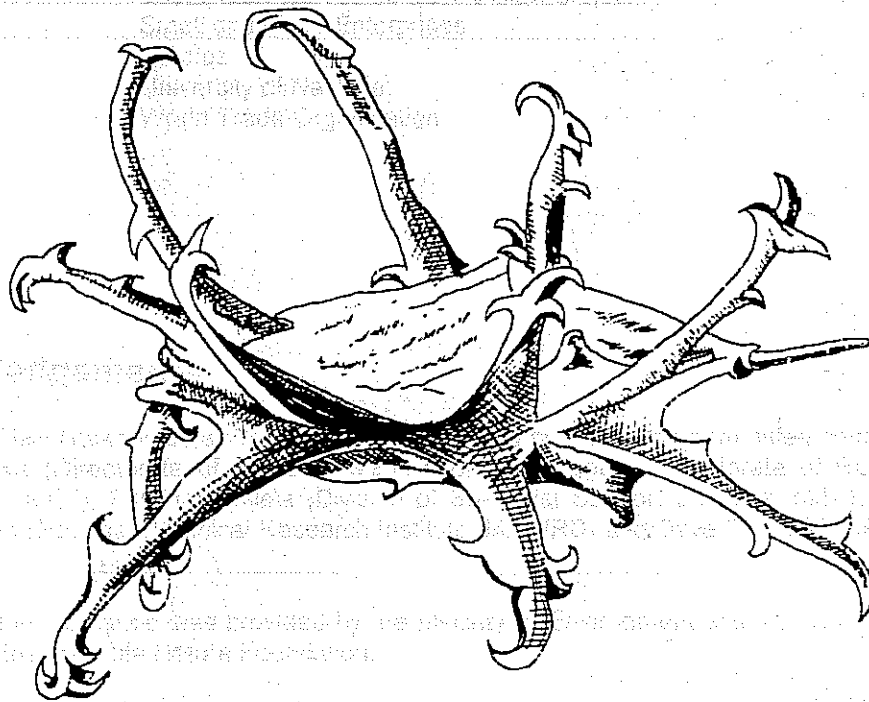


PROCEEDINGS
of the
**NAMIBIA NATIONAL
DEVIL'S CLAW
STAKEHOLDERS WORKSHOP**



Organised by

**Ministry of Environment and Tourism
Ministry of Agriculture, Water and Rural Development
CRIAA SA-DC**

at
Greiter's Conference Centre, Windhoek
on
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Acronyms and Abbreviations

CBD	Convention on Bio-Diversity
CBO	Community-Based Organisation
CITES	Convention on International Trade in Endangered Species
CRIAA SA-DC	Centre for Research Information Action in Africa, Southern Africa Development and Consulting
DoF	Directorate of Forestry
DoP	Directorate of Planning
DRM	Directorate of Resource Management
DSSS	Division of Specialist Support Services
FOB	Free On Board
GRN	Government of the Republic of Namibia
MAWRD	Ministry of Agriculture, Water and Rural Development
MET	Ministry of Environment and Tourism
MLRR	Ministry of Lands, Resettlement and Rehabilitation
MRLGH	Ministry of Local and Regional Government and Housing
NAB	Namibian Agronomic Board
NBRI	National Botanical Research Institute
NGO	Non-Governmental Organisation
NNF	Namibia Nature Foundation
SHDC	Sustainably Harvested Devil's Claw project
SME	Small and Micro Enterprises
sp.	species
UNAM	University of Namibia
WTO	World Trade Organisation

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Executive Summary

The tubers of Devil's Claw (*Harpagophytum* sp.) are in demand in the phytomedicines industry because they contain a natural anti-inflammatory remedy. Namibia is the world largest producer of Devil's Claw, with annual exports of about 600 tons dry weight of wild-harvested material (worth an estimated N\$10 million a year). Harvesting the plant is an important (often the only) source of cash income for up to 12000 poor and marginalised rural families.

The growth of the Devil's Claw trade in recent years has given rise to concerns about the sustainability of current harvesting levels and practices. In 1997 CRIAA SA-DC started the Sustainably Harvested Devil's Claw project in the Omaheke region, working with communities of harvesters to promote sustainable resource utilisation and secure better prices for harvesters. In July 1999 the Ministry of Environment and Tourism re-introduced an interim permit system under the provisions of the Nature Conservation Ordinance of 1975. Many concerns about the permit system were consequently raised by various stakeholders in the industry.

The Devil's Claw Stakeholders Workshop that is the subject of this report was organised to bring together for the first time as many of the stakeholders in the industry as possible, to discuss the many issues surrounding the management and utilisation of this important natural resource. Participants ranged from representatives of illiterate harvesting communities through traders and NGO workers to senior Government officials. The workshop was officially opened by the Permanent Secretary of MAWRD, Dr Vaino Shivute, and officially closed by the Permanent Secretary of MET, Mr Tangeni Erkana.

The first part of the workshop comprised input from various quarters:

- A briefing on current exports, resource status and the permit system by Ms Elly Hamunyela of DSSS
- A harvesters' perspective incorporating the views of a community workshop on Devil's Claw held in the Omaheke region, presented by Mr Mbazo Motlhaping, a CRIAA SA-DC field worker
- An overview of the export market by Mr Michael Krafft, an exporter
- An overview of current issues around the resource by Mr Cyril Lombard of CRIAA SA-DC

The second part of the workshop consisted of four working groups that were formed to discuss related issues under broad categories. These groups, and the issues they were delegated to discuss, were:

Resource Management

- Policy - who is responsible for what aspects of resource management?
- Research –
 - situational analysis of resource status
 - comparison with other countries and areas
- Information dissemination (on sustainable resource utilisation)

- Harvesting season
- Sustainable harvesting techniques
- Quotas - how to set and implement them
- Training and extension (in sustainable management)
- Monitoring procedures
- Cultivation
- Who pays for research and resource management
- Mapping the distribution of the two different species and keeping their tubers separate
- Physiology of the plant
- Socio-economic issues related to resource management

Permits

- Who is the land-owner that must give permission before a permit is issued?
- Registration of harvesters?
- What is the objective of the permit system - is it necessary?
- Accessibility of permits, physically and in terms of literacy, affordability etc.
- Legislation and enforcement
- Links between permits and resource management (considering both landowners and harvesters)
- Harvesting for traditional own use versus commercial harvesting
- Permits to groups or individuals?
- Period for which permit is valid
- Criteria used to issue or refuse a permit
- Fee (or free)
- Practical logistics of issuing up to 12000 permits
- Responsible authority?

Marketing and Exports

- Export permits
- An national organisation / "Board of Control" / Devil's Claw Association
- Standards and quality control
- Controls on genetic material (especially to SA) and blackmarket
- Domestic and international market research
- Certification and "organic" marketing advantage of sustainably harvested product
- Value-adding and processing
- A national data bank
- Cooperative marketing
- Pricing and economic viability

Policy and National Strategy

- Objectives of a national policy and strategy
- Situation analysis of relevant national and international laws
- Relations between Namibia and the other range states regarding the resource

- A national response to the proposal to list *Harpagophytum* on CITES Appendix II
- Which stakeholders were involved and who should benefit from the industry
- International standards
- Trademarks / other intellectual property rights / biotrade legislation
- Cultivation
- Institutional arrangements
- Socio-economic issues

The working groups reported back to the plenary session, where their suggestions were discussed. After its plenary deliberations, the workshop adopted the following **conclusions and recommendations**:

1) A **Devil's Claw Working Group** must be formed. This committee will initially be **chaired by DSSS** on behalf of DRM/MET. The Working Group should continue the consultative process initiated by the workshop. The following were nominated to be represented on this working group:

- a) Ministry of Environment and Tourism:
Directorate Resource Management
Directorate Forestry
- b) Ministry of Agriculture, Water and Rural Development:
National Botanical Research Institute
Directorate of Planning
- c) University of Namibia
- d) CRIAA SA-DC
- e) A representative from the harvesters
- f) A representative from the exporters

2) **DRM** would assume **overall responsibility** for co-ordinating the issuing of Devil's Claw **permits** and other **resource management** issues. Devolving responsibility for local resource management to producer level should be pursued as a longer-term objective.

3) A **national situational analysis** on Devil's Claw must be conducted in the near future. The Working Group will set the Terms of Reference and coordinate the study.

4) Devil's Claw should be **harvested on a seasonal basis** to ensure sustainability. MET should declare open and closed seasons. The Working Group was tasked to investigate (possibly as part of the situational analysis) when the harvesting season should start and end.

5) The Working Group was mandated to pursue the following issues (not necessarily in order of priority):

- a) **Standards** for export of Devil's Claw (possibly in coordination with international standards bodies)
- b) Present **legislation** controlling Devil's Claw (possible gaps/overlap between Forestry and Resource Management laws)

- c) The proposal to list the plant on **CITES** Appendix II
- d) A methodology for setting (possibly area-specific) harvesting **quotas**
- e) The requirements pertaining to, and practical arrangements for, the issuing of research, harvesting and export **permits**
- f) **Propagation and cultivation** of Devil's Claw

1) Introduction

Devil's Claw is a perennial prostrate vine that grows in many parts of southern Africa. In Namibia there are two species, *Harpagophytum procumbens* and *H. zeyheri*. The tubers of *H. procumbens* contain a natural anti-inflammatory remedy and are harvested and exported from Namibia at an annual rate of up to 600 tons dry weight (worth about N\$10 million at current prices). Harvesting Devil's Claw is an important source of cash income for many poor rural people, especially in the Omaheke and Otjozondjupa Regions.

However, in recent years there has been growing concern that current levels of harvesting might be unsustainable. Responses to this perceived threat included the Sustainably Harvested Devil's Claw project implemented by CRIAA SA-DC, private efforts to propagate and cultivate the plant commercially, a proposal (originating in Germany) to include it on Appendix II of CITES, and the reintroduction by the MET in mid-1999 of an interim permit system for harvesting and export.

The aim of the workshop was to bring together representatives of all national stakeholders, from harvesters through exporters and NGOs to various government departments, to discuss the current status and future management of this natural resource. A list of participants is included as Appendix 2.

2) Welcome and Opening

The workshop facilitator, Dave Cole of CRIAA SA-DC, welcomed the participants and handed the floor to the Permanent Secretary of MAWRD, Dr Vaino Shivute, who officially opened the workshop.

Dr Shivute expressed a keen personal interest in plant genetic resources and added that the rapid development of bio-technology had opened up considerable new avenues to be explored. He pointed out that plant-based traditional medicine was an integral part of most cultures, while Western or orthodox medicine could be traced to the identification of active ingredients and the use of these as single drugs in the 18th century. The two systems were interdependent, e.g. one in four prescription drugs was discovered from studies of medicinal plants used by indigenous people, while the technology of orthodox medicine allowed the standardisation of dosages by traditional healers.

Devil's Claw must surely be Namibia's most noteworthy contribution to the global pharmacopoeia, Dr Shivute observed. Although used for generations by Namibians, the medicinal properties of the plant were only recognised by Europeans in 1904 and the first large-scale exports of dried Devil's Claw took place in 1962 to Germany. The demand for the products had increased to the extent that about 600 tonnes dried material was exported annually from Namibia in 1998 and 1999, representing foreign exchange earning of as much as N\$10 million a year for the country. While this had brought increased opportunities, it had also vastly increased the pressure on the resource and raised concerns about its future, leading to the reintroduction in August 1999 of a permit system for harvesting Devil's Claw.

Dr Shivute said the possible cultivation of Devil's Claw should be researched, adding that Government sought to promote agricultural diversification by encouraging the development of non-traditional agricultural enterprises, which were often better adapted to Namibia's arid environment. However, controls would be needed to ensure that cultivation created rural employment and income for resource-poor farmers, rather than a "get-rich-quick" opportunity for large-scale commercial growers who might jeopardise the demand-supply balance and thus the entire industry. An alternative might be a programme to rehabilitate Devil's Claw in harvesting areas, to which end various activities might be devolved to community-based organisations, Dr Shivute added, pointing out CRIAA SA-DC's initiative in this regard.

Referring to the range of governmental and non-governmental agencies involved in the conservation and use of Devil's Claw in Namibia, Dr Shivute observed that exact roles and responsibilities were not always clear and that consideration should be given to clarifying this aspect. Within the MAWRD, the NBRI was responsible for promoting the sustainable use of

indigenous flora and had prioritised Devil's Claw for immediate attention under its Useful Plants Project, he said, while the ministry's Law Enforcement Section issued phytosanitary certificates and export permits prior to dried tuber material leaving the country. The MET played a major role in administering and enforcing regulations concerning the use and conservation of Devil's Claw, Dr Shivute added, with the DRM issuing harvesting permits (previously done by the DoF) and the DSSS establishing criteria for permits and collating the information obtained from them.

Role players from the non-governmental sector included harvesters, middlemen and exporters, Dr Shivute continued, with harvesters in particular playing a crucial role – as the ones harvesting the resource they were its actual managers, but they were also vulnerable to exploitation, which did not contribute to sustainable management. If harvesters were paid a fair price and were able to see the benefits from sustainable harvesting, they were more likely to employ sustainable harvesting practices, he said, and in this way sales of Devil's Claw could also make a significant contribution to improving rural livelihoods, where in some cases sales of Devil's Claw represented the only cash income for the whole year.

Dr Shivute said the many issues surrounding Devil's Claw that needed attention ranged from resource management and permits through the possible listing of the resource on CITES Appendix II, to marketing and export, the exploitation of harvesters and possible future cultivation, and also, perhaps most importantly, a national strategy for managing and developing the resource. It was for these reasons, and others identified by stakeholders, that this first Devil's Claw stakeholders workshop had been organised. It was important not to see this as an end in itself, but rather as the first step in a process towards developing and implementing an efficient and effective resource management policy.

Indigenous plants presented opportunities to develop novel products, but were also an important buffer against poverty for many communities, especially in the rural and informal sectors, Dr Shivute said. Lessons learned in the management of Devil's Claw could be applied to other Namibian plant resources. This had to be done in the context of the national biotrade legislation which Namibia, as a party to the CBD, was obliged to develop so as to facilitate access to genetic resources while ensuring fair and equitable sharing of benefits accruing from their use.

Dr Shivute acknowledged that many of the issues to be discussed might be contentious, but added that all stakeholders had a common purpose and vested interest to ensure more efficient, equitable and sustainable use of Devil's Claw. He requested that participants enter the workshop with openness and honesty so that all might profit at the end of the day. The emergence of a sustainable Devil's Claw industry would contribute to the broad national development goals of reviving and sustaining economic growth, creating employment, reducing inequalities in income distribution and eradicating poverty – a challenge indeed, Dr Shivute said.

3) Current Exports, Resource Status and Permit System

Elly Hamunyela of MET (DSSS) was the next speaker. Referring to the distribution map produced by Karen Nott in 1986 (attached as Appendix 3) she explained that both *Harpagophytum procumbens* and *H. zeyheri* occurred in Namibia and that the first large-scale export of *H. procumbens* took place to Germany in 1962. By 1975 exports had risen to 180 tons a year and concerns about over-utilisation led to the plant being listed as a protected species under the Nature Conservation Ordinance (No. 4 of 1975), which meant that permits were required to harvest, possess, transport or export it, and that permit holders had to submit monthly reports on quantities harvested and/or exported.

In her 1986 study, Nott found that only about 10% of Devil's Claw harvested was done with a valid permit. At her recommendation, permits for harvesting, possession and transportation were suspended, so that permits were only required for export. Hamunyela said an analysis of permits issued since 1991 showed a progressive increase in the quantity of *Harpagophytum* exported, with a dramatic increase in 1998 from about 300 tons to almost 700 tons (graph attached as Appendix 4). In 1999, up to the workshop date, about 568 tons

had been exported, she added. The major importing countries (see graph attached as Appendix 5) were France, Germany, South Africa, Spain, UK and Switzerland, with South Africa becoming an increasingly important importer in recent years (300 tons in 1998).

The MET started receiving complaints from various quarters about over-utilisation, and there was concern about harvesting practices, Hamunyela said. In July 1999 MET re-introduced an interim permit system for the harvesting of Devil's Claw, which was aimed at solving some of the concerns (e.g. unauthorised harvesting on communal and private land) as well as providing MET with more information on localities and quantities harvested. To date (of the workshop) 18 harvesting permits had been issued, viz:

- 7 in Gobabis
- 2 in Okakarara
- 7 in Rundu
- 1 in Windhoek
- 1 in Otjiwarongo

Hamunyela showed the workshop an example of a permit application form, which had a section for the landowner's written permission and an illustration of the taproot and side tubers to encourage harvesting without killing the plant. A permit was only valid for one month, was only issued to individuals and had a reporting form on the back where permit holders had to indicate how much they harvested and from which areas. MET was aware that the permit system was causing problems for certain people, Hamunyela said, and hoped the workshop would contribute ideas on how to control harvesting in a fair manner.

In conclusion, Hamunyela expressed the hope that a better adapted permit system would also help to address other areas of concern to MET:

- Over-utilization in some areas
- Harvesting without permission from landowners or local communities
- Unsustainable harvesting methods (removal of taproots)
- Deep holes left in the ground posed a threat to livestock, people and water catchments

The discussion was then opened to the floor and the following remarks were made, questions asked and answers provided:

Remark: The information on sustainable harvesting is currently printed on the permit application form, which is handed in to the MET; it would be better to hand it out with or as part of the permit itself, so that harvester can keep it in their pockets for reference.

Question: What is known about the status of the Devil's Claw resource?

Answer: The DSSS is not really sure - this was one reason for the reintroduction of permits.

Remark: Eighteen permits have been issued and one can wonder to whom, because the traditional harvesters are overwhelmingly illiterate - this raises the question of whom the permit holders are hiring to do the harvesting for them?

Question: Illegal harvesting is continuing - what measures can be taken to stop it?

Answer: MET is trying to sensitise its field staff to the need for permits, which must be carried on their person by harvesters while harvesting; at export the exporter must make a full account of the quantity being exported be reconciling it with valid permits.

Question (from an exporter): There are no numbers on the permits and the problem is how to know that the permit you are shown is indeed a valid one, because exporters have seen some "funny ones" - there seems to be no system to confirm the validity of a permit?

Answer: Genuine permits do have serial numbers.

Question: There are obviously many more harvesters than the 18 permits issued?

Answer: Permits have only been issued since July 1999 - there might well be more harvesters, and more permits issued before the start of the next harvesting season.

Question: What procedure or process was followed before the permit system was reintroduced?

Answer: Permits to harvest/transport/sell Devil's Claw (which had been suspended since 1986) were reintroduced in 1999 in order to establish where and how much Devil's Claw was being harvested; it is an interim permit system to gather information on localities and quantities; the workshop can make recommendations about how a future system should function.

Question: The permit system introduced in 1975 applied only to commercial farms - what is the situation now?

Answer: The regulations of the Nature Conservation Ordinance apply to all of Namibia.

Question: Shouldn't MET establish a quota for each harvesting area before issuing harvesting permits?

Answer: There is a need to gather more information first, but this is one reason why permits are only valid for one month.

Comment: Complaints had been received from various stakeholders and landowners (including Members of Parliament) about illegal harvesting, which had in some cases led to physical fights between harvesters and local communities; there was an urgent need to control the situation; the permit system is an interim measure while legislation is being prepared.

Question: Are permits issued only to people who actually live on the land where the plant is to be harvested?

Answer: No, anyone can get a permit, but needs the permission of the landowner to harvest.

Question: Two species of Devil's Claw occur in Namibia - is the permit the same in all parts of the country?

Answer: Yes, the permit applies to the genus *Harpagophytum*.

Question: The Directorate of Forestry issued permits for Devil's Claw in some areas - are these included in the statistics presented?

Answer: No, the DoF permits were issued before the interim permit system was introduced. The statistics apply only to new permits issued by MET under the interim permit system introduced in July 1999.

Question: Do traditional local users also need permits to harvest for their own use?

Answer: Yes, they do, but no such applications have been received.

Comment: The one month harvesting period allowed by the permit is too short, because digging the tubers is hard work that cannot necessarily be completed in this time; it would help harvesters if the period was longer.

Question: In view of the fact that sustainable harvesting requires waiting until after fruitset, would it not be a good idea to introduce a fixed harvesting season, e.g. from April to August?

Answer: The MET is open to suggestions and hopes that the question of a harvesting season will be discussed at the workshop.

Question: Who is the landowner in communal areas - the Traditional Authority, the GRN, or the community?

Answer: This is a hard question to answer generally, but the landowner would be the official body who controls the land, e.g. the municipality, Traditional Authority, MLRR etc.

4) Harvesters' Perspective

The next speaker was Mbazoo Motlhaping, a CRIAA SA-DC field worker who has been working with communities of harvesters in the Omaheke region as part of the SHDC project. His presentation was a reportback from the Community Devil's Claw Workshop held on 12-13 October 1999 at Tjaka-Ben Hur rural development center.

Motlhaping reported that the community workshop had been dominated by discussions about the permit system "reimposed" on traditional harvester (who were mostly San), but that the following general points of concern had been raised as well:

- The workshop participants felt that they had no real control over the sustainable utilisation (or not) of the resource, because they had no power to control who comes onto the land to harvest
- They are paid exploitative prices by "middlemen"
- There was no clarity on land ownership, especially in communal areas and on resettlement farms
- There was a lack of communication between the communities and Government agencies such as MAWRD and MET

Regarding the recent reintroduction of a permit system, Motlhaping reported that the community workshop had raised the following points of concern:

- Although groups of harvesters from 18 farms were involved in SHDC, only individuals could apply for permits, and not groups or conservancies; while groups of harvesters could better coordinate their harvesting to ensure sustainable use of the resource, most of their members were illiterate and found it hard to obtain permits
- The issuing of permits to people who did not live on the land they wanted to harvest meant that anyone could theoretically harvest on the farms where groups were active, which undermined community efforts to use the resource sustainably
- It will be difficult for those who cannot read and write to complete the application and reporting forms
- Communities did not have scales to weigh their harvest for reporting purposes
- The permit system says nothing about sustainable harvesting, i.e. quotas, although communities involved in SHDC had set voluntary quotas for each piece of land
- The permit system might undermine the current process of registering harvesters in SHDC project areas
- If the permit system undermined collective marketing, prices might decrease and some harvesters could resort to over-exploitation in an effort to increase their incomes
- The one-month limit on a permit is too short - harvesters sometimes spent more than 5 weeks in the veld to harvest one bag of dried tubers
- The transport cost from harvesting areas to e.g. Gobabis to get a permit would be prohibitive to many harvesters, and this would result in more mobile people who were not actually harvesters getting the permits instead
- Who is the real landowner on communal and resettlement land? Where and how does a person actually get the permission required by the new permit system? This requirement seems to disadvantage marginalised people, especially the San.
- How will quotas be set and who will monitor them?

Motlhaping then moved on to measures recommended by the community workshop as possible solutions to the issues raised above:

- Groups or conservancies should be able to get a collective permit, allowing the harvesting of a set quota over a practical period from a specific piece of land
- Each group applying for such a collective permit should have a register of harvesters in which names, ID numbers, weights harvested and sales are recorded
- By registering as a member of such a group a person accepts the rules of the group, e.g. harvesting only secondary tubers from mature plants, refilling holes, using stainless steel knives to slice the tubers and drying the product properly
- Permits should only be issued to people who actually live on the land for which the permit is being sought, because the residents of an area know where and how much they can

- sustainably harvest, but if permits were issued to just anyone they would have no control over e.g. the harvesting of immature plants
- There should be post-harvest assessments (by the MET or another appropriate agency) of areas for which harvesting permits have been issued, to evaluate e.g. the refilling of holes and detect possible over-harvesting
 - Purchasers of Devil's Claw should keep a record of the permit number(s) when they buy from groups - this will allow groups to maintain the unique identity of their product as a marketing tool and encourage quality control
 - Communication between the harvesting communities and the MAWRD and MET should be improved, with GRN field workers possibly supervising harvesting and doing extension work on sustainable harvesting techniques
 - The permit system should somehow protect the poorest and those who cannot read or write

The following comments were made, question asked and answers given during the discussion following Mothlaping's presentation:

Comment (senior MET official): Thank you for raising these issues. There is a need to address community concerns, but also practical questions about how to control group harvesting and how to set quotas.

Comment (senior MET official): Regarding control over land, it is hard to control how people move around in their attempt to make a living. The landowner's permission must be obtained - Government can give permits but the landowner must give permission. Price controls are not feasible and would cause an outcry from industry, but buyers should not exploit their "countrymen". MET staff regularly report doing extension work - community complaints about inadequate extension should be investigated. Regarding the problem of illiteracy, Government employees and NGO workers can help harvesters who cannot read or write.

Question: How does information about permits etc. reach people who do not have access to the means of communication? How will they know that they need permits? How will they weigh their harvests? If there are two tribal chiefs in an area, which of them must sign the application?

Answer 1: The re-introduction of the permit system and other information was communicated in the media; exporters were also informed, in the hope that they will inform "middlemen" and that the information will trickle down to harvesters in this way. So far the MET has been very lenient in enforcing the system. Regarding weighing, a possible solution is to report the number of bags of a certain size that have been harvested - the idea is to get reliable data about quantities harvested.

Answer 2: In the case of two tribal chiefs, the MLRR should be able to tell who the legal "landowner" is.

Question: While it seems like a good idea to link quotas and permits (provided a quick way to set quotas is found), and to have a monitoring system in place, can harvesters also be involved in monitoring?

Answer: Harvesters will do anything possible to help conserve the resource because they have a direct interest in its continued well-being.

Comment: If the law is broken, e.g. if there is illegal harvesting, groups make law enforcement very difficult; on the other hand, registered harvesters will make law enforcement easier.

Response: Harvesters register by household and local monitors can be appointed to supervise their peers; law enforcement will be made easier if groups know their quotas; groups keep records and make information available.

Comment: There have been problems with permission granted by Tribal Authorities, with some members of the community questioning the authority and legitimacy of the local headman; a possible solution would be for e.g. the MLRGH to write to headmen authorising them to grant permission, and then sensitising them to the conservation issues involved.

5) Overview of Export Market

The next speaker was Michael Krafft, who introduced himself as born and bred in Dordabis, where he is a farmer, registered professional hunter and founder member/current chairperson of the Dordabis Conservancy. With his wife, he has been buying and exporting Devil's Claw since 1975.

Krafft said exporters occupied a key position in the industry: they had the contact with and confidence of importers/processors, which they earned by being able to deliver the quantity and, more importantly, the quality required by the overseas buyers. To do this, exporters must finance, repack and store considerable quantities. At the same time exporters had contacts with local traders and harvesters. All links in the Devil's Claw marketing chain were trying to make a profit and all should have a fair share of the income from the industry, he said, adding that there was also a role for the relevant authorities in regulating the harvesting and exporting process.

After World War 2 the late Mr Mehnert had started research abroad on the curative properties of Devil's Claw, Krafft said, and since then demand for the product had risen constantly, with a sharp increase to about 600 tons a year in the last few years. He added that he was uncomfortable with the accuracy of this figure, because various Ministries had issued phytosanitary permits for exports. However, such quantities gave rise to a few concerns:

- The number of exporters had increased over the years and offered products of varying quality in various quantities for a range of prices, which had placed importers in a bargaining position. Over 24 years the price had consequently dropped 85% in US\$ or Deutsch Mark terms; the Namibian producers and dealers were only saved by the devaluation of the local currency. In the mid-1970s, Krafft said, he failed in his efforts to organise exporters to stabilise the quantities and consequently price of the product; recently a South African buyer told him that he would continue trading as long as he could make a profit, regardless of other stakeholders in the industry - an attitude that could be disastrous for Namibian stakeholders and the whole trade in the long run. Krafft said certain exporters were currently offering Devil's Claw FOB in European ports for as little as N\$11/kg - at such low brutto prices, how much would the harvesters be paid, and what was the quality of the product? Quality was even more important now that the use pattern had changed from tea to pills and tinctures.
- The higher demand had also led to an increase in the number of harvesters, especially in the east and north of Namibia, Krafft said. Harvesters were mostly the poorer members of the community, who had to sell to (sometimes unscrupulous) dealers and traders who owned shops or provided transport in the area. These "middlemen" had contact with exporters and usually sold smaller quantities often, because they wanted a quick turnover and did not want to get involved in drying and packing. There has been a decline in quality, with inferior roots and/or *Harpagophytum zeyheri* tubers (which come from the higher rainfall areas in the northern and north-eastern regions and are obtainable at a much lower price) offered for sale, or even being mixed with the real thing, *H. procumbens*. The difference between the dried tubers of the two species was very difficult to detect by eye, but the present market required the dried secondary roots of *H. procumbens*. "In short, if the trade requires peas, you cannot supply beans, even though they are nutritious," Krafft said. [Note: *H. zeyheri* tubers are not used by industry because they contain much lower levels than *H. procumbens* of harpagoside, which is believed to be the main medically active ingredient. Recent high-tech advances in analytical methods have made it much easier and quicker for importers to measure harpagoside levels directly and thus to detect if and when *H. zeyheri* tubers have been mixed with those of *H. procumbens*.]
- Higher demand and higher levels of harvesting, combined with the unsustainable harvesting methods used in many areas, gave rise to fears that the plant might be endangered and over-utilised - Krafft said he agreed that this concern (which was first voiced overseas) was valid in specific areas. The authorities became concerned and re-introduced a permit system, regrettably without consulting any stakeholders and on the basis of very little research. In this connection there has also been the opinion overseas that future supplies would increasingly be drawn from cultivated plants grown in Namibia and South Africa, but neither he nor any of the authorities he consulted was aware of

cultivation on a scale large enough to supply within a few years the current demand of 600 tons a year; nevertheless, this was an issue that should be investigated by landowners, communities and conservancies, Krafft said. He also mentioned that after concerns about the future of the resource were raised, the supply had increased while the quality dropped - this was bad for the whole trade.

Krafft next moved on to some measures he felt should be implemented to put future harvesting, trade and exports on a sustainable basis for the benefit of all concerned:

- The current permit system must be improved by the introduction of quotas. Since no-one can say at present how much Devil's Claw can be harvested without endangering the plant population in a specific area, or in the country as a whole, area-specific quotas must be adjusted from year to year, based on research, observation and climatic conditions. Such a system would also pre-empt problems should the demand grow sharply (e.g. as happened with rhino horn).
- Because any natural resource needs time to rest, recover and reproduce, a closed season must be introduced. Unfortunately it was the case at present that the plant was often harvested as soon as it started growing after the first rains in October or November, and to make things worse this was sometimes done in a way that destroyed the plants. A closed season was a common conservation tool (e.g. for crayfishing, fishing, hunting) and would allow the plant to grow and produce ripe seed before being harvested.
- As an example, Krafft mentioned the work of the SHDC project run by CRIAA SA-DC in the east, where growth is estimated each year and quotas set according to the population in a specific area. Harvesting, packing and storing are supervised and the product is then certified as organic - in his view a trustworthy certificate in the trade.
- Instead of a permit accompanying the product, a certificate must be issued, stating the product (*procumbens* or *zeyheri*), the origin of the tubers and the date they were harvested.
- If it is not already too late, efforts must be made (possibly in cooperation with Botswana and South Africa) to prevent genetic material leaving the country/region. Krafft said everyone knew what happened to the ostrich industry as a result of exporting breeding material, and added that there were rumours about experiments with growing Devil's Claw in north Africa.
- Act 20 of 1992 gives the MAWRD and the NAB control over the harvesting and selling of proclaimed crops - the ministry should proclaim Devil's Claw a controlled crop under the provisions of this act.
- More generally, education about the sustainable use of all natural resources should be stepped up dramatically by all concerned, starting at primary school level.
- A control and marketing body for Devil's Claw should be created, made up of various stakeholders and relevant government departments (e.g. MET and DoF), to set quotas, issue permits and certificates, register harvesting areas (wild, wild crafted and cultivated), control quality, etc. - an example was the benefit the diamond industry derived from the central selling organisation.
- Laboratory facilities should be available to test the quality of products.

Krafft concluded his presentation by saying that Devil's Claw can and must be utilised on a sustainable basis, that this must be done at a price that produced acceptable benefits for all involved, and that a quality acceptable to the market must be maintained at all times.

The discussion was then opened to the floor:

Comment: The marketing chain from harvester to middleman to exporter is often not so simple, and can sometimes involve 5 or more intermediary steps; this also made tracking and controlling the movement of the product more complicated.

Question: What can Namibia learn from how the other countries in the plant's natural range deal with the issues raised?

Answer 1: *H. procumbens* occurs only in Namibia, Botswana and to a lesser extent in the northern parts of South Africa (*H. zeyheri* has a wider distribution, but no market at present) - earlier in 1999 representatives of the three countries had met to discuss the proposal from Germany to list the plant on CITES Appendix II. Botswana has certain control measures and it

would be especially interesting to see how they deal with the issue of quality control, but Botswana's exports are smaller than Namibia's. South Africa does not harvest very much Devil's Claw of its own, but is buying and exporting Namibian material.

Answer 2: No Devil's Claw is currently exported from Angola or Zimbabwe, although *H. zeyheri* from Angola has been finding its way to Namibia. The South African connection is especially worrying, because SA is using Namibian material to establish itself in the market while it conducts trials with large-scale cultivation - this could lead to the eventual marginalisation of Namibian harvesters and dealers.

Comment: It would indeed be possible for the MAWRD to use the NAB to set standards and control quality, and to promote value-adding inside Namibia - a subject that should be investigated.

Response (from exporter): Companies overseas have spent millions on processing facilities and did not see their way clear to establish operations here - the easiest way to add value immediately is to improve the quality of the product, e.g. through better cutting and drying.

6) Overview of Current Issues

Cyril Lombard of CRIAA SA-DC briefed the workshop on some current issues pertaining to the Devil's Claw industry. He characterised his presentation as "an attempt to plug the gaps" in the discussion by looking at aspects of two broader questions:

- 1) What do we need to know to develop a national policy on Devil's Claw, and what should that policy be?
- 2) Should Namibia treat Devil's Claw as a strategic resource, and if so, how could the benefits be maximised for all involved?

Lombard said it was necessary to know how the market operates: what exactly do foreign importers need or want, and how exactly do exporters access harvesters and their product? He pointed out that marketing chains could be long and exploitative, but that good marketing chains were also possible. Regarding the requirements of importers, he said it would be wise to remember that Devil's Claw was only one activity among many for these companies - the group that buys around 70% of all *Harpagophytum* also processes and sells over 400 other products.

Ideally the workshop should have been preceded by a situational analysis, Lombard said, adding that it should be recognised that harvesting is not uniform across the range area (e.g. different situations prevailed on commercial and communal/resettlement land).

Considering that only 18 permits had been issued, he said, the reinstated permit system, if successful, could deprive approximately 12000 other harvesters of an income and shut down the industry through a shortage of supply. Maintaining a constant supply, like adding value and quality control, were important aspects of retaining the market for exports from Namibia; for the time being the issue was to keep the markets interested in buying Namibia's high-quality product.

Lombard warned against "passing the buck" by handing over management of the resource to communities without first implementing a good system to support them, especially with resource assessment and marketing.

Regarding value adding, Lombard said it was important to remember that industry using this raw material increasingly made the product into standardised extracts, and that the processing and dosage standardisation this entailed helped to legitimise herbal medicines and thus stimulate demand for the product. Namibia was not well informed about the technicalities of this processing, e.g. even something as basic as the technical capacity to measure the harpagoside levels of the exposed raw material was not in place (although it was being researched at Unam). This capacity was important for export quality control and essential for any attempts at local processing.

There had been reports that the international phytomedicines markets were very interested in cultivated (as opposed to wild-harvested) Devil's Claw, Lombard said, primarily because of

the control over the level of active ingredient that could be obtained with a cultivated product, and the (supposed) possibility of securing supplies free of "environmental and socio-economic baggage". If this was true, and large-scale Devil's Claw farming became a reality, what would happen to poor rural harvesters and their communities? Did other stakeholders have an obligation to keep them in the system? This was an important issue to address at policy level.

Referring to the possible proclamation of the plant under the Agronomic Industries Act of 1992 (as mentioned by Michael Krafft above), Lombard said this would involve another ministry in the control and marketing process, which raised the question of what institutional framework would best address the strategic opportunity represented by the Namibian Devil's Claw industry.

Turning to the proposal to include *Harpagophytum* on Appendix II of CITES, Lombard said it was a sign of concern about the resource base, which was an issue especially in communal areas. But there was a lack of knowledge and data regarding the ecological status of the resource, and the many socio-economic aspects of the supply of the product from the rural areas, which made the proposal problematic in some respects, not least in that it would send the wrong signal to international buyers.

Lombard concluded that a sensible and sustainable national strategy on Devil's Claw was needed to protect and promote a resource that offered significant opportunities for Namibia, and cautioned that it was easy to underestimate the importance of the plant as a source of cash income for around 12000 marginalised rural families - it would be hard to design a better system for distributing at least some cash to these people.

The discussion was then opened to the floor:

Question (senior MET official): If the international market is not dependable and stable, shouldn't NGOs and other role players start looking at ways to maximise the benefits to Namibia by promoting local processing and use (as has been done with other herbal products like Timjan from South Africa)?

Answer: European importers use the argument of market instability as a way to keep prices down, but internationally the demand is growing - and there is a strong opinion in the trade that the American and Asian markets remain largely untapped. The problem was less one of marketing than of strong and growing demand while the resource management system remained inadequate and the sustainability of supply is perceived as problematic.

Comment: Regarding the CITES proposal, Karen Nott's 1986 report was probably still valid - she found that around 50% of the plant population was completely protected on commercial farms where no harvesting took place - and therefore the species was not really endangered or threatened.

Response: Yes, but most of the product that is actually harvested and traded comes from the communal areas, where (at least in specific localities) the plant is threatened - this problem should receive attention even if the resource is protected in other areas.

Comment: It is useful to bear in mind that the 600 tons dry weight exported yearly represents only about 10% of the wet material taken out of the ground.

Question: If the international industry is interested in buying cultivated Devil's Claw, what trials have been done in this regard and what were the results?

Answer: The plant can be propagated from seed (which is easier; documented results are available from Botswana and South Africa), but seedlings have diverse genes and are therefore variable in performance. It can also be propagated vegetatively, which involves a higher level of technology (less suitable for communal farmers), but is very useful for improving the crop, e.g. through selective propagation of plants with higher tuber yields or higher levels of active ingredients. In South Africa there has been several attempts at commercial propagation and some farmers recently claimed success (Namibian genetic material was involved in this process). In Namibia Dr George Betti is involved in private, confidential trials, but little information is available and it is not known if the methods used would be suitable for communal areas.

Question: What is the actual and potential value of the industry to the Namibian economy?

Answer: The current value is estimated at N\$10 million a year, while the potential market is estimated at about 3000 tons a year at a price of around N\$18/kg - so a lot of money, plus any additional income to be derived from value-adding, but the international trade is very competitive and the local industry would need to reach a critical threshold through cooperation before the potential can be realised.

Follow-up question: If the industry is potentially worth N\$60 million a year, it is worth investing in a system to ensure sustainable use and optimal marketing - how should such a system be designed?

Answer: Some ideas have been suggested, but the system cannot be finalised before there has been consultation (a process this workshop was contributing to). It is important that government and the private sector cooperate in the process of designing such a system. Attention should be paid to the fact that South Africa is using Namibian material to build up a market for itself, because once it has sufficient contracts and starts cultivating on a larger scale, it will drop Namibian suppliers and harvesters.

Comment: At present there is only indirect evidence of a possible threat to the resource - this needs careful study (e.g. some people maintained that the plant was an invasive weed of disturbed and overgrazed areas) before rushing into something like a CITES listing.

Comment: Many farmers are still not even aware of the existence of the plant.

Comment (from UK herbal products trader): Some people in the trade say there is only one active ingredient, while others maintain that a complex of active substances working together give the plant its medicinal properties. This implies a need to keep looking at the whole plant, rather than concentrating on high harpagoside levels.

Response: Debates like this underscore the importance of providing stakeholders with good information (otherwise they may e.g. propagate the wrong type of plant material). Another example of the need for better information is the fact that it is not just the harpagoside level that counts, but also the ratio of harpagoside to other substances.

Question: If there is strong and growing international demand, why has the price dropped 85% in US dollar terms?

Answer: The importers use a strategy of divide and rule to play off various exporters against one another; there has also been "roll-up" in the industry with smaller processors being absorbed into larger groups, so that Namibia was in effect supplying a virtual monopoly market - something of which stakeholders should be aware. At another level, as happens with many new products, prices started high and dropped as more supply came onto the market. This issue again shows the importance of reliable information, e.g. for use by state organs in making policy.

Comment: It would be good if this workshop came up with clear recommendations to limit the role of middlemen, to the benefit of the producers.

Response: It is more likely that a variety of marketing systems is needed; it is also necessary to understand that some middlemen are good people who provided an important service as agents in remote rural areas, where transport is often a problem. Again, providing good information about market requirements and current prices would empower producers, to the ultimate benefit of the whole industry.

7) Working Groups

The workshop next divided into four working groups to discuss the following main areas:

- Resource Management
- Permits
- Marketing and Export
- Policy and National Strategy

The facilitator, Dave Cole, led a brainstorm to identify issues to be considered by the working groups. For ease of reference, these lists of issues are included below in the section on the relevant working group. All groups were asked to consider, in relation to their general topic:

- what can be done now (and by whom)
- what can't be done now (and why)
- what can be done later (and when)

7.1) Working Group on Resource Management

The following issues were identified for discussion by this group:

- Policy - who is responsible for what aspects of resource management?
- Research –
 - situational analysis of resource status
 - comparison with other countries and areas
- Information dissemination (on sustainable resource utilisation)
- Harvesting season
- Sustainable harvesting techniques
- Quotas - how to set and implement them
- Training and extension (in sustainable management)
- Monitoring procedures
- Cultivation
- Who pays for research and resource management
- Mapping the distribution of the two different species and keeping their tubers separate
- Physiology of the plant
- Socio-economic issues related to resource management

After its deliberations, this working group reported back as follows:

Research -

- A **rapid resource assessment methodology** should be developed as soon as possible for use in setting quotas quickly and effectively; quotas should be area-specific and based on the population status in the area; there should be on-going monitoring and adaptive management, with quotas set from year to year (depending on climatic conditions etc.) to ensure sustainability.
- A **national baseline assessment** of the resource should be undertaken and should include botanical aspects (distribution per species, population structures, growth rates under different conditions, chemotypes, seasonality etc.) as well as utilisation trends and socio-economic factors.
- **Cultivation** should be researched further, including different propagation options and their applicability under various conditions, dryland vs. irrigated cultivation, potential effects on the market and on rural harvesters.
- The recommended research should be the **responsibility** of a working group comprising MET, MAWRD, Unam, CRIAA SA-DC and other NGOs/CBOs.

Information dissemination -

- This should **start immediately** and should be on-going, but messages must be selected carefully for consistency.
- Relevant information must be **shared at all levels** - inter-ministerially, NGO/CBO, national media - and extension workers should be targeted specifically so as to get relevant messages to the community level; further stakeholder workshops should be organised to share new information generated by research.
- The **responsibility** for information dissemination should fall on the working group suggested above, as well as MET.
- Appropriate **extension messages about sustainable harvesting techniques** should be prepared and disseminated before the next harvesting season (March 2000).

Harvesting season -

- Harvesting should only be allowed in a **harvesting season that starts after fruiting**, e.g. February to July, depending on the year's rainfall.
- The most appropriate season should be **determined by research** and a databank should be set up at the permit office.

Sustainable harvesting techniques -

- The most important thing was **not to disturb the taproot** - digging should start at least two hand-widths away from the taproot.
- **All holes must be refilled** after digging.
- The plant should be **left to rest for at least one season**.
- These techniques are **based in indigenous knowledge** and are recommended as a starting point while more research is done into especially the resting period needed under different rainfall scenarios.
- **Training in sustainable harvesting** should be provided to extension officers and communities as needed.
- The **responsibility** for promoting sustainable harvesting techniques falls to the **MET**, especially those officers issuing permits, and to all other stakeholders directly or indirectly involved in harvesting.

Policy -

- The **MET** should **assume overall responsibility** for policy.
- The policy **objective** should be to **manage the resource sustainably** with input from all stakeholders.
- Harvesting **communities have day-to-day responsibility** for managing the resource, therefore they should be issued with permits and receive the benefits of managing their resource sustainably.
- The policy should **protect the resource** by protecting harvesters from exploitation.
- The **formation of harvesting groups should be encouraged**, possibly through the use of specific incentives.

Who pays? -

- **Everyone pays** at their level of operation - Government, NGOs/CBOs, private sector/exporters, harvesting communities.

Monitoring -

- The **responsibility** for monitoring is **shared by the community** (especially primary monitoring in a specific area) **and MET** (oversees community monitoring, monitors national resource, supervises trade).
- The **details** of how the resource should be monitored (through the permit system? through rapid assessments? - see "Research" above) **must be worked out**.

The reportback from the working group on Resource Management elicited the following discussion from the floor:

Question (senior MAWRD official): With reference to MET taking the lead, is Devil's Claw to be regarded as an open-access natural resource or a crop? If it is a crop, the business aspects become more important and there is a possible role for the NAB.

Answer: The group felt MET was more appropriate than the MAWRD under present conditions, although it acknowledged that the industry was business-driven; the particular ministry is not as important as the process, which remains the same regardless of the responsible ministry.

Follow-up question: It is partly a matter of perception - the public has different views of resources governed by MET and those falling under MAWRD - what perception best suits the reality of Devil's Claw?

Answer: The proposed management approach extends present wildlife management models (e.g. conservancies) to other natural resources - this is why MET is more appropriate.

Comment: A very important aspect is to train extension workers in the management of the Devil's Claw resource, so that they can train people at **grassroots level**.

7.2) Working Group on Permits

The issues identified for consideration by this working group were:

- Who is the land-owner that must give permission before a permit is issued?
- Registration of harvesters?
- What is the objective of the permit system - is it necessary?
- Accessibility of permits, both physically and in terms of literacy, affordability etc.
- Legislation and enforcement
- Links between permits and resource management (considering both landowners and harvesters)
- Harvesting for traditional own use versus commercial harvesting
- Permits to groups or individuals?
- Period for which permit is valid
- Criteria used to issue or refuse a permit
- Fee (or free)
- Practical logistics of issuing up to 12000 permits
- Responsible authority?

This working group reported back as follows:

Are permits necessary? To manage a resource it is necessary to know how much of it there is, how fast it is growing and how much of it is being harvested - permits deal with the off-take and are therefor **an essential part of resource management**.

What are permits for? Harvesting permits are prescribed by law, and since harvesters do not have access to transport, people who are transporting the product from remote rural areas must have **transport permits** tied to harvesting and marketing permits; "middlemen" must obtain **marketing/trading permits**; **export permits** must be maintained. The overall objective of the permits system should be to control and manage the resource.

Who is the landowner on communal/resettlement land? Local authorities (chiefs, headmen, committees etc.) must be properly **authorised by the MLRGH** to give harvesting permission and **provided with criteria** to use in considering requests for permission to harvest (important to provide training for headmen etc.); cases where Government and the local community do not recognise the same local authority must be identified and resolved on an ad hoc basis.

Group permits and registration of harvesters: The DRM should keep a **register** of each person permitted to harvest. Subject to the permission of the landowner, permits can be issued to **any individual or group**; however, since groups of up to 150 harvesters can create serious law enforcement problems, **group permits must list the names and ID numbers** of registered members and each harvester must carry his/her ID document and a copy of the permit on his/her person while harvesting.

Accessibility of permits: Illiterate people can get help from **literate** members of the community, teachers, clergy, NGO workers or MET officials; the problem of distances could possible be overcome by using inspecting officers and/or the postal service, otherwise applications must be made at the nearest DRM office.

Validity period: The permits should be **valid for a whole season** (not just one month), say from April to August; people should be allowed to apply up to 7 months ahead for a permit for the next season, possible problem of premature harvesting on a post-dated permit should be monitored carefully.

High priority should be given to intensive **extension work to explain the permit system to stakeholders**.

Legislation and enforcement: Harvesting areas should be **patrolled** to ensure harvesting is legal and sustainable; permit conditions must be stipulated, explained and enforced; patrolling officers can also do extension work on sustainable harvesting techniques. Permits must be **issued for specific areas** and the permitted harvesting area explained to illiterate people to avoid confrontation between groups of harvesters.

The group considered the possibility of allowing harvesting of, say, up to 25 kg a year **for own use** without a permit, but **rejected the idea** because it could lead to **illegal trade** in material harvested for own use. The group also rejected the idea of allowing traditional-use harvesting without a permit, arguing that it was hard to distinguish from commercial harvesting.

Permits should be issued **free of charge or at a nominal fee**, the group recommended, so as not to exclude very poor people, who in some cases had to pay N\$30 to travel 200 km before they could even apply for a permit. Government revenue from the industry should come from **tax paid by exporters**.

Since Devil's Claw is a protected plant, the **DRM is responsible for managing** the resource and should therefore also be responsible for **issuing permits**, the group decided, adding that there are also roles in the management of the resource and the development of the industry for the DoF, MAWRD and NAB. Communication between government departments involved in managing the resource should be improved.

The reportback from the working group of permits elicited the following discussion from the plenary session:

Comment: There is a conflict between the permit system and the reality on the ground; it is easier to change the law than it is to change the reality; the main objective is not to enforce the law for its own sake, but to facilitate sustainable use of the resource.

Comment: Transport permits are unnecessary - the harvesting permit should accompany the product from veld to export.

Comment: Earlier in the workshop there was encouraging talk about considering illiterate people and making the process easier, but the measures recommended here will make the problem worse; the talk of a protected species will be hard to explain to people who have always used it.

Comment: The fact that only 18 permits have been issued while there were an estimated 12000 harvesters showed that the permit system would most likely be impossible to police; one can question the need for a system that is so difficult to implement.

Comment: Experience has shown that law enforcement and extension work do not mix well and cannot be done successfully by the same people.

Comment: There is a clear need to solve the problem of permits for registered groups of harvesters, possibly tied to specific areas and subject to quotas. Although individual permits are currently law, this workshop is part of a process of investigating if and how the law must be changed. Export permits and the register of harvesters should be combined for practical reasons. Harvesting permits should be issued for free, but there is a good chance that export permits will be paid for in future, as levy to be used to the benefit of the industry.

Comment: If the permits system is removed, what are the alternatives? With a concerted effort (like in the 1989 election) the illiterates can be educated and helped to work within the system. Legislation can be changed, but only if workable alternatives are available. The issuing of free permits should be considered against the small Namibian tax base and Government's policy of cost recovery on services where possible; nevertheless, harvesting permits should be as cheap as possible and income from value-adding, trading and exports should be used to the benefit of the harvesters.

Comment: It is easy to demand that the system be made easier, but practical suggestions are needed. The MET has a duty to protect the plant from over-exploitation and possible extinction resulting from a wrong or improperly implemented management system. Even if own-use harvesting is allowed, 25 kg is far too much - "what do they want to do: start hospitals?"

Comment: During the deliberations of this working group, participants from Government repeatedly used the argument of complying with the laws to dismiss concerns raised by harvesters from disadvantaged minority groups.

Response (senior MET official): This is an unfortunate comment, because all stakeholders have been invited to give input on a management system - it is not government's intention to dominate such deliberations, but to share experiences, to get everyone's input and create a common position.

7.3) Working Group on Marketing and Export

This working group's brief included the following:

- Export permits
- An national organisation / "Board of Control" / Devil's Claw Association
- Standards and quality control
- Controls on genetic material (especially to SA) and blackmarket
- Domestic and international market research
- Certification and "organic" marketing advantage of sustainably harvested product
- Value-adding and processing
- A national data bank
- Cooperative marketing
- Pricing and economic viability

The working group reported back as follows:

The following **general objectives** should be pursued in marketing and export policy:

- Realise the **highest possible price** for the product
- **Consolidate Namibia's position** as the leading exporter
- Grow Namibia's **market share**
- Clearly **identify and meet the needs** of the market

Export permits could serve several functions:

- Gathering **statistics**
- **Controlling** the trade
- Linking to "sustainable" certification as a **marketing tool**

The group therefor decided there **should be export permits** and recommended that a **register of exporters** be implemented; criteria should be developed for issuing such registration and it should be taken away from people who broke the rules.

The question must be resolved of whether the same export permits should be required for cultivated and wild-harvested material.

The group felt that the MET was maybe not the best institution to control and promote the trade, and suggested a role for the NAB.

An interim body of some sort, e.g. a **task force on Devil's Claw** comprising various stakeholders, should be formed as soon as possible to address the many unresolved issues.

Concerning **standards, quality control and certification**, the group felt it would be relatively simple to evolve a **national Namibian standard** quite quickly; such a standard should encompass characteristics like moisture content, source, species (pure *procumbens* or mixed with *zeyheri*) and packaging, with harpagoside levels added if and when local testing facilities

are available; standards can be published in the Government Gazette and form the basis of contracts. The proposed **Task Force should investigate** further.

The group was of the opinion that it was already **too late to stop genetic material from leaving the country**, because the necessary laws and international agreements were not in place, and nothing could be done about the genetic material that had already been collected by e.g. South African bioprospectors; Since Namibia could not prevent competition from possible cultivation, the country's best option was to **stay ahead of the game through quality and good marketing** (possibly by concentrating on "natural", "organic" and "sustainable" features.)

Regarding **domestic market research**, the group recommended that the following aspects be investigated to quantify the existing trade:

- **volumes** moved
- **prices** at different levels of trade
- **margins** at different levels of trade
- **origins** of traded material
- identity and typology of **traders** ("middlemen")
- the **informal market**

Such research must be **coordinated by the task force** and could possibly be paid for by the MAWRD; research programme must be **synchronised with the harvesting and marketing season**.

The group identified the following aspects of the **international market** as requiring further research:

- how **prices** are set
- who the **end users** are and **what** they use the product for
- how the market is **segmented**
- how **supply and demand dynamics** affect prices
- the **requirements of buyers** in terms of quantity and quality
- possible **substitutes, alternatives and competitors**

Such research would probably require an expensive consultancy of a year or more, the group said; the **task force** should identify a suitable programme and consultant(s) if money is available. A Devil's Claw Producers and Exporters Association or other such body could have a useful role in this research.

On the question of **branding and labelling**, the group felt that it could only be fully resolved after **more market research information** was available to design and develop a trade mark (e.g. "Namibian A-grade"); such a trade mark should make use of **positive "organic" messages**.

Value adding and processing should be promoted, using e.g. laboratory skills from Europe if necessary, the group reported; the economic feasibility of making **extracts locally** should be investigated; the **SME potential** of processing should be used to stimulate further development; the **economics** of building and using local capacity should be compared with that of contracting out.

The group recommended a **market information system** to keep Namibian stakeholders up to date on the industry. Such a system should include information like a list of buyers, current and historic prices and volumes, standards and recent technological and market developments; however, the group could not decide who should be responsible for maintaining such an information system (the NAB was a candidate) and it also expressed concern that the information generated will not reach all segments of the industry.

The group felt **cooperative marketing** was "a nice dream" at this stage, and could not imagine how it might evolve from the current market. It suggested the formation of a Traders Association (in 2000 or later), and maybe a Producers Association, as first steps towards coordinated marketing. There was a potential role for the MAWRD (DoP) in developing cooperative marketing.

The group said **pricing should be related to quality** and standards, and there should be price incentives for producers to deliver a quality product, but it did not resolve this issue due to a lack of time.

On the possibility of a **levy on exports**, the group felt this should only be done once the whole management system was in place; before levies are implemented a resource economist should study the rate of return and investigate the principle and effects of such payments.

The reportback from this working group elicited only one **comment** from the plenary session (from a senior MET official): Devil's Claw is not yet a cultivated crop, and until it becomes one on a significant scale, all permits should be issued by MET, especially if the plant is listed by CITES.

7.4) Working Group on Policy and National Strategy

Within the broader topic, this group had to take a closer look at the following issues:

- Objectives of a national policy and strategy
- Situation analysis of relevant national and international laws
- Relations between Namibia and the other range states regarding the resource
- A national response to the proposal to list *Harpagophytum* on CITES Appendix II
- Which stakeholders were involved and who should benefit from the industry
- International standards
- Trademarks / other intellectual property rights / biotrade legislation
- Cultivation
- Institutional arrangements
- Socio-economic issues

The group reported back as follows:

The **objectives** of a national policy should be:

- To ensure the **sustainable utilisation** of the resource for the **benefit of Namibian stakeholders**, especially marginalised rural communities
- To **facilitate optimum benefits** to the Namibian economy
- To **capture and feed back** reliable and relevant **data** so as to enable an adaptive management strategy and improved policy

Concerning a **situation analysis** of legislation and policy, the group felt that the **legal situation was unclear** about a number of issues; at the national level an analysis should include current access legislation (the Nature Conservation Ordinance), conservancy legislation, the Land Bill, Forest Bill, the Agronomic Industries Act of 1992 (which deals with the promotion of agricultural produce and thus does not conflict with the MET's management of wild products) and possibly also other relevant laws and policies, including official regional and development policy; the analysis should aim to come up with **recommendations for improved policy and/or legislation** on the management of Devil's Claw and similar natural resources. The analysis must take cognisance of relevant **international instruments**, such as the CDB, WTO, CITES etc.

Of the various **international standards**, the group considered **official pharmacopoeia** (e.g. ESCOP) as very important, because they set a minimum standard of what is acceptable to the trade (e.g. species, harpagoside levels etc.); also relevant was the international demand for "natural" products and the consequent need to **harmonise Namibian certification criteria with international standards** on what qualifies as e.g. "environment friendly", "organic" or "sustainably harvested".

The national policy and strategy on **propagation, cultivation and value adding** should be to **facilitate research** and funding to ensure that longer term **benefits accrue to the small-scale / communal / conservancy sector**; such research must be subject to a **permit**; a flow

of information from the private sector to the public sector and harvesters should be encouraged (which can be shown to harvesting communities as one of the benefits of a permit system); policy should reflect the need to **stimulate local value-adding activities**.

Regarding **socio-economic issues**, the policy must reflect the importance of Devil's Claw as a source of **cash income** making a vital contribution to **rural livelihoods and household food security** in some of the most underdeveloped parts of rural Namibia.

The **institutional arrangements** should facilitate input from all stakeholders into a **consultative policy-making process**; to this end the group recommended that a **task force or working group** with full ministerial support be established immediately to deal with all **urgent issues** related to the industry. The core of the working group should be the steering committee that organised the workshop, with other stakeholders co-opted as necessary.

One of the first responsibilities of the **working group** must be to work out **Namibia's national position on the potential CITES listing** - this must be ready in time for the CITES conference of parties in April.

The **DSSS** should prepare a **draft policy on resource management and permits** and present it to the working group for consideration by January 2000.

The only response from the plenary session to the reportback of this working group was a **request** to calculate what percentage of the estimated N\$10 million income that the industry generated yearly accrued to the respective role players, i.e. harvesters, middlemen, exporters and Government (as tax) and to present this finding at the next workshop on the subject.

8) Plenary Conclusions and Recommendations

The workshop in plenary formulated the **conclusions and recommendations** below. [*For ease of reference, applicable points from the plenary discussion are recorded here after the relevant decision.*]

1) The main output of the workshop was consensus on the formation of a "**Devil's Claw Working Group**". This committee will initially be **chaired by DSSS** on behalf of of DRM/MET. The Working Group should continue the consultative process initiated by the workshop. The following were nominated to be represented on this working group:

- a) Ministry of Environment and Tourism:
- b) Directorate Resource Management
- c) Directorate Forestry
- d) Ministry of Agriculture, Water and Rural Development:
- e) National Botanical Research Institute
- f) Directorate of Planning
- g) University of Namibia
- h) CRIAA SA-DC
- i) A representative from the harvesters
- j) A representative from the exporters

[*Discussion on the formation of the Working Group:*

Comment: *The committee is too large - "almost like creating another workshop" - three or four people need to take the lead to get things done.*

Response: *But the proposed group does address the need to consult widely with stakeholders in the industry.*

Response (senior MET official): *There is a danger that Government could dominate the discussion due to the high number of GRN representatives - care should be taken to ensure adequate representation of the views of the primary producers (harvesters).*

Response: *Maybe it would be more practical if a core group of 3-4 people canvass contentious issues more widely with the constituencies they represent.*

Response (senior MET official): *A possible solution is to restrict GRN representation to one person each from MET and MAWRD.]*

2) It was agreed that **DRM** would assume **overall responsibility** for co-ordinating the issuing of Devil's Claw **permits** and other **resource management** issues. Devolving responsibility for local resource management to producer level should be pursued as a longer-term objective.

[Question: Are research permits being introduced as a new requirement?

Answer: Actually they are required by existing legislation, but none have been issued so far.

Question (senior DoF official): Which issues around permits remained unresolved and required the attention of the Working Group?

Answer: The issue of the landowner's permission, especially on communal and resettlement land; also more generally, ways to make permits part of an effective and pro-active resource management system, rather than an interim response to a perceived threat.]

3) It was recommended that a **national situational analysis** on Devil's Claw be conducted in the near future. The Working Group will set the Terms of Reference and coordinate the study.

4) It was agreed that Devil's Claw should be **harvested on a seasonal basis** to ensure sustainability, and that MET should declare open (harvesting after fruiting) and closed (regrowing and fruiting) seasons. The Working Group was tasked to investigate (possibly as part of the situational analysis) when the harvesting season should start and end.

[The discussion on a harvesting season included the following:

Comment: In February rain can be a serious problem for drying the tubers; if drying tubers get wet and rot, producers must harvest again to get an income; it is therefore better to open the season in April, when the rains are largely over, and to continue until August, when the plants start regrowing.

Comment: A possible problem is that harvesters will not be able to find the plants in e.g. April after they have fruited.

Response: People in the field are already waiting until plants have matured - they can find them even in August.

Comment: The correct season for harvesting obviously depends on the rainfall in a particular season, e.g. if the Omaheke region only gets rain in January, the Devil's Claw will start growing later and be ready for harvesting later - the season must be decided in accordance with the timing of the rains.

Comment: Agricultural and natural resource require adaptive management; set the season from March to August for the first year, monitor the effects and adapt as the need arises.

Response: Rather from March to September, because people are still harvesting in September at the moment and it does not seem to harm the plants.

Response: In northern Namibia the rainy season typically starts later and it might be more appropriate to set the season there from May to September.

Comment: Traditionally people harvested in the dry season because then the tubers dry out quickly; harvesting stopped when the rains started and the plants were left to grow for the duration of the wet season. The problem is not so much one of timing as of over-harvesting in response to a desperate need for cash, and of killing whole plants instead of leaving taproots to re-grow.

Comment: The logical flow required to solve this problem is for the Working Group to set the terms of reference for the situational analysis and then to decide on the season when better information is available.

Comment: Exporters might be faced with a cash flow problem if they have to buy the entire harvest in a short time after the season.

Response: Apart from cash flow, there might also be a problem with the effect of seasonal supply and demand on prices.

Comment: A closed season could threaten Namibia's market share if other producers stepped into the gap.

Response: Not so, because the harvesting and exporting seasons were not the same - exporters can stockpile enough material to supply the market for a year.

Response (from large exporter): To close the season for six months of the year is too much too soon - as a transitional measure the season should be open for eight months and closed for four (which is how long the plants took to fruit).

Comment: There is a consensus on the need for a closed season, but disagreement on the timing; the workshop should mandate the Working Group to study the situation and recommend an appropriate season to MET. Ideally the season should be announced yearly, based on climatic conditions.]

5) The Working Group was mandated to pursue the following issues (not necessarily in order of priority):

- a) Standards for export of Devil's Claw (possibly in coordination with international standards bodies)
- b) Present legislation controlling Devil's Claw (possible gaps/overlap between Forestry and Resource Management laws)
- c) The proposal to list the plant on CITES Appendix II
- d) A methodology for setting (possibly area-specific) harvesting quotas
- e) The requirements pertaining to, and practical arrangements for, the issuing of research, harvesting and export permits
- f) Propagation and cultivation of Devil's Claw

9) Closure

The workshop was closed by the Permanent Secretary of the MET, Mr Tangeni Erkana.

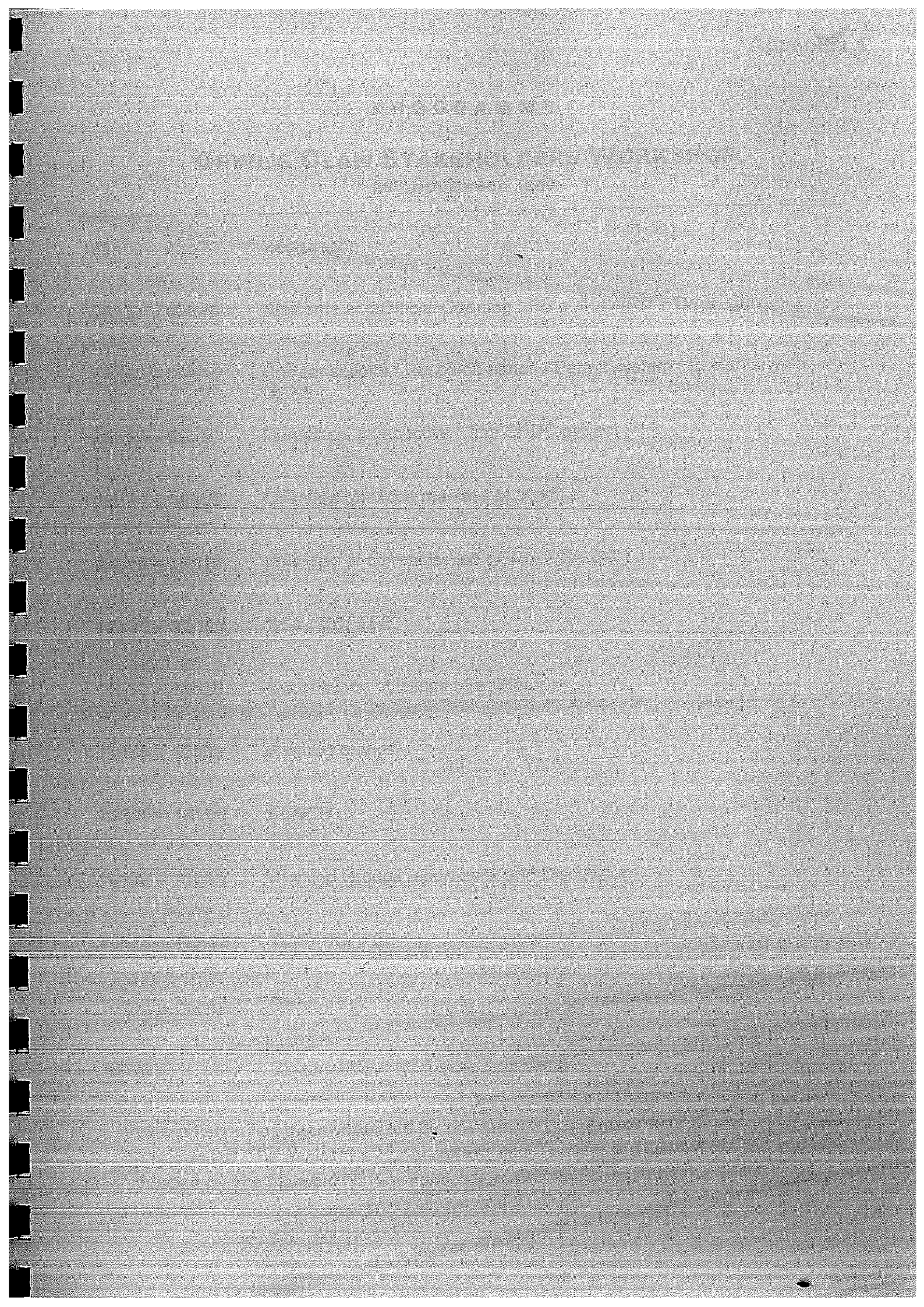
Mr Erkana said being illiterate did not mean that one was stupid, and that harvesters would understand the need for and modalities of resource management if these were explained to them.

He thanked the participants for attending and said the number of people present clearly signified that Devil's Claw was an important resource in Namibia and one that should be managed in a responsible manner if future generations are also to benefit from it.

Mr Erkana said concerns had been raised in recent years not only about the high level of utilisation in some areas, but also about harvesting practises that killed plants and deep holes left unfilled that posed a threat to people, livestock and water catchments - in response to complaints from various quarters, MET had introduced an interim permit system. Admittedly this was a drastic response, Mr Erkana said, and met with much discontent from those involved in the industry.

He hoped that the workshop had helped to develop a control system acceptable to all stakeholders, Mr Erkana said, so that the resource will indeed be available to future generations of Namibians. It was only through close cooperation between all involved in the industry that we could hope to protect this resource.

Mr Erkana concluded by saying it would be a good idea to organise another workshop once the situational analysis has been completed.



PROGRAMME

DEVIL'S CLAW STAKEHOLDERS WORKSHOP25TH NOVEMBER 1999

08h00 – 08h30	Registration
08h30 – 08h45	Welcome and Official Opening (PS of MAWRD - Dr. V. Shivute)
08h45 – 09h15	Current exports / Resource status / Permit system (E. Hamunyela – DSSS)
09h15 – 09h30	Harvesters perspective (The SHDC project)
09h30 – 09h55	Overview of export market (M. Krafft)
09h55 – 10h30	Overview of current issues (CRIAA SA-DC)
10h30 – 11h00	TEA / COFFEE
11h00 – 11h35	Identification of Issues (Facilitator)
11h35 – 13h00	Working groups
13h00 – 14h00	LUNCH
14h00 – 15h15	Working Groups report back and Discussion
15h15 – 15h45	TEA / COFFEE
15h45 – 16h45	Plenary and Conclusions
16h45	Closure (PS of MET – Mr T. Erkana)

This workshop has been organised by the Ministry of Agriculture Water and Rural Development, the Ministry of Environment and Tourism and CRIAA SA-DC and is funded by the Namibia Nature Foundation, Oxfam Canada and the Ministry of Environment and Tourism.

DEVIL'S CLAW STAKEHOLDER WORKSHOP - 25th November 1999 - LIST OF PARTICIPANTS

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DEVIL'S CLAW STAKEHOLDER WORKSHOP - 25th November 1999 - LIST OF PARTICIPANTS

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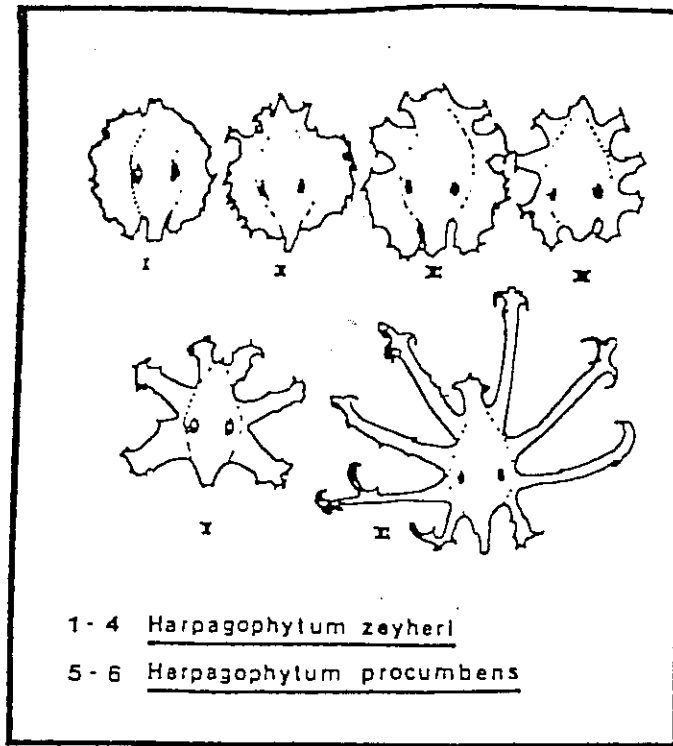


Fig 1. Fruits of H. zeyheri and H. procumbens
 (after Ihlenfeldt & Hartmann, 1970).

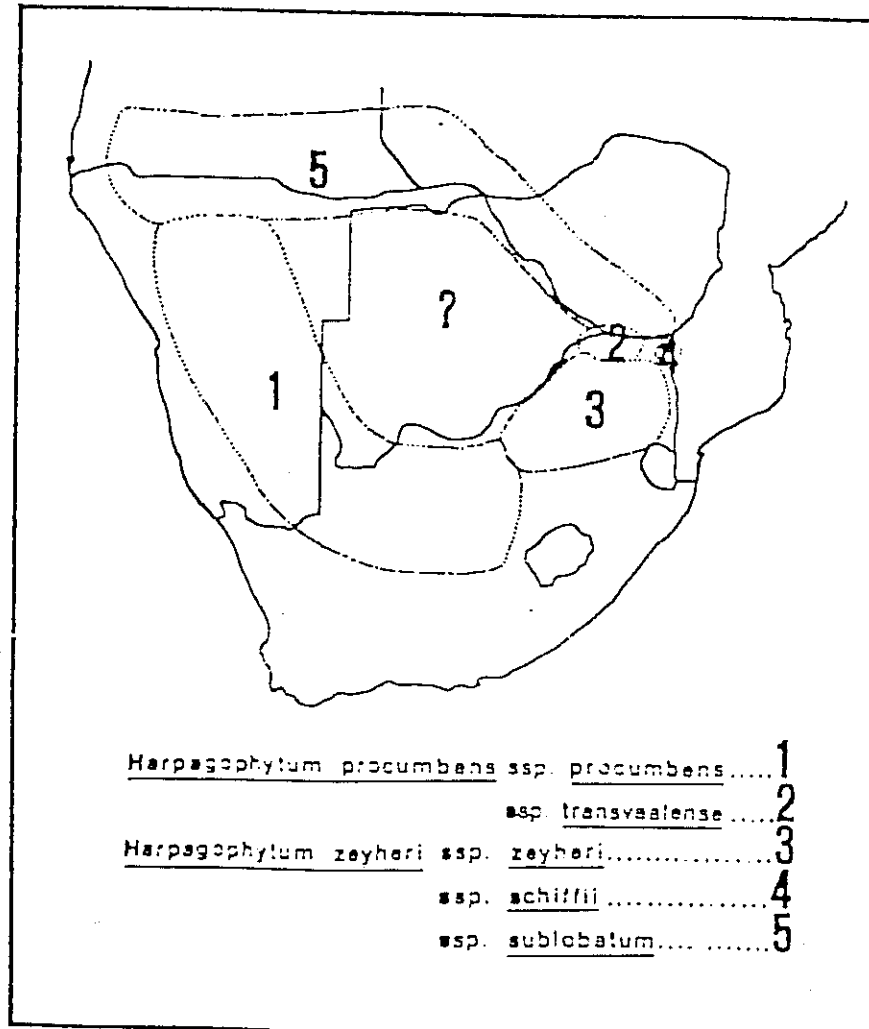
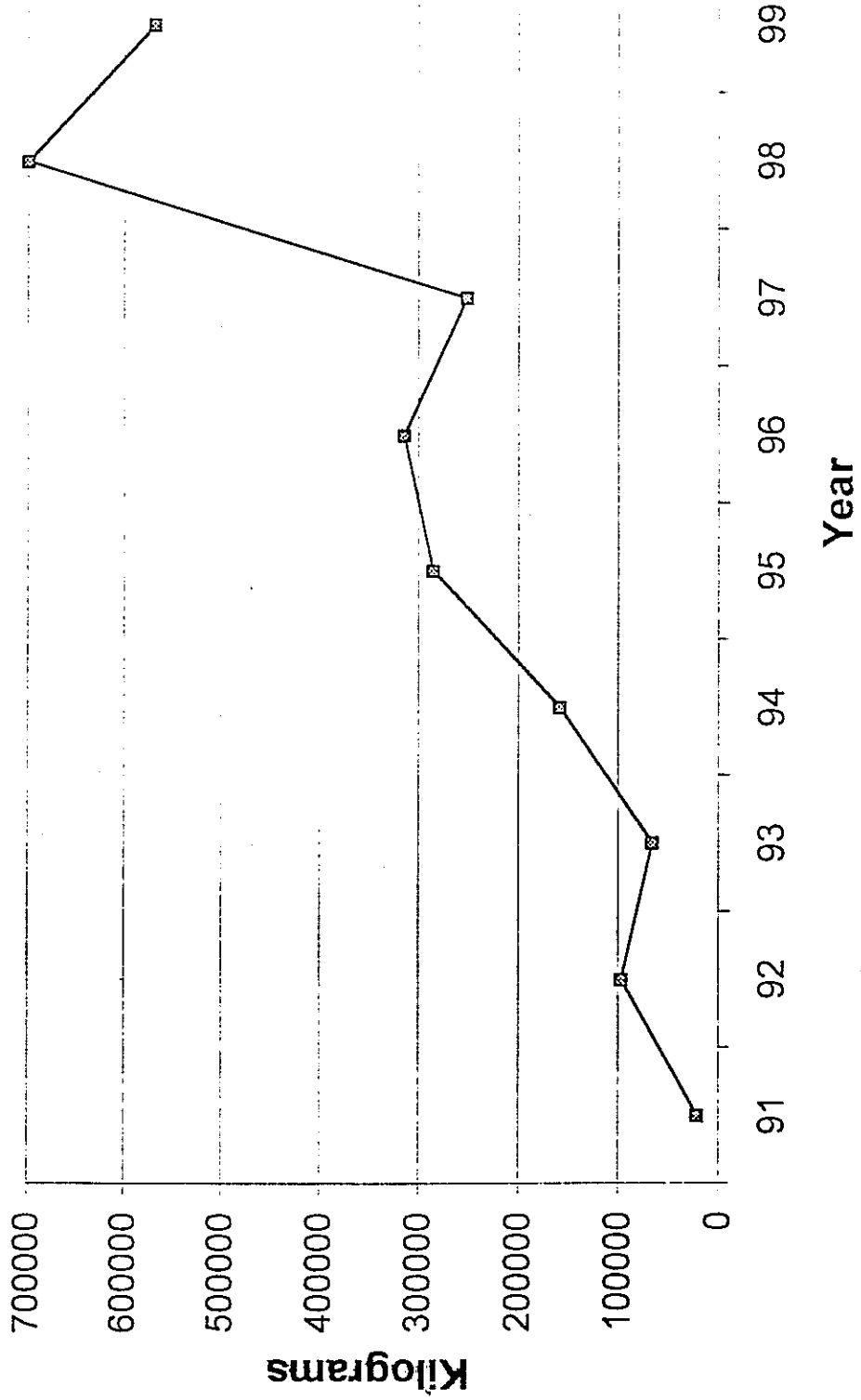


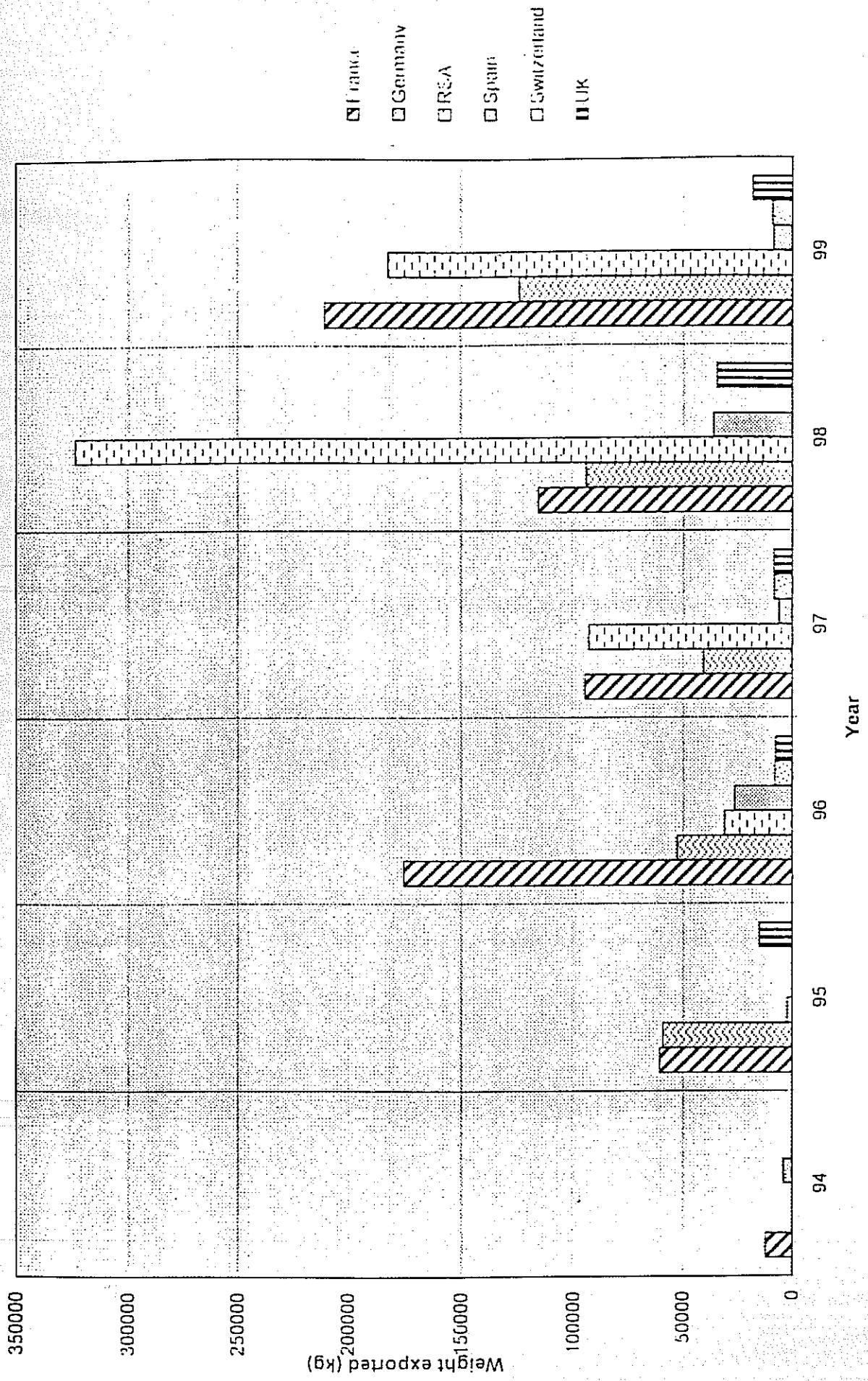
Fig. 2. Distribution of Harpagophytum in southern Africa
 (after Ihlenfeldt & Hartmann 1970)

Harpagophytum exports (1991-1999)

(Extracts from DSSS permit database - not for third party use without permission from DSSS)



Exports from Namibia



100

100

100

100

100

100

100

100

100

100

100