit promotion
- The Task Team members should represent:
 - Ministry of Agriculture Water and Rural Development**
 - DART (convene and chair)
 - NBRI
 - DEES
 - DOP
 - Ministry of Environment and Tourism**
 - DoF
 - DEA
 - Ministry of Higher Education Technology and Employment Creation**
 - Directorate Research Science and Technology (DRST)
 - Ministry of Trade and Industry**
 - Division of Industrial Development
 - Polytechnic of Namibia**
 - University of Namibia**
 - NGOs**
 - CRIAA SA-DC
 - DRFN
 - NNFU

Membership should be restricted to 10 to 15 people. Members should be properly mandated by their respective ministries, institutions and organisations. The Task Team can co-opt additional members if necessary.

Immediate actions

During the final plenary session immediate actions were decided and responsibility for their completion allocated as follows:

1. Workshop proceedings

- CRIAA SA-DC will compile the workshop proceedings and a draft will be circulated for comments by the 2nd May.
- Comments on the draft report are due at the latest by Friday the 19th May
- The Indigenous Fruit Task Team will meet to review the draft workshop report and comments in the week of the 22nd and 26th May.
- The proceedings will be completed and distributed by the end of May.

2. Indigenous Fruit Task Team mandated by the workshop

- The Directorate of Agricultural Research and Training (DART) will be responsible for inviting members onto this Task Team and this should be done as soon as possible.
- The first meeting of the Task team will take place between the 22nd & 26th May. DART will call this meeting. The Agenda will include :
 - Revision of the comments on the draft workshop report.
 - Finalise the Terms of Reference for the Task Team

3. Fine Tune Strategy

- The Task Team is responsible for fine-tuning the strategy and should complete this by July/August 2000

1 Workshop Preparation

The Promotion of Indigenous Fruit workshop was held to develop a co-ordinated approach and strategy for the implementation of an economically sustainable promotion of indigenous fruits in Namibia.

In order to facilitate a more focused and informed discussion, a *Background Document* and short questionnaire were circulated with the workshop invitations. Stakeholders were asked to provide input on past, current and planned activities related to PIF. On the basis of replies received, interviews and consultations were conducted with selected stakeholders.

The data gathered was combined with information from published and grey literature to synthesise a *Summary of Information on Indigenous Fruit in Namibia*, which was circulated to participants before the workshop. Since the *Background Document* and *Summary of Information* have already been distributed and much of their contents are reflected below, they are not included in these workshop proceedings (additional copies of both documents are available from CRIAA SA-DC on request).

Participants were also invited to bring along posters or displays on work related to indigenous fruit. The following institutions took part in the mini-exhibition:

- National Botanical Research Institute
- Directorate of Forestry – Namibia Finland Forestry Programme National Forest Inventory
- University of Namibia: Department of Food Science and Technology
- Polytechnic of Namibia: Department of Agriculture
- Desert Research Foundation of Namibia

The workshop programme is attached as Appendix 1. A list of participants is attached as Appendix 2.

2 Welcome and Official Opening

The workshop started with participants being welcomed by Mr Hans Venter, Deputy Director of DART, who (with some help from a taped recording by the National Youth Choir) led the workshop in singing the National Anthem.

2.1 Speech by Permanent Secretary

The Permanent Secretary of MAWRD, Dr Vaino Shivute, officially opened the workshop. He expressed his pleasure at having the opportunity and apologised for the absence of the Minister, who was out of town. Dr Shivute assured the workshop that the Minister had a particularly keen interest in the topic and had been the driving force in ensuring that the workshop took place.

Dr Shivute then delivered the following opening address:

“People sometimes say we live in a desert, which can be hard to believe in a year of bountiful rain such as this. But desert or not, Namibia has been blessed with a rich heritage of useful indigenous plants, including a surprising variety of indigenous fruits – in some areas people regularly eat more than 20 different types.

“For centuries these plants and their fruits have helped our people to feed themselves and to stay healthy, through good years and especially through bad, when the rains stayed away and the crops failed. When times were good, people would make the fruits into drinks, with which they could toast nature’s bounty. Using these fruits has long been an integral part of our culture.

“So you may be excused for wondering why such well-known products are in need of promotion. The simple answer is that, for all their many virtues, these fruits can make a much bigger contribution to the livelihoods and food security of our rural population than they do at the moment.

“The more complicated answer is that we now live in an economy where cash has become an absolutely essential requirement for having a decent lifestyle. People need cash to pay school fees; cash to buy school clothes and shoes for their children; cash to pay for medical care; cash to pay for transport. And as you are no doubt aware, in rural Namibia there are not all that many opportunities for everyone to earn enough cash. By creating markets for our indigenous fruit we can provide an opportunity for even the poorest of rural people to earn some cash, and so take part of our modern economy.

“In a wider sense, we need to promote the utilisation of our indigenous fruits so that the trees, and the forest ecosystems that sustain them, will be seen as very valuable by the people who must first and foremost protect them - the people who live with them, and in them, every day. In the past these forests must have seen endless - people used them, and chopped them down when necessary, without always thinking about what it would be like when they were no longer there. Of course people have always protected some of the more useful species, leaving them to grow in their fields and around their homesteads, even planting them, to have them closer at hand. But as the number of people increased, and more fields were cleared for agriculture, the forests and woodlands became smaller and fewer, and with them those fruits that were not actively cultivated and protected. By promoting the cultivation and use of these fruits, and demonstrating to people that they are potentially a reliable source of income, we will contribute directly to their preservation for future generations of Namibians, as we are indeed obliged to do by our Constitution.

“From an agricultural point of view, our indigenous fruits are much more adapted to, and suitable for, our harsh and unpredictable climate than most exotic plants. This simply means that they will survive better in extremely dry years, and produce better in years of normal rainfall. If we can successfully promote the growing, marketing, and utilisation of these fruits, they will contribute to the diversity of our farming systems and make them more resilient, so that they are less affected by all except the very worst drought years.

“In addition, indigenous fruits are less susceptible to attacks by pests and plagues, and therefore require far less, if any, inputs of expensive pesticides and other agro-chemicals. This saves money not only for farmers, but, since these products are mainly imported, for the economy as a whole. Another advantage of being able to produce fruit without using poisons is that it opens up the possibility of selling our fruit in the rapidly growing international market for organically cultivated produce, where it is possible to realise much better prices than in more conventional markets.

“Our indigenous fruits furthermore have the potential to be processed into secondary products. By developing and promoting such products, we can contribute to our national development goals of adding value to raw materials, stimulating industrial development and creating employment. As you know, harvesting and processing fruit is a labour-intensive

business, with the potential to employ significant numbers of people in rural areas, where other jobs can be very scarce.

“Because these fruits occur over wide areas, often far away from existing infrastructure, they can also lead to the creation of businesses in areas where development is needed most. And because they can be processed with relatively simple technology, they are perfect for promoting the establishment of small and medium scale enterprises – another national development priority.

“The harvesting and primary processing of indigenous fruit is especially significant as an economic opportunity for rural women. It gives them the option to work at home, on a flexi-time basis, and earn a cash income while they take care of their families and their farms. As an example, there are now more than a thousand members of the Eudafano Women’s Co-operative in northern Namibia, who earn additional income by decorticating marula nuts for oil production. Through their efforts Namibia has become (believe it or not) the first, and largest, producer of marula oil in the world – an achievement about which they, and we, can justly be proud.

“There is another, less tangible and probably more sentimental, but no less valid, reason for promoting indigenous fruit: for many children in our urban areas it is now the only way they will ever experience the tastes that were so familiar to their ancestors, and which are their cultural heritage by right. By making indigenous fruits available in urban markets, we provide these children with a direct link to their past, and to the natural riches of their beautiful country.

“Last but not least, our indigenous fruits represents a rich legacy of genetic diversity, which we are committed to protect, use for the benefit of all our people, and share with our brothers and sisters in SADC. Many of our indigenous species also grow in other countries in southern Africa, where similar promotion efforts are underway. We should actively seek co-operation with them in our efforts to promote the sustainable use of these resources, not only so as to make the best use of the skills and expertise available in the region, but also as a community-building exercise – in this case the building of the Southern African Development Community.

“Ladies and gentlemen, for all the reasons I have outlined here, my Ministry is committed to the promotion of Namibia’s indigenous fruits, and we have invited you to join us here today and tomorrow morning so that we can put our heads together to develop a co-ordinated strategy, and a practical programme, for the economically sustainable promotion of our indigenous fruits.

“I want to thank the Directorate of Agricultural Research and Training for initiating this workshop, the Namibian Agronomic Board for managing and organising it, and CRIAA SA-DC for facilitating our deliberations today.

“I call on you to give this effort your fullest support and your best contribution, and I hereby declare this workshop officially opened.”

2.2 Introduction by DART

After Dr Shivute’s speech, Mr Venter took the floor to introduce the workshop topic and explain why the workshop was being held. He highlighted five points from Dr Shivute’s speech:

- Indigenous fruits already play an important role in rural households
- Value-adding technology is needed to increase the market for and income derived from indigenous fruit
- Increased economic benefits from indigenous fruit can provide motivation for increased conservation of indigenous trees
- Indigenous fruit can be used to stimulate the growth of new businesses
- It would be beneficial for Namibia to pursue active links with similar interventions and initiatives in SADC

Mr Venter explained that the Minister of Agriculture, Water and Rural Development, Hon. Helmut Angula, MP, had taken the initiative to promote the processing of indigenous crops (mahangu) and fruits. The Minister had visited Sahel countries such as Mali and Senegal (where mahangu processing is already well-developed), as well as CIRAD, an institution in France that specialises in food processing technology and had done a lot of work in the Sahel.

As a result of Hon. Angula's efforts, funding had been secured for 1999/2000 for a *Processing of Mahangu and Indigenous Fruit* project, with the Namibian Agronomic Board as implementing agent. In addition to several activities related to mahangu processing, CIRAD had been invited to undertake a mission to Namibia to identify options for an indigenous fruit processing project. A stand organised by CRIAA SA-DC at the SADC Women in Business Trade Fair in Ongwediva in May would include demonstrations of marula and other fruit processing.

Mr Venter said a primary purpose of the workshop was to meet with role players before embarking on further stages of a PIF programme, so that activities could be harmonised, because much more could be achieved if everyone worked together. He called on participants to go into the discussions with open minds and to aim for positive results.

2.3 Aims and Objectives

The workshop facilitator, Dave Cole of CRIAA SA-DC, gave participants a chance to introduce themselves. He presented an overview of the aims and objectives of the workshop:

Aim:

To develop a co-ordinated approach and strategy for the implementation of a programme for the Promotion of Indigenous Fruits in Namibia.

Objectives:

- To assess Namibia's options for an institutional framework to co-ordinate and support the utilisation of botanical resources
- To set aims and objectives for future activities
- To set criteria for prioritising the use of funds and other available resources for the efficient and effective service delivery regarding the promotion of indigenous resources
- To develop a Plan of Action and apportion responsibility for setting up such a programme

3 Summary of Information

After the tea break, Pierre du Plessis of CRIAA SA-DC presented an overview of information based on the *Summary of Information on Indigenous Fruit in Namibia* circulated to participants before the workshop. He categorised the information contained in this document according to relevant issues.

- **Institutional framework** – is needed:
 - to facilitate optimum use of financial and human resources
 - to share information between stakeholders
 - to ensure multi-disciplinary input into the programme

- **Market, trade and economic issues:**
 - the logistics of harvesting, as well as those of purchasing and transporting fruits from rural areas, are very important for the economic feasibility of processing – a small quantity of fruit on each of a million trees over a wide area is not a viable resource for processing, but a few tons of fruit collected in one place might be
 - existing markets (e.g. for phytomedicines) must be identified
 - new markets must be sought and/or created for existing and novel products
 - the ROL (return on labour) must be sufficient, compared with available alternatives, to interest harvesters or farmers in the undertaking
 - the ROI (return on investment) must be sufficient to cover R&D as well as capital costs and to reward entrepreneurs for their efforts
 - economy of scale is an important aspect of assuring commercial success – a processing business has fixed overheads to cover before it starts making a profit
 - traditional knowledge issues must be considered and benefits derived from products must be shared with traditional users
 - intellectual property rights are relevant in several ways:
 - there is a danger of biopiracy (where outside institutions appropriate the traditional botanical resources or knowledge of communities and register restrictive rights over them without consent from, or benefit-sharing with, the communities)
 - appellations of origin can be used to identify and protect products manufactured in a specific geographic area
 - some processing technologies may be patented
 - others are available in the public domain
 - if processing technologies are developed with public funds, on what basis are they made available to private users?

- **Technical research**
 - a lot of work has already been done to analyse raw materials from indigenous fruit – the question is how to access the relevant results and avoid duplicating research already available in the public domain (e.g. in other SADC countries)
 - all the potential products that can be derived from a specific plant must be researched and assessed for profitability, because resources that offer a “basket of uses” have a better chance of succeeding as crops
 - the standards and quality requirements of the market (including health regulations in formal and export markets) must be researched and met

- **Product research and development**
 - initial efforts to commercialise indigenous fruits will essentially depend on wild-harvested resources, therefore harvesting and commercialisation trials are needed to assess which fruits can be harvested sustainably, profitably and in large enough quantities to warrant processing
 - processing technology must be developed and/or adapted, which raises the questions of who pays for this R&D and who benefits from the results
 - processing trials must be conducted – the economics of processing is an important aspect to assess during these trials (credible figures are needed e.g. for entrepreneurs to secure commercial loans)

- the processed products must be marketed on a trial basis to ascertain market response and establish the potential demand
- **Livelihood strategies, socio-economic and farming systems issues**
 - resource tenure is crucially important – rural people typically have preferential access to fruits growing around their homesteads and in their fields, while fruits growing on communal land are open-access, first-come-first-served resources – this contains a potential for conflict over communal resources
 - the effects of commercialisation on traditional users must be assessed through trial purchases to avoid a situation where commercial use deprives marginalised people of a resource essential to their livelihoods
 - the periodicity (seasonality) of fruit production must be taken into account, because it has implications for the economic viability of processing
- **Botany and forestry/silvicultural issues**
 - the selection and propagation of superior genotypes is an important long-term aspect of developing an indigenous fruit industry
 - the reproductive biology of selected species must be understood for effective management
 - management techniques like pruning and fertilisation must be studied
- **Environmental and ecological considerations**
 - the need to conserve biodiversity must be born in mind, especially in so far as there is an inherent tension and potential conflict between conserving natural forest diversity and the need to clear land for agriculture
 - even if and when superior propagated genotypes are available, natural genetic diversity must be conserved (this is especially true in Namibia, where adaptation to drought is likely to be an important genetic asset to farmers in the long-term)

Du Plessis also presented a table (included as Appendix 3) on which these issues have been plotted relative to various economic sectors (primary/production, secondary/processing, tertiary/marketing) and to aspects of the promotion process (resource availability, product development, market development, institution building). He suggested that the table could be used to identify key issues at various levels that were susceptible to development intervention and asked participants to bear it in mind during the working group sessions.

After a short break the floor was opened for questions and discussion.

Comment: Although certain resources might be available in fairly large quantities, they are often unavailable to harvesters, e.g. most of the manketti in the Kavango Region is too far from water.

Response: This underscores the central importance of procurement logistics in establishing a viable indigenous fruit industry.

Comment: The matrix table is interesting as a checklist of issues, but it is like a map without roads. How can it be used to identify gaps in current knowledge, so as to decide which way to move forward?

Response: It is meant as a conceptual tool for identifying issues that can be addressed immediately and as such can suggest preliminary directions and short-term actions while still keeping track of longer-term goals.

Comment: Most harvesting of indigenous fruit is done by women, for whom it makes an important contribution to livelihood strategies. The promotion programme must focus on

improving their livelihoods and at the same time guard against depriving them of resources on which they depend.

Response: The importance of gender considerations was pointed out in the *Information Summary*. An example is the Eudafano Women's Co-operative, which was set up to help women retain their traditional control over the marula kernel resource.

Comment: It is fine and well to develop a general policy and strategy for promoting indigenous fruit, but other, more specific considerations are important, e.g. how long it takes to collect the fruits, their availability, whether processing is done for home use or cash income, the spatial distribution of the resource and whether the resource is used sustainably.

Question: Will the workshop consider a policy for all indigenous plants of economic interest, or only fruits? It would be less time consuming to consider indigenous plants more broadly.

Response: There are good reasons for either approach – this is one of the things the workshop can decide.

Response: It seems more sensible to have a general programme, rather than one for only one type of products, which will have to be co-ordinated with other programmes later.

Response: Including all types of indigenous plants would make the programme too wide and might encroach on environmental policies; a more targeted approach is needed, possibly including only fruits, medicinal and ornamental plants.

Response: The workshop is primarily about defining a common agenda between different Ministries – the policy framework is more important, not the specific products. If the framework is suitable for fruits it will also serve for promoting the use of other indigenous botanical resources and products. The important thing is to move from a supply-driven to a demand-driven approach and to find a strategy that maximises the economic benefits derived from indigenous botanical resources – this is different from straightforward conservation.

3.1 Stakeholder Identification

Next Du Plessis led the workshop in an interactive identification of institutional stakeholders to clarify who is doing what and to provide background information for the deliberations on institutional arrangements. Grassroots producer groups like the Eudafano Women's Co-operative, although obviously important and prominent stakeholders in the indigenous fruit programme, were not included in the identification exercise, because it was considered that it would be more practical if such groups were represented in the national institutional framework by a national body like the Namibia National Farmers' Union.

The workshop identified the following list of national stakeholders (relevant comments in brackets) that could play a role in an institutional framework.

Government Departments:

MAWRD:

DART (called the workshop; oversees agricultural research)

NBRI (especially concerned with conserving biodiversity)

DoP (can contribute to marketing strategies)

DCD (supports producer co-operatives)

DEES (extension, but FSRE units young and over-stretched)

DRD (emphasises food security aspects)

MET:

DoF (proposed domestication and improvement project of three selected species to be funded by FAO; also promotes other indigenous trees; DANCED and DED community forestry projects and Namibia Finland National Forest Inventory are relevant to establishing resource availability; conservancy-type community forests possible under new forest legislation could influence resource tenure.)

DEA (including Forest Bio-diversity Working Group and Traditional Knowledge Working Group; policies on biotrade and access to genetic resources in pipeline)

DRM (permits for wild harvesting)

MTI:

DID (industrial development policy and support)

ISO 2000 standards body (technical regulations)

MHETEC:

DRST (planning body to co-ordinate science and technology research, including market development and technology assessment)

MWACW (new Ministry; as former Department of Women's Affairs supported marula oil project; gender aspects of indigenous fruit promotion)

MHSS (interested in contribution of indigenous fruit to a healthy diet)

NPC (allocates national development budgets; interested in benefits to national and local economies)

Boards, Parastatals and Academic Institutions:

NAB (project implementation agent for MAWRD; potential role in regulating the trade; sets standards for proclaimed produce)

NDC (supports and finances entrepreneurs if proven viable business; involved in formulating national agri-industrial policy)

Unam:

Food Science and Technology Department (inventory of fruit in Caprivi; wine from *Berchemia*; investigating other fruit products; some laboratory capacity but lacks skills, consumables, technicians)

Multi-disciplinary Research Centre (report on technology for marula and !nara processing)

Chemistry Department (capacity for some product analyses; protocols set up; contributed to marula and manketti oil projects; lacks consumables and some instruments)

Biology Department (contributed to SUSBIOSOIL project)

Polytechnic:

Department of Agriculture (especially work on participatory extension)

Department of Nature Conservation

Centre for Entrepreneurial Development

Centre for Applied Research and Technology (these two national centres are establishing databases of people who can contribute special skills to programmes)

NGOs:

CRIAA SA-DC (producer-group support and capacity-building; co-operative training; marula, manketti and melon seed oils and soaps; trial processing; sustainable Devil's Claw project; partner in regional marula marketing and enterprise development project; export market development; appropriate processing technology R&D and manufacture at Katutura Artisans Project; local marketing services)

NNFU (representative role)

DRFN (work with Topnaar community on !nara; fruits; wider environmental programs in northern regions)

LIFE Programme (WWF) (supports community-based natural resource management)

WAD (supports marula jam and jelly project in north; plans to expand)

NNF (administers CBNRM funds)

SSDC (consultants)

Oxfams in Namibia (planning veld products component as part of Omaheke Integrated Development Plan 2)

Nepru (economic policy analysis; socio-economic service provision)

Various members of JCC (SME service providers)

Entrepreneurs and Private Companies

Namibia Beverages (potential customers and product development partners)

Namibia Breweries (potential customers and product development partners)

Namibia Dairies (potential customers and product development partners)

Yetu Cosmetics (melon seed oil cosmetics and soaps)

Potential Donors:

French Cooperation (works closely with CIRAD; supporting FSRE unit in NCRs)

GTZ (administers major technical assistance programme)

DfID (UK) (Enterprise Development Fund supporting regional marula marketing project in Namibia, Zimbabwe and SA; Namibia office supports FSRE units)

USAID (supports enterprise development)

EC Delegation in Namibia (Tropical Forests budget line; especially interested in sustainable use aspects)

FAO (considering funding DoF proposal)

During this session the following points were made from the floor:

- There are many small rural projects that deal with indigenous fruit to some extent, but there has been no co-ordination or wider effort to develop appropriate processing technology or access to markets.
- Where research (e.g. by Unam) has generated relevant results, structures for dissemination of the findings have been inadequate.

3.2 Service Providers

The next part of the presentation looked at potential service providers for the promotion of indigenous fruits. The following points were discussed:

- **There are no Namibian service providers with the whole range of skills required**
 - the program needs multi-disciplinary input and collaboration
 - well-formulated terms of reference are crucial for achieving results
 - the lack of existing skills can also be used as an opportunity to build skills
- **Criteria for selecting service providers**
 - this depends on the type of service required
 - unless there are good reasons to make an exception, the order of preference should be Namibian > SADC > African > international
- **Public calls for research proposals can have several positive spin-offs**
 - stimulate team building
 - generate ideas
 - proposals received must be judged on criteria decided by workshop
- **IPRs and confidentiality**
 - agreement on these issues must be reached before work commences
 - researchers must share their results with appropriate stakeholders
 - there are some doubts about using SA service providers, because of fears that positive results will be appropriated by that country's strong farming and industrial sectors
- **Product and market development service providers are essential**
 - there is no industry without a market
 - there is no market without attractive products
 - specialised knowledge of industrial requirements can help to identify new products
 - targeted market research is important
- **Chemical analyses**
 - using service providers with established reputations in the market can result in quick acceptance
 - there is a need to build the local capacity to provide these services
 - analyses should only be done with clear objectives (not research for research's sake)
- **Technology development**
 - this is not always required (e.g. market for dried pharmaceutical products)
 - much information is already available in the public domain for adaptation (which can nevertheless be time-consuming and expensive)

- donors are reluctant to fund this because it is expensive, positive results are not guaranteed and/or the immediate grassroots benefits are not clear – therefore there is role for government to fund such work
- **Technical co-operation with donor countries can be useful**
 - it allows skills transfer for capacity-building
 - it can substitute for direct funding in some cases

3.3 Sources of Funding

Regarding potential sources of funding, the following points were discussed:

- **Direct Government funding**
 - should be available for key issues not funded by donors or the private sector
 - also for policy, strategy and co-ordination
- **Donors (local and international)**
 - the list of potential donors identified under 3.1 above is not exhaustive
 - donors usually want immediate and clear grassroots benefits and therefore do not find PIF priorities attractive, because funding technology R&D and/or market development is perceived as risky and expensive, with no guarantee of positive results
 - if these negative perceptions can be addressed adequately, donor funding is possible
- **Private sector funding**
 - this would only be available for very specific parts of the program
 - private investors are risk-averse and tend to take an opportunistic approach, preferring to back proven winners
 - larger private companies with established retail networks could possibly be convinced to make in-kind contributions in the form of distribution services
 - private entrepreneurs will purchase proven technologies with profit potential – this can contribute to R&D cost recovery
 - focusing too intensely on the private sector is not always in the interest of the producers/community
- **Regional co-operation**
 - the SADC TSCN project will be applying to Cida (Canada) to fund a regional Indigenous Fruit Tree project and Namibia could access some money through the involvement of the DoF
 - participating in the regional project and sharing results with neighbouring countries could substitute for funding in specific aspects of the program
- **Technical co-operation**
 - using existing agreements with donor countries can substitute for direct funding
- **Self-generated revenue**
 - the program can convince producers to re-invest some of their profits in research
 - at best this can contribute to partial cost recovery

3.4 Institutional Framework

Regarding an institutional framework for PIF in Namibia, Du Plessis raised the following points for consideration by participants:

- **Why is a framework needed?**
 - to co-ordinate the best use of financial and human resources
 - to share information
 - to ensure multi-disciplinary input
 - to divide funding
 - maybe to impose a master plan? – but is this feasible or advisable?
- **Who should be involved?**
 - some of the identified stakeholders (since all would be impractical)
 - possibly the MHETEC S&T policy body
 - what form should it take? a working group? a project steering committee?
 - should it be organised by resources (focused) or sectors (more complicated)?
- **It should provide for and co-ordinate technical research**
 - because this is hard to fund (through donors) at present
 - but donors might be more interested if technology R&D clearly fits into a wider national programme
 - there is a role here for the State if the private sector and/or donors are reluctant
- **It should not neglect producer institutions (e.g. co-operatives) at grassroots level**
 - this is a crucial part of the logistics (for processing, resources must be collected in sufficient quantities)
 - co-ops can play other roles in community development
 - functioning producer bodies is key to effective resource management (if their resource tenure is secure)

3.5 Criteria for Prioritising Funds/Resources

Du Plessis suggested the following as guidelines when deciding which aspects of the promotion of indigenous fruit to tackle first:

- **Solve bottlenecks/logjams**
 - to bring known products to market quickly
 - to deliver increased benefits to primary producers
- **Take knowledge/programme forward**
 - no re-hashing of e.g. nutrition analysis
 - aim at solving clear, well-defined problems
- **Use the resource potential**
 - help communities to use their existing resource endowment
 - make full use of comparative advantages
 - fend off immediate competition from other countries and/or commercial farmers and stay ahead of the game
- **Quickly benefit large number of producers**
 - to demonstrate to farmers the advantages of participating

- **Products already in demand in known market**
 - on-going market analysis/intelligence
- **Favourable socio-economic conditions**
 - e.g. appropriate community institutions
 - cultural acceptance

Comment: Another priority, especially relevant for the issue of sustainability, is the need to look at the current low levels of natural recruitment affecting indigenous fruit trees in certain areas, where there are only old trees – to base an industry on them without ensuring that replacement trees are planted or allowed to grow would be futile.

3.6 An example and some comments

To conclude the session, Du Plessis briefly presented a conceptual outline for an indigenous fruit project incorporating many of the considerations he had outlined. This is attached as Appendix 4.

Comment: Networking and co-ordinating are clearly very important aspects to address in the planned promotion of indigenous fruit programme.

Question: What capacity is actually in place for extension work on such a program?

Response: The FSRE units, which look at all aspects of farming systems. In some regions a lack of co-operation between DoF and DEES is a problem.

Comment: In some of the northern regions, the DEES/FSRE units have only been interested in promoting live fences, mango and citrus trees. Most of these trees are imported from SA and despite being subsidised are very expensive.

Response: A DART staff member is currently undergoing training in FSRE in Brazil.

Response: Extension services are generally overstretched and the FSRE units are at an early stage of development – it would be unfair to expect too much of them. FSRE is easy to say but hard to do – it involves a two-way interaction between extension officers and the community.

Question: Why are there no indigenous fruit orchards?

Response: Indigenous fruits must first be perceived to offer additional economic value – then farmers will plant more of them.

Response: Indigenous fruit trees are already available from DoF nurseries.

Response: In some areas people have barely enough arable land for staple crops and they lack space to plant additional trees.

4 Working Groups

After lunch, Dave Cole briefed the workshop on topics to be discussed in more depth by three working groups. These working groups met and then reported back to the plenary session. During the discussion that followed, it was decided that each working group should have a second session to prioritise actions for the national strategy, which could be collected into terms of reference for a task team to take the work forward. For ease of reference, the entire process (first working group reportback, discussion, second working group reportback and final discussion) is reported here under the heading of the relevant working group.

4.1 Resources group

This working group was asked to consider the following:

- What are the resources available for promotion? (Inventories)
- What criteria should be used for selecting resources to promote?
- What could be done with these resources?
- What are the environmental and ecological considerations?
- How does the program ensure community involvement and benefits?

After the first round of deliberations, the group reported back as follows:

Selection tools/criteria

The program should consider promoting the use of all indigenous plants with economic potential that could be cash crops.

To prioritise resources, all or some of the following criteria should be used:

- Cost-benefit analyses of promoting and developing specific resources – do the potential benefits justify the development costs? This is related to the size and potential value of the resource.
- Known or potential local markets (could bring quick benefits)
- Known or potential international markets (could earn higher returns than local markets)
- Does the resource play an important role in subsistence strategies? (If it does and it is plentiful it will be easy to promote; conversely, if it does and it is relatively scarce it could be dangerous to commercialise it.)
- How widely does the resource occur? (Promoting widespread resources can benefit many people in different regions; promoting very localised resources could benefit specific communities.)
- For action in the near future choose resources that have potential for immediate development and marketing.
- The increased harvest and/or use must be sustainable.
- The existing natural stock should be adequate to allow increased use.
- The plant should have agricultural potential (at least for medium-term cultivation) but should not necessarily be suitable for large-scale plantations (to prevent large commercial farmers from appropriating promotion efforts at the expense of smaller producers).
- Commercialisation of a particular resource should not have negative effects on communities that depend on it for a significant part of their livelihoods.
- Preference should be given to resources that can be processed with available or easily adapted technology.
- Products that can be stored (to compensate for seasonal/irregular supply) should be preferred.
- How unique are the products? (Will they have to compete with cheaper agricultural or industrial substitutes?)
- Can plants from elsewhere in the SADC region be cultivated and used?
- How many people will benefit? Who will benefit most?

Environmental considerations

- The natural gene pool should be conserved at all times (even if breeding and selection make improved cultivars widely available)

- Studies are needed to determine:
 - that sufficient seed banks are left after harvesting
 - the impact of harvesting on ecosystems and on socio-economic systems
 - how regrowth and recruitment are affected by harvesting
 - sustainable harvesting rates and methods
 - how to encourage recruitment (both natural and cultivated)
- To facilitate monitoring the effects of harvesting, the ecological requirements of the plants must be understood (including how environmental variables such as rainfall affect productivity of the resource).
- Traditional knowledge regarding resource value, management and conservation issues must be assessed (including whether and why communities/farmers prefer exotic fruits).
- Appropriate species mixes for diversification/polycultures should be investigated.

What to do with specific resources

The working group selected a few resources it considered candidates for immediate promotion. The selection was partly based on the criteria proposed above, but was also intended to provide a broad coverage of different circumstances, so that more could be learned about specific aspects of the general promotion process.

Marula (*Sclerocarya birrea*)

This resource is already widely used and is a priority species in most parts of SADC where it occurs. In Namibia the resource tenure, traditional use and cultural acceptance issues are not problematic. Producer structures are in place and cultivation efforts are quite advanced.

- Research the technology and logistics requirements of processing the fruit (kernels already used for oil production – promote and increase)
- Develop formal market products (e.g. wine)
- Investigate medicinal use of the bark, bearing in mind effects on productivity, harvesting methods, recovery rates, alternative sources of the active ingredients (e.g. fruit skins)
- Study the effects of increased cultivation on land use patterns
- Select trees with the most desirable traits (including oil producing characteristics of the seeds/kernels)
- Take cognisance of what other countries in the region are doing with and have learned about marula processing

Eembe (*Berchemia discolor*)

The institutions involved with marula could also be used to promote this resource, significantly shortening the lead time involved. Some research has been done on processing, but the potential size and availability of the resource are not known. There is an informal market, but no formal market products have been developed.

- Establish the size and potential availability of the resource
- Develop products and markets
- Look at fruiting times, seasonal variability and accelerating fruiting in young trees

Manketti (*Schinziophyton rautanenii*)

The existing resource endowment is very large. The fruits make an important contribution to the rural economy of the range area (through kashipembe production) and to the survival strategies of marginalised groups and very poor people (nuts). Initial work has been done on commercialisation (oil production). If successfully promoted, the existing resource can contribute significant economic benefits in an underdeveloped region.

- Can kashipembe production be legalised?
- Can brewing/distilling methods and standards be improved (to develop a formal market product and avoid the danger of methanol poisoning)?

- Can promotion efforts proceed immediately despite the security situation in the Kavango region?
- Can products other than kahipembe and oil be developed (e.g. nuts as snacks)?

Monkey Orange (*Strychnos* spp.)

The fruits are more suitable (in appearance and taste) for existing formal markets than most others. Informal trading already takes place. Potential demand possibly exceeds existing supply. Promoting the resource in formal markets will facilitate research into cultivation of indigenous fruits (acceptance by farmers) and the logistics of fresh fruit marketing (fruits transport and keep relatively well).

- The seeds of some species might contain strychnine – will this be a problem or not?
- The fresh fruits are very popular and the resource base is not very large – can production be increased through cultivation? What do other SADC countries know about cultivating *Strychnos*?

***Terminalia* spp.**

There is a known phyto-medicinal market for the rootbark of this abundant genus. No technology development is necessary initially (just harvesting and drying). Trial commercialisation could produce new insights into the (sustainable) use of vegetative parts of indigenous plants and demonstrate the economic potential of non-food products.

- How large is the resource base?
- Study the impact of harvesting rates and methods to ensure sustainable use
- Research existing markets, prices and return to labour
- The wood is a preferred timber in some areas – study the silvicultural aspects of using both rootbark and wood, and possibly cultivating the trees

!Nara (*Acanthosicyos horridus*)

This is a uniquely Namibian plant with an existing (exploitative) market in SA – it represents an opportunity to demonstrate the potential of improved value-adding and marketing efforts.

- Improve local marketing and value adding (packaging) – as curiosity for tourist market
- Develop new products (dried fruit pulp, maybe snackbars with seeds? oil? medicinal use?)
- Increase total seed production (maybe through cultivation?)
- The plant is endemic to one area (Namib coast) and traditionally used by one fairly cohesive group (Topnaar people) – it could therefore be a good test case for IPR issues
- Clarify the resource tenure/ownership issues

Devil's Claw (*Harpagophytum procumbens*)

This is Namibia's best-known indigenous botanical resource. It already supports a large export industry. Sustainable use and securing more value for harvesters and the local economy are the main issues at present. It requires more research into cultivation methods that are suitable for use by traditional harvesters, who are otherwise at risk of being marginalised in an industry based on their traditional knowledge. There are significant opportunities to increase national value-added.

- Co-ordinate with national Devil's Claw working group and Sustainably Harvested Devil's Claw project.

Ensuring community involvement and benefits

- In communal areas the questions of resource and land tenure (who has legal access to resources) are key factors in determining the level of community involvement and how benefits are divided between community members
- There is a need to formulate effective extension messages on indigenous fruit for use by existing extension services/structures

- When commercialising indigenous resources, work directly with existing community structures, including traditional leaders. Register harvester (and set household quotas if necessary) to control over-exploitation. Work with those community members who already have an interest in the use and management of a particular resource.
- Make communities aware of their legal rights
- Introduce incentives to stimulate positive community involvement (bearing in mind such factors as entrepreneurial attitudes and cultural practices/taboo)
- Look for solutions to logistics problems and their effects on feasibility (e.g. transport, access to marketing points)
- Pay special attention to the effects on marginalised groups and women
- Help communities to build their organisational capacity and empower themselves

First round discussion

Question: How will the program use other work that has already been done in SADC? Could this have significant cost benefits?

Response: The work accessible through the SADC TSCN can be used to save time and accelerate the promotion process. The TSCN can also prove helpful in securing cultivars and other species from SADC. However, most of the work done to date has been focused on selection and improvement – there have been few positive results with product development and marketing.

Question: Re the Topnaar community, !Nara fruit and IPRs: does this imply that only the Topnaars have rights to this resource?

Response: The main concern is that outsiders should not be allowed to benefit at the expense of the community that traditionally uses the resource. Since the plant is area-specific, others can't grow it, so the problem is not likely to arise.

Response: The fruit could be an IPR test case because it is endemic to one place and its traditional use is firmly associated with one group.

Response: IPRs only become an issue if products (and associated technologies) are developed – otherwise the issue is one of resource rights.

Comment: The EU is funding (probably available from next year) projects to develop tools to assess forest use rights and benefits – this could be useful for addressing some of the issues raised.

Priorities for action

After its second session, the Resource working group reported the following immediate priorities for action to be incorporated into the national strategy plan:

- Establish a database of species potentially suitable for promotion and use the selection criteria outlined to choose a shortlist of resources to promote first (also bearing in mind SADC priorities and work already done in SADC)
- Look at what still needs to be done to effectively promote the species shortlisted (e.g. as in the specific resources section above).
- Establish how much money is available to do this work
- If funding is adequate, is there an agency in Namibia that can use the funds to take the work forward?
- Identify who is capable of implementing the next step(s) in the program
- Co-ordinate research efforts (around resources and around cross-cutting issues)
- Start investigating the genetic variability of promising resources and collecting germplasm for use in selection and improvement – actively involve farmers and communities in the selection of superior specimens (tie in with DoF project)

Comment: It would be sensible to use agencies that already have contact with communities and to delegate or sub-contract appropriate areas of work if funding is available.

Comment: In selecting species to promote, the usual method is to conduct surveys of farmers' preferences (used by e.g. ICRAF in other SADC countries) – but it is very important to also consider the commercial opportunities associated with a particular species/resource.

4.2 Technical and processing issues group

This working group considered the following issues:

- Who develops the processing technology and where?
- Who are the service providers? What is their capacity/experience?
- Who pays the R&D costs (and who receives the benefits)?
- What should be done about marketing (market research, market development)?
- Quality and standards
- What human (skills) and financial resources are required?
- Criteria for prioritising research?

After its first round of deliberations, the group reported that it had decided to focus on indigenous fruit products.

Marketing

A major problem is the lack of market research (on consumer attitudes, domestic markets, regional and international markets, the scope and scale of potential markets) – this means a lack of information to feed into the promotion programme. Information about markets is constrained by a lack of funding, insufficient capacity to conduct market research and the fact that some (potentially major) markets are outside Namibia. Farmers and communities should be able to obtain reliable information about market opportunities and prospects so that they can make informed production decisions.

Potential solutions are:

- Generally, to support market research
- Funding provided by Government and/or donors, or earned from trial production
- The Marketing Investigation Unit could contribute capacity
- Specific research could be commissioned on markets outside Namibia for specific products and the information fed back into the institutional framework
- Regional co-operation and networking could also help

Another problem is the perishability of fruits and the distances to markets. This involves high transport costs, insufficient economies of scale, lack of information about where to market and of infrastructure for marketing. Possible solutions are:

- Local processing into a low-volume-high-value product (preservation techniques)
- Improved availability of market information (e.g. marketing facilitation centre)
- Identify and address the bottlenecks in the marketing flow
- Provide simple services to facilitate national marketing (e.g. move indigenous fruit to urban markets at the right time)

As far as promotion is concerned, indigenous fruits could benefit from being clearly identified as indigenous Namibian products. There is potential for regional co-operation around the

generic marketing of veld products. However, promotion is difficult until the products to promote have been selected and are available.

There are currently limited industrial markets for indigenous fruits and/or their products, either because their unique qualities have not been identified, or because they must compete with cheaper substitutes and alternatives. If industrial markets develop, there is also a danger that the natural product could be pushed out later by cheaper alternatives (e.g. vanilla). The problem can be addressed through ethical trading (where primary producers are the main beneficiaries of the trade); however, this increases production costs and must be offset by concentrating on lucrative niche markets. These considerations underscore the need to study and understand the market.

Processing

There are two distinct aspects to processing: choosing processing technologies, and managing the technologies as part of a processing enterprise.

Regarding technology development, the working group identified the following constraints and possible solutions:

- Available technologies are not immediately suitable for local fruits or conditions; they must be tested and adapted, possibly by using a partnership approach between Government, producers and service providers.
- Local technology manufacturing/adaptation is constrained by low demand and a lack of basic technical skills; this can be addressed through appropriate training (e.g. Mashare RDC blacksmithing course) and/or co-operation with other countries.
- There is a lack of information about the available technology options; networking and directed information gathering can help to solve this.
- There is a lack of information about the processing properties of indigenous resources; this can be addressed through literature searches and basic research (trial processing).
- There is a lack of national leadership on technology development; this can be addressed through the institutional framework (created at this workshop) to bring the role players together.

As far as technology/enterprise management is concerned, the working group reported the following constraints and potential solutions:

- There is a shortage of well-developed institutions such as co-ops, SMEs and producer groups; this can be tackled through business orientation training and support packages, and by making a longer-term commitment to develop producer groups.
- There is a lack of maintenance, management and negotiating skills; possible solutions include mentorship and incorporating skills training into business support packages.
- Communities, CBOs, NGOs and other service providers are not aware of the opportunities; a potential answer is to develop a promotional package on opportunities, examples of successful sustainable use and the economic benefits that are possible.
- Some areas lack infrastructure such as roads, electricity and sanitation; a solution is to locate processing where the infrastructure is available (e.g. business clusters) – if the bare minimum infrastructure exists, the growth of indigenous fruit processing could stimulate further development.
- The seasonal glut of fruit is a problem for keeping a business working all the year round; possible solutions are product diversification and technologies that can process more than one product (e.g. the marula press that can process juice and oil).

Finance and capital

The working group was of the opinion that capital for fruit processing businesses should be provided according to the same basic rules that apply to other rural financing. It reported as follows on constraints and possible solutions related to this aspect:

- There are no dedicated financial institutions or mechanisms to support indigenous fruit processing; the pending National Rural Finance policy could solve this, while a clear national program and an institutional framework for fruit processing could facilitate donor support.
- Many prospective entrepreneurs lack collateral for loans; this could be addressed by demonstrating the financial viability of fruit processing, or by mobilising savings.
- Lending institutions such as NDC and Agribank do not have ways to assess the viability of indigenous fruit processing business plans; this could be overcome through pilot projects using trial production to demonstrate viability – the results could be collated into a range of viable “package deals” that could be demonstrated to both SMEs and financiers.

Quality and standards

On this topic, the group reported that:

- There are no standards for indigenous fruits in Namibia yet, although there are some generic standards that might be applicable.
- As the industry grows, the need might arise to develop (and ultimately gazette) official standards and benchmarks – this should be done in participation with producers, processors and other stakeholders, so that everyone involved in the industry knows and adheres to such standards.
- For the export market there is a need to comply with international packaging and labelling standards.
- Health and safety standards are needed to protect consumers; this can be done through training and awareness-raising, possibly in co-operation with local governments.

First round discussion

Question: Is the intent only to commercialise fruits when the market is flooded, because some of these fruits are scarce resources?

Response: The criteria for commercialisation or promotion were looked at by the Resource working group. Obviously it would not be possible to commercialise a resource unless the community wanted it.

Question: Exactly who are the stakeholders in this process?

Response: This has been discussed already, but it is hard to be exhaustive at present – it could be that communities have different perceptions about stakeholders and priorities. The program must find out which resources producers want to commercialise and work around that.

Response: People should be informed about the possibilities that exist for various resources and then they can make informed decisions.

Response: At the very least there are thousands of women stakeholders in the north who would like to see something done about deriving more value from their marula juice.

Question: Many indigenous fruits and fruit products are already sold in informal markets – how will they be promoted? Only by introducing them to formal markets, or by facilitating a better income?

Response: The programme should be careful not to destroy informal markets, because they may be more flexible and better adapted to supporting livelihoods.

Follow-up question: So the intention is to bring new products to market?

Response: Yes.

Follow-up question: For example?

Response: For example products from mopane seeds and similar under-utilised resources – the issue is to understand which resources can be commercialised and to facilitate the process.

Question: How can the right time to commercialise a resource be decided? Because as soon as value-adding happens and products are brought to the formal market, standards etc. become an issue.

Response: The timing and sequencing of the commercialisation process is different for different resources, e.g. for marula the technology is relatively well-known and some people have surplus fruit every year, so there is no problem of resource availability, only of best marketing practices. Eembe, for example, is different, in that there is not as much of it as marula, and it therefore needs additional study. The principle should be to promote under-utilised resources and to adapt the approach to the availability.

Priorities for action

After its second session, the Technical and Processing issues working group recommended the following priorities for action to be incorporated into the national strategy plan (short-term ST, medium-term MT, long-term LT):

Marketing

- Market research on selected resources and products – national regional and international markets; identify rent-seeking in marketing chain; rank best-prospect products; labelling and packaging (ST)
- Investigate options for establishing marketing investigation unit – to do market matching, market information, market research (MT)
- Identify private stakeholders involved – possibly co-operation (ST)
- Identify bottlenecks in infrastructure/logistics for marketing (MT/LT)
- Develop a generic promotion strategy (LT)
- Establish quality and standards requirements of markets (MT)

Processing/technology development

- Identify potential test/pilot communities/projects with under-utilised resources (ST)
- Assess technologies available in Namibia and elsewhere (ST)
- Pilot and adapt selected technologies in a secure funded project (ST/MT)

Technology management

- Develop training packages (MT)
- Develop and disseminate extension messages and promotional materials (MT)
- Identify mentors (ST/MT)
- Identify and promote suitable sites for dissemination (MT)
- Special scheme in rural finance (MT/LT)
- Assessment and demonstration of financial viability – from economics of pilot projects for business plans (MT)
- Labelling and packaging (MT/LT)

Comment: It would be useful to monitor existing businesses based on indigenous fruits

4.3 Institutional arrangements working group

This group was tasked with considering:

- Policy and legislation (including resource tenure)
- Role of Government
- Role of the private sector
- Framework for co-operation, communication and information exchange
- Co-ordinating bodies

The group reported back as follows:

Constraints

- Inadequate communication between actors in indigenous fruit promotion (government and NGOs)
- No mechanism for co-ordination between actors
- No policy or national strategy for indigenous fruit promotion
- Limited human, material and financial resources
- No appropriate central information system on indigenous fruit promotion
- Weak grassroots community institutions
- Inadequate co-operation between the different extension services
- Laws restricting e.g. brewing and sitilling indigenous fruits for formal market
- No product- and market-orientated (rural) technology innovation and dissemination centre(s)

Opportunities and strengths

- Government is committed to grassroots development
 - supported in National Development Plans (NDP 1&2)
 - available budgets (NPC, line ministries)
- SME and co-op support and development services exist
- Existing specialised institutions
 - MAWRD – NBRI, RDCs, NAB etc.
 - MET – DoF, DEA
 - MHETEC – NCRST, Unam, Polytech
 - NGOs/CBOs/private companies
 - Lending organisations
- Donor support to Government, NGOs, grassroots organisations (but not R&D funds?)
- Access to specialised services (SADC, internationally)

Solutions

- A national strategy is needed as a priority for the commercialisation of not only indigenous fruit, but also indigenous plants
 - should harmonise with existing policies – agricultural, forestry, food security, wildlife, science and technology etc.
- The strategy should address
 - information, communication and information-sharing
 - co-ordination
 - mobilisation of resources (government, donor, NGO, expertise...)
 - priorities and key areas
- A Task Team should be established
 - comprised of the main stakeholders
 - convened by MAWRD
- The main tasks of the Task Team should be
 - develop a national strategy through a consultative process

- organise regular workshops for stakeholders (yearly?) to review progress
- scrutinise and facilitate new strategic intervention for indigenous fruit promotion
- look into establishing a “central information system” for indigenous fruit promotion
- The information system should
 - collect information on what is done by whom in Namibia and the results achieved
 - disseminate information to stakeholders
 - identify gaps in knowledge
 - research and gather information internationally
- The promotion of indigenous plants should be included in the mandates of FSRE units and agricultural extension service (holistic approach) and closer co-operation with other extension services (e.g. forestry) should be promoted

First round discussion

Comment: The Resources group also identified a need for an information centre – the NBRI seems like an appropriate place to house it.

Response: Possibly in the short term, but it should eventually fit into the central information system envisaged by MHETEC.

Response: Setting up a structure is easy, but feeding in relative information is harder. MAWRD is establishing a new information management system, including a website for all directorates and projects – it should co-ordinate with MHETEC.

Question: What would an organigram of this arrangement look like? What is the relationship between the Task Team and e.g. the MHETEC initiative?

Response: The Task Team should get on with the job in the meantime and slot into the MHETEC structure when it is ready.

Response: The MHETEC science and technology body will cover all sectors, but also contain sectoral sub-bodies – it does not mean that sectoral initiatives can’t be started.

Question: Can an S&T body deal with market research and market intelligence (which have been identified as crucial for the programme)?

Response: Maybe, in an appropriate sectoral sub-body.

Comment: Insofar as the promotion of indigenous fruits concerns traditional knowledge, it is relevant to the UN Convention on Biological Diversity, for which the information clearinghouse is located in the DEA.

Comment: Re the remarks on extension mandates: there is currently no clear message on indigenous plants to take to farmers – once the market is known and technologies are available, extension services can carry the message without changing their mandate.

Comment: This discussion underscores the need to share information between different national initiatives. It would be useful to have a “roster of experts” (people who know the background) who can be accessed for the Task Team.

Comment: The background document states that there is no one institution with the total capacity to promote indigenous fruit in Namibia, but there have been some efforts. In the opinion of the DoF its forest policy includes the promotion of fruits and other non-timber forest products – therefore the proposal to FAO. The DoF also has an information management system, including information on indigenous fruits.

Response: The group did not identify a new policy as a priority – it suggested looking at existing policies, harmonising those aspects that relate to indigenous fruit promotion and closing possible gaps.

Response: Maybe the workshop should discuss whether there is a need for a new policy?

Response: If the Task Team looks at existing policies and from the gaps identifies a need for a new policy, then it can be developed – there are many complex issues to address in such a programme.

Response: The upcoming policy on access to genetic resources and traditional knowledge addresses some of the relevant questions – the best plan is to harmonise applicable parts of existing policies.

Question: If there were to be a new policy (or strategy), in which Ministry would it belong?

Response: This question is part of the policy process – the answer will emerge in the course of the policy discussions.

Comment: Harmonising policies involves a lot of discussion of doubtful utility. But a strategy is required to do something specific.

Suggestion: The workshop should use what time it has left to flesh out the strategy.

Response: Maybe it would be better to retain a consultant to work out a project proposal and formulate specific initiatives which the Task Team can take further.

Response: But the workshop should at least point the way forward.

Response: As an example, in the formulation of the rural finance strategy, stakeholders identified “strategy components” to include in the way forward and the working team then took those as guidelines – otherwise it is hard to make progress.

Response: Yes, other task teams (e.g. cotton) went through a similar process and found it useful – the workshop should define terms of reference for the Task Team.

Question: Will that be the only output, or will there also be specific recommendations for action?

Suggestion: Participants should return to their working groups to prioritise actions for the national strategy, which can then be used to develop terms of reference for the Task Team.

Priorities for action

After its second round of discussions, the Institutional Arrangements working group recommended that the following actions be accorded priority:

- The Terms of Reference of the Task Team must be finalised
- The Task Team members should represent:

Ministry of Agriculture Water and Rural Development

- DART (convene and chair)
- NBRI
- DEES
- DOP

Ministry of Environment and Tourism

- DoF
- DEA

Ministry of Higher Education, Training and Employment Creation

- Directorate Research Science and Technology (DRST)

Ministry of Trade and Industry

- Division of Industrial Development

Polytechnic of Namibia

University of Namibia

NGOs

- CRIAA SA-DC
- DRFN
- NNFU

Membership should be restricted to 10 to 15 people. Members should be properly mandated by their respective ministries, institutions and organisations. The Task Team can co-opt additional members if necessary.

- The development of the information base should be a high priority.

The working group further identified the following strategic institutional components:

- Community participation in the project
- IPR issues
- Information, training and support services to project actors
- Pilot/demonstration projects

5 Final Plenary

During the final plenary session immediate actions were decided and responsibility for their completion allocated as follows:

1. Workshop proceedings

- CRIAA SA-DC will compile the workshop proceedings and a draft will be circulated for comments by the 2nd May.
- Comments on the draft report are due at the latest by Friday the 19th May
- The Indigenous Fruit Task Team will meet to review the draft workshop report and comments in the week of the 22nd and 26th May.
- The proceedings will be completed and distributed by the end of May.

2. Indigenous Fruit Task Team mandated by the workshop

- The Directorate of Agricultural Research and Training (DART) will be responsible for inviting members onto this Task Team and this should be done as soon as possible.
- The first meeting of the Task team will take place between the 22nd & 26th May. DART will call this meeting. The agenda will include :
 - Revision of the comments on the draft workshop report.
 - Finalise the Terms of Reference for the Task Team

3. Fine Tune Strategy

- The Task Team is responsible for fine-tuning the strategy and should complete this by July/August 2000

4. Immediate Actions

- CRIAA SA-DC is responsible for distribution of this list of immediate actions by the 19th April.

Comment: Fine-tuning the strategy involves developing actions, allocating them to stakeholders, setting a timeframe and setting deadlines.

Response: Would it not be more efficient to advertise a tender for a consultant to finalise the strategy and have the project steering committee oversee this process?

Response: The Task Team should first identify the actions required and develop terms of reference for such a consultancy, otherwise it would not be clear what it should achieve.

Mr Hans Venter of DART then made the following closing remarks:

“What has become abundantly clear during the past day and a half is that the promotion of indigenous fruit is far more complex than it would appear at first glance. To ensure success, several key issues must be addressed simultaneously, and in a coordinated manner.

“Like any chain, the production chain between indigenous fruit growing in the wild, and a finished product in the shopping bag of a consumer, is only as strong as its weakest link. I think we have heard and seen enough to know that at the moment one of the weakest links in this chain is marketing, and in that I also include product development, because attractive products provide the building blocks for marketing.

“As many participants have remarked, we need to focus urgently on turning the research that has already been done – in Namibia, in SADC and elsewhere – into action that can have an immediate, positive impact on rural livelihoods. To achieve this, the workshop has identified processing as a priority activity. This processing must be market-oriented and must concentrate on products with a high value-added component. Ideally, as much as possible of this added value must be transferred to community level, so that the marketing of indigenous fruit products directly benefits those who are most in need of additional income opportunities.

“Another achievement of the workshop has been the institutional framework we have initiated here. This will allow us to plan and coordinate our actions in such a way that we avoid duplication of efforts and achieve, as the Americans would say, “maximum bang for the buck”. I think we now have a much clearer idea of who is interested in, and capable of, contributing what services to the implementation of the indigenous fruit programme. We have the outline of an action plan and we can move ahead rapidly to deliver results.

“I am also very glad that we have managed to prioritise a few specific resources for immediate promotion, and that we have established criteria for selecting further resources at a later stage. For a variety of reasons, marula has been selected as the resource that should be accorded highest priority. Prioritising marula does not mean that we should neglect other resources with existing potential, like manketti or *Berchemia*, but it does provide us with a place to start immediately and a structure within which to evaluate and then promote these other resources.

“We have also heard much about the need to protect our indigenous fruit resources, and those communities that depend on them for food-security, against over-exploitation, especially once we proceed to commercialising them. I would like to urge all stakeholders to bear this important consideration in mind at all times, and to actively plan it into further actions. Without resource sustainability, it is impossible to do sustainable processing or marketing.

“Finally I would like to call on all the role players in this programme to continue and accelerate their efforts. There are hundreds of thousands of rural Namibians with valuable natural resource endowments that they would like to use sustainably for their own economic development, and that of our country. These people are looking to us to help them bring these resources to the market. Let’s not fail them.”

Mr Venter thanked all who had contributed to making the workshop a success and declared it officially closed.