International Standard for Sustainable Wild Collection of Medicinal and Aromatic Plants (ISSC-MAP)

Study on Implementation Strategies and Opportunities for Pilot Implementation*

Excerpt from Final Draft, April 2006

Wolfgang Kathe
and
Eleanor Gallia

*Research for the study has been carried out by:

*Study compiled by: Wolfgang Kathe
Acknowledgements

WWF Germany commissioned a study on “implementation strategies and opportunities for ISSC-MAP pilot implementation” to Wolfgang Kathe (Bremen, Germany), who compiled the report and carried out research with the help of: Rankica Bahtijarević (Sarajevo, Bosnia and Herzegovina), Josef Brinckmann (Sebastopol, California, USA), Ximena Buitrón (La Pampa, Quito, Ecuador), Tony Cunningham (Fremantle, Australia), Eleanor Gallia (Nether Cerne, Dorset, UK), Giridhar Kinhal (Bangalore, India), Luo Peng (Chengdu, Sichuan, China), Reza Azmi (Kuala Lumpur, Malaysia), and Alan Pierce (Duxbury, Vermont, USA). In preparation of the WWF/IUCN/BfN side event on ISSC-MAP implementation strategies at the 1st IFOAM Conference on Organic Wild Production (Teslić, Bosnia and Herzegovina, 5 May 2006), this excerpt from the report was written by Wolfgang Kathe, in cooperation with Eleanor Gallia.

We would, in particular, like to thank all organisations and interview partners who were prepared to provide valuable information and share their experience with us during this project. We express our sincere thanks to the Steering Group (SG) of the ISSC-MAP process for their trust and continuous support, namely: Britta Pätzold (WWF Germany and TRAFFIC, Frankfurt am Main, Germany), Danna Leaman (IUCN-MPSG, Ottawa, Canada), Frank Klingenstein (BfN, Bonn, Germany), Susanne Honnef (WWF Germany and TRAFFIC, Frankfurt am Main, Germany), and Uwe Schippmann (BfN, Bonn, Germany).
2 Introduction

Sourcing and application of medicinal and aromatic plants (MAP) is one of the most complex, diverse and traditional uses of natural resources by humankind. Throughout history, people have collected medicinal, aromatic and food plants or plant parts to prepare medicine for the treatment of adverse physical, psychological and spiritual health conditions. Although, coupled with technical advances in agricultural and medical systems worldwide, the volume of cultivated medicinal plants has increased considerably over the past decades, the majority of medicinal plant species is still sourced from wild populations.

Almost all humans benefit from medicines derived from these plants and the majority of the rural populations in less industrialised countries rely on plant-based medicine to meet primary health care and livelihood needs (Honnef et al. 2006). A number of factors, such as land conversion and habitat loss, pollution, over-harvesting and climatic influences, have contributed to an increasing pressure on natural populations of many medicinal, aromatic, cosmetics and food plant species worldwide. Cultivation of these plants often does not ensure the conservation of MAP populations in their natural environment, for it may reduce the economic value of natural ecosystems and increase the immediate threat through further land conversion; this does not only put natural habitats at risk, but may also have a negative impact on cultivation, because the genetic variability of the wild relatives of cultivated species suffers from habitat degradation.

For these reasons, effective mechanisms need to be developed to guarantee that the sourcing and use of medicinal plants from the wild are sustainable and encourage habitat conservation. Widely accepted and applied rules and standards focusing on criteria for sustainable wild-crafting of MAPs can be an effective method to achieve long-term conservation of MAP resources and their habitats. Several standards have been developed over the past decades, which provide guidance on important specifics, such as good MAP harvesting and handling practices. However, most of these standards have the disadvantage that they either do not focus on wild-crafting or only cover selected elements of sustainable MAP sourcing. The German Federal Agency for Nature Conservation (BfN), WWF and TRAFFIC and the Medicinal Plant Specialist Group (MPSG) of the IUCN Species Survival Commission have developed a strong base of expertise and knowledge in the field of sustainable medicinal and aromatic plant wild-crafting. Together, these agencies and organisations have initiated an International Standard for Sustainable Wild Collection of Medicinal and Aromatic Plants (ISSC-MAP). With the third and final working draft of this standard approaching completion in the near future, the development of implementation strategies for the standard has become a priority for the ISSC-MAP process.

The purpose of this study is to provide guidance to the ISSC-MAP implementation phase. The document is based on a concept developed by the Steering Group of the ISSC-MAP and a list of potential partners for implementation identified by Leaman (2004), during the ISSC-MAP consultation process including five field consultations in late 2005 (in Bosnia and Herzegovina, Brazil, China, Ecuador, and Namibia – see Salvador 2005) and the results of the ‘Expert Workshops’ on the Isle of Vilm (Germany) in 2004 and 2005 (Pätzold & Honnef 2004; Salvador & Pätzold 2005).
3 Summary

The study on potential implementation scenarios and opportunities for pilot implementation of ISSC-MAP, which is the basis for this excerpt, was realized by 10 consultants, who contacted and interviewed 77 potential partner organisations, agencies, companies, groups and projects world-wide. From the original eight different ISSC-MAP implementation scenarios identified (see figure 1), six were chosen to evaluate; these scenarios were relevant to more than one interview partner: resource management at area and species levels, certification standards, voluntary codes of practice, legal adoption, development cooperation and CITES non-detriment findings. ‘Information and training’ was identified as an additional, usually cross-cutting implementation scenario, which would be an important element of any ISSC-MAP implementation strategy.

The three implementation scenarios with the obviously highest importance to potential partners are:
- Certification standards
- Resource management at area and species levels
- Information and training

Voluntary codes of practice and legislation have also been mentioned in many interviews as an appropriate tool for ISSC-MAP implementation. The other two scenarios, development cooperation and CITES non-detriment findings, proved to be less relevant to potential partners for ISSC-MAP pilot implementation.

Most interview partners showed genuine interest in the ISSC-MAP. However, many were confused by the fact that the ownership of the ISSC-MAP is still unclear and expressed the opinion that the implementation concept of ISSC-MAP would need to be developed and communicated. Therefore, a number of interview partners agreed, in principle, to the aims of the standard but some were hesitant to identify pilot implementation opportunities, because they do not know whether they would be able to support the implementation mechanism(s) that is / are finally chosen for the ISSC-MAP.

The ISSC-MAP has been perceived as a standard whose main benefit may be the attempt to provide a balanced approach to all pillars of sustainability. Some organisations and companies perceived the current draft of the standard as too complex to be applicable on the ground, whereas others expressed concern that ISSC-MAP implementation could turn out to be too costly, especially for small producers who lack powerful institutional or company backing. Most interview partners pointed out that implementing the standard would need to result in a financial benefit for their organisation or group. Otherwise the standard would most likely not have any significant long term effect, because its implementation is not attractive to resource users. The development of nationally or locally appropriate standards under the ‘ISSC-MAP’ umbrella would be essential to take different local situations and contexts into account.
Controversial opinions characterized the discussion on the benefits of a multifunctional approach to ISSC-MAP implementation versus an approach focused on one or two implementation scenarios exclusively. Some organisations explained that four or five different scenarios were relevant for their operation at the same time (e.g. training needs, certification for product x, voluntary agreement and resource management for product y, development cooperation for trade facilitation). Others pointed out that a clear decision on how the ISSC-MAP will be implemented would in practice ease establishing a system which is appropriate to the implementation scenario chosen; costs and capacity requirements for implementation could be streamlined and implementation could therefore be more effective and faster.

Some interview partners suggested proceeding step by step. In a first step, voluntary agreements and on-the-ground resource management would provide the framework for ISSC-MAP pilot implementation. This phase would allow getting experience in ISSC-MAP implementation, which would help in updating the document and preparing it to become an independent certification standard or inform other certification standards. A third step would be legal adoption. Although some potential partners were not in favour of ISSC-MAP implementation through legislation, several regarded this scenario as an appropriate and inevitable final implementation step.

A number of conclusions can be drawn from the results of this research. The most important recommendations are:

- A workable ISSC-MAP standard document should be available very soon to profit from the current interest and possibilities for pilot implementation

- A decision on the ownership of the standard and on its scope (only relevant for medicinal and aromatic plants or covering others such as food plants and spices as well?) should be made as soon as possible

- The future structure of the governing body of the ISSC-MAP, its financial and personnel requirements should be discussed and decided upon by the SG; fundraising will need to start soon

- It will be beneficial to develop and implement a communication strategy for the standard, together with all members of the Advisory Group and all potential partners in ISSC-MAP implementation

- The idea of the ISSC-MAP SG to develop a standard pilot implementation concept, aiming at carrying out pilot implementation in about 20 different projects / operations in a variety of diverse settings world-wide is considered as helpful; it may be an important step to get first on-the-ground implementation expertise, which will be useful for the standard’s updating and more formal implementation processes.
4 Key implementation scenarios for ISSC-MAP

4.1 Implementation scenarios identified by the ISSC-MAP Steering Group, Advisory Group and during the field consultations

This report aims at covering a wide range of experience and opinions, from different stakeholders and people with different professional backgrounds and hopes to serve as basis for the decision on the most promising implementation strategies of ISSC-MAP. Parameters for the selection of implementation scenarios defined by the ISSC-MAP Steering Group include:

- Similar or comparable experiences
- Strategic opportunities and time considerations
- Reach of scenario (including its regional reach)
- Opportunities and risks for ISSC-MAP implementation
- Potential combination / collaboration with other scenarios
- Existence of strong potential partners
- Estimated implementation costs and funding potential

During the first period of ISSC-MAP development (e-mail consultation; field consultations; seminars), 8 main implementation scenarios were identified by the ISSC-MAP SG and advisory group (Figure 1).

---

**Figure 1: Implementation scenarios for ISSC-MAP identified by the SG and advisory group**
(Source: Salvador & Pätzold 2005)
In this report, the eight different scenarios identified were reduced to six. The scenario ‘good practices – GCP’ is considered as part of the scenarios ‘Resource management’ or ‘Voluntary codes of practice’, because in practice it seems to be difficult to distinguish between GCP and resource management and often also between plant and product levels. The plant species the ISSC-MAP targets are all subject to extractive use, for which reason they become a product as soon as they are harvested. It is difficult to imagine an implementation of the ISSC-MAP through GCP, which is not either part of resource management or GACP.

Producer manuals, on the other hand, are necessarily linked to some kind of resource management. The ISSC-MAP can provide useful guidance on management plans, if the standard is not reduced to the bare essentials; in order to be in accordance with the aims and objectives of ISSC-MAP the management plans will need to include sustainable resource management or be linked to appropriate certification standards.

During the research for this report, buyers groups and clearinghouses of sustainable MAPs have been mentioned as additional potential implementation scenarios. These ideas have not been looked at in detail, but it may be worth considering them as potential options. Achieving sustained success and impact through these scenarios may take a lot of time and expense, but especially working through buyers groups can be an effective instrument. Clearinghouses are more difficult, for they tend to be a bit of a holy grail: everyone wants to do it, and database management can be a nightmare. Perhaps it would be a good start to get a consortium of a few enlightened companies together to buy into ISSC-MAP actively.

As a result of the research carried out for this study, it is suggested to consider one additional, cross-cutting implementation scenario:

**Information and training**

(Including consumer information; capacity building; training at all levels of the chain of custody in the MAP sector).

Information and training will be crucial for the success of a new standard, but it is both costly and complex. Whereas it is evident, that this will be no stand-alone scenario but an integral element of all other implementation scenarios, it seems to be strategically important to acknowledge its own value and relevance as an implementation scenario. Several potential partners were identified whose main or only contribution to ISSC-MAP implementation could be consumer information or training of key groups within the MAP trade chain, such as collectors or producers of medicine.)
4.1.1 Resource management

a) Similar or comparable experiences
Adequate resource management is the cornerstone of any successful implementation of a standard aiming at the sustainable sourcing and use of natural resources. It is of fundamental relevance to ISSC-MAP. The main reason for developing a standard such as the ISSC-MAP is inadequate resource management.

b) Strategic opportunities and time considerations
Implementing ISSC-MAP through (species and / or area) resource management on the ground has a high potential impact on resource sustainability but its strategic opportunities are limited, because many operations have only local relevance and not enough capacity or support to increase the strategic opportunities through scaling-up on a regional, national or international levels or informing national or international policy. However, resource management is usually also a core element in larger projects implemented through companies, NGOs or development organisations. In these cases, better strategic opportunities may exist. Local resource management can offer considerable strategic opportunities in on-the-ground pilot projects within the framework of ISSC-MAP pilot implementation. If successful, these projects can be used as examples world-wide and can influence both policy makers, companies, other NGOs and, ultimately, the consumers. This will require strategic advance planning of pilot implementation.

Implementation through resource management usually takes several years if project and management planning needs to start from scratch. If projects are chosen which are already established and which have started the process of resource management, the ISSC-MAP implementation process can take a short-cut, provided sustainable resource management is already part of the operation’s philosophy.

c) Reach of scenario
As a core element of ISSC-MAP, resource management on area and / or species levels offers good opportunities to achieve a wide reach of ISSC-MAP. In all projects and operations dealing with the wild collection of medicinal and aromatic plants, formal or informal resource management is a prerequisite to guarantee resource sustainability and is therefore of high relevance world-wide. Methods will need to be developed and established to spread to a wider audience experiences made during ISSC-MAP pilot implementation. Supporting local and national empowerment and developing an effective strategy for information, awareness raising and training will most likely be helpful measures to increase the reach of ISSC-MAP through resource management.

d) Opportunities and risks for ISSC-MAP implementation
Openness towards the development of sustainable resource management is the most important basic condition for an effective implementation of ISSC-MAP. In most projects / operations, there is some basic awareness of the importance of resource management; often, however, on-the-ground
implementation is fragmentary, due to various reasons. Care will need to be taken that compliance with the principles of sustainable resource management does not contribute to increasing the burden on primary producers without, at the same time, offering them higher revenues or other benefits. This seems to be the major risk of implementing ISSC-MAP through resource management.

Another potential risk is a negative exposé: for example, an operation says it is using ISSC-MAP, and then a sceptical NGO investigates and writes a scathing story about rampant over-harvesting and other poor practices. Example: During the first years of FSC, one specific certification was contested by several NGOs. They launched a campaign telling the public that logging in the area was unsustainable and also had the unpleasant side effect of increasing bushmeat harvest and other illegal activities. FSC got inundated with hate mails for well over a year. This may hopefully be a less likely scenario for ISSC-MAP, unless it is building powerful enemies and critics.

e) Potential combination with other scenarios
In some cases, sustainable resource management is linked to certification (certificate of origin, organic certification, fair trade and others). The scenario has a large area of overlap with the scenario ‘certification standards’, for resource management is usually an integral part of relevant certification systems. Implementation through resource management can and most likely needs to be combined with information, awareness raising and training on various levels, from the producers, to traders, consumers and policy makers. Since resource management operates within the framework of national or regional legislation and regulations, the scenario may also overlap with the scenario ‘Legal Adoption’; the possibilities vary from country to country.

f) Existence of strong potential partners
Through the ISSC-MAP consultation process, including the field consultations, and an active advisory group, the ISSC-MAP SG has good contacts with quite a number of potential partners in ISSC-MAP implementation world-wide. The research carried out within the framework of this report will also contribute to strengthening links to potential partners for ISSC-MAP implementation on various levels. These contacts offer a good chance for ISSC-MAP to achieve acceptance world-wide and get implemented in many on-the-ground operations, particularly in resource management. This procedure helps increase local participation and buy-in and may thus avoid the impression that the standard will be implemented in a top-down exercise.

g) Estimated implementation costs and funding potential
Implementation costs of ISSC-MAP through the scenario ‘resource management’ will largely depend on the final version of ISSC-MAP, on the actions that need to happen to achieve compliance, and on the scope of each individual project or operation (the territory it covers, the number of species collected, the volume of collection, and other factors). In most cases, no funding for ISSC-MAP implementation through resource management will be readily available. For this reason, it will be helpful to identify potential projects and operations for ISSC-MAP pilot implementation soon and develop a fundraising strategy together with the operations selected. In
response to pressure from buyers groups committing to purchase sustainable supplies by a certain
date, supply companies may be willing to shoulder some or all of the resource management costs of a
producer if it is shown to be in their interest.

Summary:
Implementation of the ISSC-MAP through resource management is of high relevance and very
promising, because it forms the basis of any sustainability of resource use and because many links to
potential partners have already been established. The scenario may be combined with other
implementation scenarios, depending on each individual project / operation. Funding may be a major
constraint, because most projects and operations do not have funds available to support ISSC-MAP
(pilot) implementation; therefore, early fundraising seems to be crucial. In addition, the ISSC-MAP
will need to elaborate the benefits for potential partners clearly and make them transparent.

4.1.2 Certification standards

a) Similar or comparable experiences
Relevant resource management and trade certification standards and the ISSC-MAP share similar
experiences relating to processes enabling the sustainable use of MAP and there is a considerable
overlap in aims. As most certification standards are relatively weak in covering ecological criteria,
ISSC-MAP has a high potential in influencing certification standards. Several potential partners have
already been identified during the ISSC-MAP development process.

b) Strategic opportunities and time considerations
Informing the certification and standard setting process of accreditation bodies / certifiers offers a
very good strategic opportunity to achieve large scale impact. If possible, a good strategy would be to
develop a governance structure of the ISSC-MAP which allows some independence and therefore
helps in cooperating with all certification bodies that are interested in sustainable MAP sourcing and
in considering ISSC-MAP. Implementation can be relatively fast, because some certifiers seem to be
interested in proceeding quickly. It may be possible to include certifiers in some pilot projects
already.

c) Reach of scenario
The scenario has a high potential reach, since some certification bodies are active world-wide.
Certification is likely to become an increasingly important tool in marketing. Companies and
producers alike are therefore more and more willing to work with certified products. The scenario
does unfortunately not reach operations for which certification has no advantage and may therefore be
irrelevant in many cases (see below).

d) Opportunities and risks for ISSC-MAP implementation
Including ISSC-MAP into relevant certification schemes is a good chance for ISSC-MAP to achieve world-wide impact in the near future. However, there are some risks in focusing on certification as an implementation strategy. If ISSC-MAP does not remain independent to some degree, it may lose any opportunity to reach those MAP wild collection enterprises and systems, for which certification is not important (e.g. for most sourcing activities in which raw materials are collected for the national markets in less industrialized countries or for primary health care). In addition, certification often focuses on material sourced from agricultural systems. Therefore, it may be beneficial to select certifiers for cooperation, which have relevant experience in the certification of wild-collection operations.

Certifiers will clearly need to see tangible (economic) benefits resulting from ISSC-MAP implementation, before they consider adopting the standard. The questions of ISSC-MAP ownership and governance will have to be solved before certifiers may take the ISSC-MAP on board. It needs to be stressed that certification is a market-based tool that often favors the well-organized and well-capitalized. If ISSC-MAP wants to have a grassroots impact, this may not be the best way to go.

Certificate of origin may also be a promising certification tool in well known regions with a specific reputation among customers.

e) Potential combination with other scenarios
Certification is a relatively exclusive implementation scenario. Naturally, information and training and resource management at area and species levels are crucial implementation scenarios of high relevance to certification. In some cases, there is also overlap between legal adoption and certification.

f) Existence of strong potential partners
Whereas the ISSC-MAP can build on prior cooperation with several certification bodies, collaboration with the accrediting bodies could be improved. The upcoming meeting in Bosnia and Herzegovina in May 2006 may be a good opportunity to gauge the potential for future collaboration.

g) Estimated implementation costs and funding potential
Costs of certification are often high. This may have a strong impact on the range and nature of enterprises that can be certified and, at the same time, those which may be excluded from certification. Many people are concerned that certification favours large enterprises and may contribute to drive small scale producers out of business. Besides, the costs of certification need to be rewarded by higher revenues for the producers and trading companies to make the system attractive. This will not be possible for all products. The overall funding potential for this scenario will be higher for large scale enterprises than for smaller companies and operations.

Summary:
Implementation of the ISSC-MAP through certification is a promising option with a high potential overlap in interests. If reputable certification bodies are chosen as partners, certification can be a
valuable tool and may effectively contribute to the conservation of some medicinal plant species and their habitats. However, certification targets only a specific market niche and may have a detrimental effect on small scale producers. It may be useful to consider other implementation scenarios (such as voluntary codes of practice) as complementary, because even if they may be less effective, they can reach organisations, interest groups and plant species which will not be reached by certification.

4.1.3 Information and training

a) Similar or comparable experiences
Information and training is an essential element of almost all projects aiming at conservation and the sustainable use of natural resources. The necessity of training and capacity building is an experience shared by most project managers and it has become evident during the development process of ISSC-MAP and the research for this report that it will also be of high relevance for the standard and its implementation.

b) Strategic opportunities and time considerations
Information and training are central strategic tools, because they 1) help in getting the standard more widely known and accepted, 2) offer opportunities to explain the ISSC-MAP and demonstrate its application and usefulness and 3) provide an on-the-ground structure which allows direct feedback of information and experience relevant for amendments to the standard. The scenario can be implemented on numerous levels as soon as the ISSC-MAP becomes available.

c) Reach of scenario
The scenario enables the ISSC-MAP to potentially reach all people involved in the MAP sector along the whole chain, from the collector to the consumer of the final product. Therefore, it reaches farther than any other implementation scenario.

d) Opportunities and risks for ISSC-MAP implementation
Information and training is a basic prerequisite to get the message of the ISSC-MAP across to a large number of people and interest groups. Care needs to be taken, however, that information does not become a political instrument of its own. It is only valuable if combined with all on-the-ground implementation scenarios selected by the ISSC-MAP SG. One interesting opportunity would be to introduce ISSC-MAP principles into educational programmes for extension workers, university students or training of ethnobotanists.

e) Potential combination with other scenarios
Information and training is not a stand-alone implementation scenario. It is an essential part of all other implementation scenarios.
f) **Existence of strong potential partners**

Strong potential partners to provide information on the ISSC-MAP and to offer training are rare. Further contacts and a comprehensive communication strategy may need to be developed. Whereas technical training on the standard can start as soon as the document is available, informing the public (e.g. through campaigns) will need careful advance planning, internal lobby work and may only make sense when ISSC-MAP implementation is more advanced. Information campaigns will need to be tightly focused and targeted.

g) **Estimated implementation costs and funding potential**

Implementation costs cannot be calculated exactly but they will be relatively high. Both technical training and media work are expensive. Funding options for information and training are often limited and may partly need to be covered from core funds.

**Summary:**

Information and training is a cross-cutting, overarching implementation scenario of high relevance. It can and should be part of all other implementation scenarios and ISSC-MAP pilot implementation projects. The main challenge may be to find the funds required, as well as the requisite expertise.

4.1.4 **Voluntary codes of practice**

a) **Similar or comparable experiences**

Voluntary codes of practice can work on different levels (on-the-ground collection operations, trading companies, trade associations, herbal and pharmaceutical companies and others). On all levels, resource availability, its limits and the need to find ways to ensure resource viability are similar experiences. The importance of particular resources, however, may not in all cases be similar for primary producers and international trading, herbal or pharmaceutical companies. Whereas local producers economically depend on the local resources, international companies are often more flexible and can react towards resource shortage by contracting other suppliers or even replace products. For this reason, the nature of desirable voluntary codes of practice may also differ largely. For most companies, the pharmaceutical quality of the raw material used is more important than the quality of resource management and sourcing practices. Voluntary codes, often linked with first party certification, may not in all cases be based on aims in line with the objectives of the ISSC-MAP, because they are often met with scepticism by the public and enforcement tends to be weak.

b) **Strategic opportunities and time considerations**

Voluntary codes of practice, their development and implementation are often a time consuming approach, which does not provide sufficient space for external control. However, they may have some strategic value, for they can open up possibilities to influence larger companies to re-think their
sourcing practices. In practice, however, the burden imposed on companies through regulations on product quality are already considerable, so that there may be some reluctance to voluntarily opt for further provisions relating to resource management and sourcing practices, unless this is already part of the philosophy of a company or an operation or there is keen interest in long-term supply through a particular wild resource.

c) Reach of scenario
The scenario could have considerable potential reach, especially if large traders and companies could be convinced to develop voluntary codes of practice in line with the aims of ISSC-MAP or add the relevant suggestions to already existing codes, and if adherence to these codes could be verified by an external assessor. A very broad reach would result from trade associations like AHPA, if they promoted ISSC-MAP wholesale. To achieve this, a lot of energy and time seems to be required. It may be realistic to assume that the immediate potential reach of the scenario is relatively low, but that it may have a considerable long-term reach if enough resources can be provided by the ISSC-MAP to continuously lobby and engage in dialogue with large companies and sourcing operations.

d) Opportunities and risks for ISSC-MAP implementation
At present, chances of achieving effective implementation of the ISSC-MAP through voluntary codes of practice seem to be low. Good collection practices of world-wide impact have been developed in recent years, such as WHO’s GACP; these documents have either become part of national or supranational legislation, or are implemented on a voluntary basis. These good practices have in common that they focus on resource and product quality and are weak in most aspects relating to resource management and sourcing practices from the ecological point of view. It is unlikely that these documents can, in the near future, be changed or amended in a way as to include substantive elements of the ISSC-MAP.

e) Potential combination with other scenarios
Voluntary codes of practice can be combined with several other implementation scenarios, such as certification, resource management and information / training. However, it remains unclear what the extra benefit of voluntary codes of practice could be, if implementation through certification is envisaged at the same time. Voluntary codes of practice may be beneficial for backing up resource management planning of on-the-ground operations, for they may help provide a framework for the resource management plan.

f) Existence of strong potential partners
Large companies are relatively strong potential partners for implementing ISSC-MAP through voluntary codes of practice. Many of them may turn out to be supportive, in case such a voluntary code could help in avoiding further requirements on a more binding level, be it through certification or legislation.
g) **Estimated implementation costs and funding potential**

Of all implementation scenarios, voluntary codes of practice may, in general, involve the lowest costs and the highest funding potential. Companies may be prepared to cover the costs for developing a voluntary code of practice, including on-the-ground implementation. Costs to be covered by the future ISSC-MAP governance structure may include the time and capacity for lobbying companies and other relevant operations and for advocacy on the political level, which can undoubtedly result in soaring funding needs.

**Summary:**

Implementation of the ISSC-MAP through voluntary codes of practice may not be the most effective way of implementation. It will take considerable time and effort to influence such codes and achieve substantial effects on the ground. However, it may be a first step towards certification and/or legal implementation, and an interesting tool that can be used for maintaining good relations with those companies which are not in favour of other ISSC-MAP implementation scenarios. In addition, ISSC-MAP could, through this implementation scenario, inform and support companies and operations which develop voluntary codes of their own or amend existing codes by including relevant sustainability principles and criteria.

### 4.1.5 Legal adoption

a) **Similar or comparable experiences**

The experiences and the aims of policy makers and the objectives of ISSC-MAP are often different. Resource sustainability is rarely a priority for policy makers, except for resources the supply or shortage of which have a strong national impact (such as energy resources). MAP resources and their sustainable use are, in most countries, a less significant economic factor and therefore relevant legislation and above all implementation tends to be weak. The legal system in North America and Europe generally favours a pharmaceutical/synthetic approach to medicine over plant-derived remedies. In some regions, such as in a number of South and Central American countries, this is different, because MAP resources are basic for health care and have a strong social impact, which is reflected on the policy level.

b) **Strategic opportunities and time considerations**

Legal adoption of the ISSC-MAP may have, wherever the legislation is implemented, considerable strategic impact. In many cases, this impact may be negative, because legislation tends to restrict rather than encourage following positive models. In most countries, strong political lobbying for ISSC-MAP will be required prior to considering legal adoption of the standard. This will take several years (there are a few exceptions, especially in South America, where some governments are keen to support the development and implementation of user standards). Therefore, legal adoption may be a
secondary implementation strategy, which needs significant preparation and active political work through the structure / organisation(s) who finally governs the ISSC-MAP.

c) Reach of scenario
The scenario has a relatively high potential reach, because legislation affects almost all who are involved in the sourcing, trade and use of medicinal and aromatic plants. Before it can become an effective implementation scenario, country-specific opportunities, risks and appropriate strategies will have to be analysed and evaluated.

d) Opportunities and risks for ISSC-MAP implementation
The benefits of legal adoption are its potential reach and the high level of pressure for compliance if implemented on the ground. The latter is not only an opportunity, but also a considerable risk. Legislation tends to be bureaucratic and inflexible, which may have a negative effect on the sustainability of MAP sourcing and on the image of wild harvesting as compared to cultivation. In many countries, the overall knowledge of the MAP sector and of sustainable MAP collection is low among politicians. In some countries, relevant legislation tries to regulate MAP wild harvesting and trade through a number of taxes, which have to be paid by the producers / collectors, for whom MAP collection is often no highly profitable business. Usually, this system does not benefit conservation, because the tax income disappears into the national or provincial budgets rather than being re-invested to protect the resource base and because it may promote corruption. Legal adoption also tends to ossify a standard or programme; standards outside of legal systems stand a better chance of remaining “living documents” that can be updated and modified as experience dictates.

e) Potential combination with other scenarios
Legal adoption will often be combined with other scenarios. This includes resource assessment at area and species levels, certification, and training and information.

f) Existence of strong potential partners
This is country-specific. In some countries, which have strong interest in adopting the ISSC-MAP in the legal system, the ISSC-MAP SG has access to strong political partners through its institutional network and through the advisory group. In countries where there is currently no political will to implement ISSC-MAP through legislation, the influence of ISSC-MAP is limited.

g) Estimated implementation costs and funding potential
Implementation through legislation usually takes several years. It can be faster in countries, which have particular interest in the ISSC-MAP because legal adoption could brush up the country’s image in the environmental sector and may be useful for the national implementation of the CBD. In these cases, the implementation of the ISSC-MAP will usually be financed through the state budget.
Summary:
Implementation of the ISSC-MAP through legal adoption may in most cases be an interesting secondary step. Before it can be beneficial, substantial information and training will need to be provided and political lobbying may be helpful. Care should be taken that legal adoption does not result in unrealistically high demands and unnecessarily restrictive provisions, which could, if implemented, have adverse effects on the sustainable use of medicinal plants and their conservation.

4.1.6 Development cooperation

a) Similar or comparable experiences
Development cooperation and conservation often follow different objectives. Whereas development cooperation mainly aims at the technical development of mostly rural communities in less industrialised countries, conservation primarily aims at safeguarding natural and semi-natural ecosystems, including the biodiversity of its habitats, fauna and flora. In the MAP sector, however, there are two important fields of overlap between conservation and development cooperation: the sustainable use of natural resources and improvement of local livelihoods. Experiences in the past years and the results of this study show, however, that the potential of exploring these fields of overlap has not yet been developed sufficiently and may not be adequately acknowledged.

b) Strategic opportunities and time considerations
Development cooperation offers, in theory, a good strategic possibility for the ISSC-MAP to establish on-the-ground implementation models world-wide. In practice, this would require a more comprehensive level of cooperation between development and conservation agencies / organisations in the MAP sector. Whereas this seems to be a promising vision for the future, it will require considerable effort, time and capacity and does, with individual exceptions, not seem to be a generally promising implementation strategy for the immediate future and the initial phase of ISSC-implementation. However, development agencies may be interesting secondary partners in implementation for there are many relevant projects world-wide which are primarily carried out by companies or NGOs with financial and technical support from development agencies. These projects offer a good strategic chance for awareness-raising initiatives and for developing more formal cooperation with development organisations; it may therefore have considerable long-term impact. The currently weak performance towards achieving the aims of the Millennium Development Goal MDG 7 may be a further incentive to improve cooperation between development agencies and conservation NGOs.

c) Reach of scenario
The long-term reach of the scenario is potentially high. Development cooperation is active in the majority of the most important MAP source countries and regions; the implementation of ISSC-MAP could potentially be a tool in poverty alleviation and therefore overlap with the interests of
development cooperation. However, it is heavily debated if NTFPs are able to make a significant contribution to poverty alleviation, except for very specific cases. In order to become an acknowledged, effective and integral part of development cooperation over the long-term, ISSC-MAP will first need to prove its relevance and effectiveness in pilot and demonstration projects, build close links to all relevant development agencies, and inform them about the opportunities of ISSC-MAP implementation with the help of experiences from pilot implementation.

d) Opportunities and risks for ISSC-MAP implementation

ISSC-MAP implementation through development cooperation offers interesting opportunities. Among these are: 1) World-wide impact in both the majority of source and consumer countries can be targeted; 2) potential effect on poverty alleviation and, indirectly, conservation of wild medicinal and aromatic plant resources in habitats which are under pressure from harvesting and land-conversion; 3) potential access to government support and funding.

A risk of this implementation scenario results from the fact that development cooperation mainly aims at technical assistance of communities and in general prefers managed agricultural systems, such as plant cultivation, over the use of natural resources from wild populations. There may be the risk that ISSC-MAP and its implementation is only seen as a transient tool for use until all relevant species have been brought under cultivation, as, ultimately, the conservation of natural ecosystems is not the key objective of development cooperation.

Tying the ISSC-MAP standard to aid makes them appear to be a top-down approach that could in turn breed resistance; tying the standard to development aid may also unnecessarily politicize the standard. Getting government development agencies to promote a set of standards that they themselves did not create will be very difficult. This may be one reason for the low interest of development agencies in the ISSC-MAP. Another drawback: Governments change over relatively short time periods, and newly elected governments often revise development policies and will sometimes even dismantle development initiatives begun by former administrations.

e) Potential combination with other scenarios

Development cooperation is no stand-alone implementation scenario. It is rather a tool to foster the implementation of other scenarios, such as certification of management systems and / or products, codes of practice or the development of or integration into area management plans. Therefore, this ‘implementation scenario’ will in almost all cases be combined with other scenarios.

f) Existence of strong potential partners

Strong potential partners in development cooperation exist both on the level of government agencies, mostly in industrialised countries, and non-governmental development organisations world wide. Local NGOs may be the most important partners in local implementation, although many of them do not have a strong political influence. For this reason, the cooperation with larger, mostly
governmental, development organisations is important in order to achieve world-wide impact on a political level. This will require considerable efforts to lobby for ISSC-MAP.

g) Estimated implementation costs and funding potential
Costs for the implementation of the ISSC-MAP through development cooperation cannot be estimated, because they depend on the scale of each project or operation and on the specific implementation method. The funding potential through development agencies is potentially high. Before these funds can be accessed, development agencies must see the benefit of ISSC-MAP implementation and its overlap with their own objectives and aims. The ISSC-MAP will need to demonstrate its specific usefulness for development cooperation to the development agencies.

Summary:
Implementation of the ISSC-MAP through development cooperation is no stand-alone implementation scenario, because it needs to involve other implementation methods to be effective on the ground. At present, many development agencies seem to be unaware of the potential of ISSC-MAP and possible benefits for rural development. Therefore, this implementation scenario may currently not have a high relevance for ISSC-MAP pilot implementation. However, development agencies may be interesting partners in some pilot implementation projects. These could help demonstrate the relevance of ISSC-MAP to development agencies. Over the long-term, implementation through development cooperation has a high potential, because its reach and funding opportunities are considerable.

4.1.7 CITES non-detriment findings

a) Similar or comparable experiences
A commonality shared by CITES and ISSC-MAP is that they both aim to preserve biodiversity. Whereas CITES exclusively focuses on endangered species in international trade, the scope of ISSC-MAP is much wider.

b) Strategic opportunities and time considerations
Although CITES is only relevant to very few medicinal plant species, ISSC-MAP implementation through CITES non-detriment findings could be a strategically attractive implementation scenario. As a scientific process, it could contribute to the international reputation of ISSC-MAP on the political level and indirectly promote the ISSC-MAP in general. If the standard proves to be a valuable tool for CITES non-detriment findings, it may also be possible that it can be adapted to other, non-MAP CITES species.

c) Reach of scenario
The reach of the scenario is rather limited, because CITES covers, apart from orchids, relatively few medicinal and aromatic plant species. CITES only deals with international trade and thus would not have any impact on in-country trade of medicinals, which in many cases, is substantial.

d) Opportunities and risks for ISSC-MAP implementation
This strategy provides an opportunity to increase the visibility and reputation of the ISSC-MAP on the political level as well as potentially strengthening ISSC-MAP’s ability to exert a stronger influence on CITES listings. The complexity of the CITES process may imply the risk that too much energy and capacity of the ISSC-MAP is spent dealing with this implementation scenario to the detriment of other scenarios, which may have a stronger on-the-ground impact.

On the other hand, ISSC-MAP could be seen as a tool to provide management guidance required for CITES implementation and by national legislation. In some countries, such as Ecuador, CITES mechanisms are used to regulate or guide control for all species, even if they are not subjected to CITES (Buitron 2006).

c) Potential combination with other scenarios
The scenario is relatively exclusive. If implemented, it would certainly combine with legal adoption; signatory governments may have to build the process into their existing protocols. Combination with training and information and resource management are possible.

f) Existence of strong potential partners
The organisations forming the ISSC-MAP SG are all involved in the CITES process to some degree. Therefore, strong links to CITES exist already and a lot of potential partners are well known.

g) Estimated implementation costs and funding potential
Implementation costs depend on the complexity of the scientific research. If required within the CITES process, funds are usually available.

Summary:
Implementation of the ISSC-MAP through CITES non-detriment findings is an interesting niche implementation scenario. It may be wise to explore the option but not to consider it as a primary implementation scenario, because it is highly theoretical and has a limited reach.

4.1.8 Selection of implementation scenarios
After analysing the potential opportunities and risks of the seven major implementation scenarios described above, it seems to be adequate to consider all of them as, in principle, relevant to the implementation of ISSC-MAP.
Due to limited time, personnel and financial capacities of initial ISSC-MAP implementation, however, it may not be realistic to follow all of these scenarios with the same attention from the beginning. For this reason, it is suggested to concentrate, during the initial phase of ISSC-MAP (pilot) implementation, on those implementation scenarios which may offer 1) good short-term implementation possibilities, 2) strategic opportunities, 3) considerable reach and 4) cooperation with reliable partners.

Taking these considerations into account, the most promising implementation scenarios during the initial phase of ISSC-MAP implementation are:

**Primary implementation scenarios**

1. Resource management  
2. Information and training  
3. Certification standards  
4. Voluntary codes of practice

The other implementation scenarios seem to be promising options for secondary implementation, once ISSC-MAP is established, shows tangible results from pilot implementation and an assessment of its capacity, potential influence and financial footing can be made.

**Secondary implementation scenarios**

5. Legal adoption  
6. Development cooperation  
7. CITES non-detriment findings
4.2 Brief analysis of feedback from potential partners for key implementation scenarios and models selected

Feedback from potential partners for (pilot) implementation of the ISSC-MAP was in general positive. Most organisations / agencies / companies approached were willing to discuss ISSC-MAP implementation, and some of them provided rather detailed information and insight into potential ISSC-MAP implementation scenarios relevant for their organisation. A smaller number of organisations did not reply, or were not prepared to give information and cooperate with the ISSC-MAP.

Key implementation scenarios

Except for CITES non-detriment findings, which is a very specific approach and not really relevant to most organisations interviewed, all implementation scenarios identified were considered by many organisations and groups.

<table>
<thead>
<tr>
<th>Implementation scenario</th>
<th>Identified as favourite implementation scenario</th>
<th>Identified as secondary implementation scenarios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certification standard</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>Resource management</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Information and training</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Voluntary codes of practice</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Legal adoption</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Development cooperation</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>CITES non-detriment findings</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 1: Identification of implementation scenarios of primary and secondary relevance to organisations interviewed (number of replies).

The most relevant implementation scenarios identified were ‘Certification standard’, ‘Resource management’, and ‘Information and training’ (Table 1). ‘Voluntary codes of practice’ were also considered as important, mainly by representatives from the herbal industry, trade or producer associations. ‘Legal adoption’, ‘Development cooperation’, and ‘CITES non-detriment findings’ seem to play a less important role for most interview partners and may therefore be less favoured ISSC-MAP implementation scenarios. It is interesting to observe that legal adoption was mostly not seen as a primary option but as a secondary implementation possibility. Several interview partners suggested gaining experience with the standard in pilot implementation through voluntary agreements and on-the-ground resource management first, and from there on develop a practicable certification
scheme (second step), which can eventually been used to inform national or supranational legislation in a third step.

Most organisations interviewed showed interest in ISSC-MAP pilot implementation. Some of them had specific suggestions how implementation in their case could look like. The range of implementation models is very wide: from including the ISSC-MAP in association sourcing guidelines to integrating the standard in current on-the-ground projects. In many cases, pilot implementation would mean the cooperation of two or more of the potential partners in one project.

**Potential benefits and risks**

Most interview partners made clear that their interest in the ISSC-MAP is linked to expected benefits for their organizations or for groups or people the organization represents or cares for. Such benefits could be premiums, particularly for harvesters and primary producers, access to new markets or market segments or an increase in recognition and reputation on national or international levels. Some companies seem to consider the ISSC-MAP as beneficial if implemented through company-specific codes of practice. The benefit of this strategy is to have a tool to avoid third-party certification or legal adoption of similar provisions in the future.

Time considerations link benefits to risks. In many cases, the interest in the ISSC-MAP seems to depend on rather short term benefits; it may be a risk for the ISSC-MAP that interest will be dwindling if no financial benefits result from its implementation within the next 2 or 3 years. A basic dilemma of initiatives such as the ISSC-MAP is the partial exclusiveness of approaches and implementation possibilities. Some interview partners made a strong point that the ISSC-MAP ‘needs to decide what it wants’, and gain profile, because otherwise it confuses people. A decision on ownership, long-term governance and intended implementation pathways will be required soon.

**Potential reach**

For most people and organizations interviewed, it was difficult to give an estimate on the potential reach of ISSC-MAP implementation through their organization or network, mostly because every organization has certain boundaries which define the optimum potential reach (this can be a village, a valley, a country, a continent, the whole world) and the methods to achieve optimum impact (word of mouth, lobbying on policy level, networking, trade contacts etc.). In practice and from the point of view of the ISSC-MAP, optimum reach can be achieved if a diverse set of pilot implementation projects can be established world-wide. Therefore, it may be helpful to define the potential reach of an enterprise / potential partner in pilot implementation not only in geographic terms but also in terms of reliability, recognition, scaling-up potential and other factors.
**Potential combination of ISSC-MAP with other initiatives**

The main initiatives the ISSC-MAP could be combined with are similar standards which have already been established or are in development. Among these are organic certification standards (e.g. through IFOAM and Soil Association), fair trade standards (e.g. through FLO), FSC NTFP standard, and the UNCTAD Biotrade standard (under development). As the accrediting bodies are competing on overlapping markets, the ISSC-MAP has been perceived as a competition by almost all these bodies. Confusion results from the fact that they are not sure about the true aims of the ISSC-MAP, in particular if the standard will be established as an independent sustainability label on the market, work through voluntary declarations and agreements or strive at making the criteria and indicators mandatory through informing legislative processes world-wide.

**Legal opportunities or barriers for ISSC-MAP implementation**

Most people and organizations interviewed did not see particular legal opportunities or barriers for ISSC-MAP implementation, with two major exceptions. In Bosnia and Herzegovina, almost all stakeholders (NGOs, companies, certifiers, government agencies) interviewed consider a legal adoption of the ISSC-MAP as beneficial. Several stakeholders suggested that such legal adoption, should be initiated after a first pilot implementation phase, during which the necessary experience can be gained. Pilot implementation could start immediately (as soon as the ISSC-MAP standard and reasonable funding for implementation are available), legal adoption may start in about 5-10 years. Contrary to this example, legislation is feared as an inadequately restrictive tool by most potential partners, or as a promotion of cultivation at the expense of wild harvesting (e.g. current suggestions to modify relevant EU regulations).

**Considerations on future governance of ISSC-MAP**

The lack of a clear ISSC-MAP ownership and governance structure contributed to some confusion with potential partners for ISSC-MAP implementation. Questions relating to the long-term sustainability of the ISSC-MAP process, reliability of standard administration and coordination of implementation were raised. Few interviewees gave specific opinions on potential governance structures for the ISSC-MAP. Suggestions include WWF, IUCN, Soil Association, the IC/OC group and a consortium of key stakeholders in the MAP sector.

**Suggestions on how to move ahead**

A large number of organisations interviewed suggested potential pilot projects for implementation. Some could make use of already ongoing projects and start as soon as the ISSC-MAP document is available. Others would require project development; an ISSC-MAP pilot implementation project could be linked to the organisation’s current activities. In some countries a national consultation process would be required before implementation. In most cases, no funds are available. Some potential partners are prepared to undertake joint fundraising efforts together with the ISSC-MAP.
5 References

**Buitrón, X. (2006):** Information requested for study on potential ISSC-MAP implementation strategies. [unpublished internal document]


