CITES & Livelihoods

Paper 1: Rapid Assessment Tools

Tools to assess the impact of the implementation of CITES listings on livelihoods of the poor

CITES Project No. A-338

Prepared for the CITES & Livelihoods Working Group

United Nations Environment Programme -
World Conservation Monitoring Centre

in collaboration with

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1. Summary

Two background papers have been prepared for consideration by the CITES and Livelihoods Working Group, in fulfilment of the MoU between the CITES Secretariat and UNEP-WCMC: *Assistance in the preparation of a toolkit for the rapid assessment of implementing CITES listing decisions on the livelihoods of the poor and draft voluntary guidelines for addressing.* The background papers comprise:

Paper 1: Rapid Assessment Tools - Tools to assess the impact of the implementation of CITES listings on livelihoods of the poor (this paper)

Paper 2: Addressing livelihood Impacts - Guidelines to address the impact of the implementation of CITES listings on livelihoods of the poor (separate document)

Links are identified with other relevant processes both within and outside CITES, to avoid duplication of effort and to foster a common approach to relevant issues. Of particular relevance is the CITES National Wildlife Trade Policy Review (NWTPR) process (CITES/IUED/UNEP, 2007) which parallels the CITES and Livelihoods process closely in its method of working. In both processes:

- the tools and guidance are intended to assist staff, within government ministries, national research institutions and other bodies, to assess and address issues at the national level in relation to CITES implementation;
- there is no connection between the processes discussed and compliance-related processes under CITES; and
- similar core principles apply (Box 1).

A review of the history of the CITES and Livelihoods process is provided, and key terms and information needs are discussed. This is followed by a review of principles and existing guidance on impact assessment methodologies and an examination of a number of existing livelihoods assessment tools developed by conservation and development organisations. Based on this information, issues of particular relevance to the development of a tool for use in a CITES context are considered.

Neither paper is intended to provide a comprehensive literature review.

A proposed tool for voluntary use by the Parties at the national level is provided in Chapter 7.

Box 1. Core principles underpinning the CITES & Livelihoods process (adapted from NWTPR core principles in Doc COP14. Inf. 17 Box 1.)

• **Party-driven:** The process is a voluntary one, resulting from a Resolution and Decisions of the Conference of the Parties.

• **Capacity building oriented:** the project is neither prescriptive nor linked to compliance mechanisms.

• **Results oriented:** the work focuses on outcomes that will help the effective implementation of CITES

• **Interdisciplinary:** CITES and livelihoods involve different disciplines including biology, law, economics, other social sciences and traditional knowledge and linkages between these will need to be strengthened to inform the CITES and Livelihoods process.

• **Stakeholder-oriented:** Particular importance is attached to stakeholder participation as a crucial element to increase the likelihood of the outputs being accepted and implemented. In addition to the poor, the range of stakeholders includes rural poor organizations, cooperatives and community-level committees, representatives of indigenous people, as well as non-governmental organizations, the private sector, individuals, relevant national and multilateral organizations and government bodies

Key issues for consideration by the CITES & Livelihoods working group

Issues discussed in this paper that the working group may wish to focus further discussions on include:

1) **Poor** – Consider whether to agree the definition, for CITES purposes as: "*The Poor" are considered to comprise the rural poor who are directly involved with collection of specimens from the wild as part of their livelihoods and coping strategies* (Chapter 2: Introduction – Definitions – The Poor).

2) **NWTPR Framework** - Ensure the CITES and Livelihoods discussions benefit from and contribute to NWTPR work, particularly in relation to definitions of key terms, and NWTR questions and indicators relating to social and economic issues (Chapter 5: Issues to consider for a CITES tool - CITES Context - CITES National Wildlife Trade Policy reviews)

3) **Impacts** – Discuss whether the "Do no harm" position should be encouraged (Chapter 5: Impacts)

4) **Indicators of poverty** – It may be helpful for the working group to suggest an approach to identifying poverty related indicators that Parties could follow, that maintains synergy with work being implemented by the CBD and the 2010 Biodiversity Indicators Partnership (see Chapter 6: Issues to consider for a CITES tool: general –Indicators of Poverty - CBD & 2010 Biodiversity Indicators Partnership).

5) **Proposed Tool for Use by Parties** – Discuss the tool proposed in Chapter 7.

A preliminary draft of this paper was circulated to the CITES and Livelihoods working group. The final version includes feedback from working group members and others, as well as additional material.

2. Introduction

History of the CITES & Livelihoods process

Resolution & Decisions

At its 13th meeting (CoP13, Bangkok, 2004), the Conference of the Parties adopted an amendment to Resolution Conf. 8.3 with the inclusion of the wording:

RECOGNIZES that implementation of CITES-listing decisions should take into account potential impacts on the livelihoods of the poor

This introduced a new issue within CITES, but there was a lack of clarity about what was being proposed. To address this lack of clarity, the South African National Biodiversity Institute hosted a workshop in 2006 on CITES and Livelihoods, to identify practical measures that would contribute to the implementation of the new provision of CITES Resolution Conf. 8.3 (Rev. CoP13). The workshop agreed on 14 recommendations that were presented at CoP14 and served as the basis for the adoption of Decisions 14.3 and 14.4 adopted by the Conference of the Parties at its 14th meeting (CoP14, The Hague, 2007). Decision 14.4 related to raising the funds to implement Decisions 14.3.

Decision 14.3 states that:

The Standing Committee shall, subject to the availability of external funding, and requesting the assistance of organizations including the IUCN Species Survival Commission, initiate and supervise a process to develop, by the 15th meeting of the Conference of the Parties:

a) tools for voluntary use by the Parties for the rapid assessment at the national level of the positive and negative impacts of implementing CITES listing decisions on the livelihoods of the poor, in conformity with Resolution Conf. 8.3 (Rev. CoP13); and

b) draft voluntary guidelines for Parties to address these impacts, particularly in developing countries. The guidelines should, where possible, assist Parties to develop local, national and regional initiatives that take account of the impacts of implementing CITES listing decisions on the livelihoods of the poor. This process may benefit from taking account of the deliberations and recommendations of the CITES and Livelihoods Workshop (5-7 September 2006) and should draw on the technical contributions of Parties, the Secretariat, non-governmental organizations and other national and international agencies, such as IUCN – The World Conservation Union.

For further clarification, the process shall not include consideration of the criteria for amendment of the Appendices or the requirement to make non-detriment findings.

At its 57th meeting (SC57, Geneva, July 2008), the Standing Committee agreed on the creation of a Working Group on CITES and Livelihoods to assist in the implementation of Decision 14.3.

One of the first issues discussed by the Working Group was the scope of the amendment to Resolution Conf. 8.3. A majority of members reaffirmed that the emphasis of the amendment was clearly on the *implementation* of CITES-listing decisions, rather than on the listing of the species itself. It was also emphasized that consideration of the impacts of the implementation of the CITES-listing decisions on the livelihoods of the poor should not be a "backdoor" to discuss the criteria for listing species in CITES and that impacts could be negative as well as positive.

Although the wording of the resolution: “take into account the potential impacts” suggests that the impacts to be considered are likely to be an adverse ones, the wording of the Decision clarifies that both positive and negative impacts are to be considered when the processes described in paragraphs a) and b) are implemented.

Implementation of Decision 14.3

In May 2009, the Secretariat contracted UNEP-WCMC to develop background papers regarding the information requested in paragraphs a) and b) of Decision 14.3 for consideration by the Working Group.

UNEP-WCMC collaborated in the development of the background papers with the Durrell Institute of Conservation and Ecology, TRAFFIC South Africa, the Chair of the Working Group on CITES and Livelihoods, and the Secretariat.

A progress report on the work was provided by the Secretariat at the 58th meeting of the Standing Committee (Geneva, July 2009). The Committee decided that the Chair of the Working Group should submit the background papers for consideration at the 59th meeting of the Standing Committee (SC59, Doha,

March 2010). The Committee could then decide whether to endorse the documents for consideration at the present meeting.

The Secretariat issued Notification No. 2009/035 on 10 August 2009, inviting Parties to submit research findings or case studies that could be used in the development of the background papers.

A preliminary draft of the background papers was circulated by the Chair of the Working Group to members on 13 August 2009, with a deadline of 15 September 2009 to respond.

The deadline for completion of the final version of the background papers was subsequently extended to 31 November 2009. They will be submitted for consideration at SC59. The Chair of the Working Group will report at the present meeting on the results of that discussion.

CoP15 Doc.14 prepared by the chair of the Standing Committee Working Group on CITES and Livelihoods in consultation with UNEP-WCMC was submitted to CoP15. The document summarises activities to date and includes draft decisions and a draft resolution derived from the draft background documents, comprising a series of Principles that Parties could consider when addressing livelihoods issues.

Definitions

Definitions and a common understanding of key terms will be an important for Parties to consider, when developing livelihoods assessment strategies. In particular, a clear understanding of the terms *livelihoods, poor* and *rapid* (in relation to assessment) will be required.

Livelihoods

Recognising that only the poor really know what poverty comprises and how their livelihood strategies operate, some authors suggest that the poor themselves should be instrumental in developing indicators to characterise their own livelihoods and changes therein (Brocklesby & Hinshelwood, 2001; Ashley & Hussein, 1996). This may be practical in a project-based situation but may be more problematic in terms of providing a workable option for CITES Parties to follow at the national scale.

Livelihoods are increasingly recognised as involving much more than simple economics, i.e. they are multidimensional (World Bank 2000; Kusters et al, 2005), and a number of conceptual frameworks have been developed to guide livelihood assessment.

The Five Capitals

The sustainable livelihoods approach or framework (SLA or SLF) developed by DfID (1999) and OECD (2001), uses the “five capitals” approach, identifying five factors:

1. Human
2. Social
3. Natural
4. Physical
5. Financial

This approach recognises that people’s livelihoods and well being are dependent on a complex mix of issues (DFID, 1999; OECD, 2001; Carney et al 1998). The SLF is widely used in the development context and the approach, with appropriate modification has been used by organizations such as DFID, Save the Children, OXFAM GB and Oxfam South Africa, amongst others. From a starting point of the DFID five capitals, other organizations have modified the approach to include issues such as empowerment and politics. In contrast, others have reduced the framework to a more manageable triumvirate of assets, capacities and activities (de Stage, 2002).

As approaches evolve into a more rights-based approach, differing emphasis is placed on concepts such as empowerment, governance, security, poor health, hunger, assets, capabilities, and activities, depending on the aim of the organisation carrying out the assessment. The World Bank for example recognizes opportunities, empowerment and security as key issues. Now, both development and conservation agencies use their own variations on the SLA theme.

Kusters et al (2005) describe their use of the five capitals approach in their CIFOR report "*A method to assess the outcomes of forest product trade on livelihoods and the environments*", and the indicators that they developed for use at the household, community and national levels. This approach would appear to provide a simple starting point for Parties wishing to initiate and develop their own methods, particularly with regards the household level indicators.

Kusters et al (2005) provide a list of guiding questions and examples, for household use in Annex 3 of their report. These focus on the impact of commercial production of non timber forest products (NTFPs), e.g.

Question 1.1.a: Has commercial production of the NTFP target species led to much worse, worse, better much better physical access by producer households to the target resource?

These questions could be readily modified to fit the CITES context. For example the question above could read: "Has implementation of a particular CITES listing led to much worse, worse, better much better physical access by producer households to the target resource?"

This would also support the approach taken in the CITES Wildlife Trade Policy Review process (CoP14 Inf. 17), which also refers (in table 3) to Kusters et al (2005) when defining areas in which to observe change.

The Poor

In the past, "the poor" have been characterized by their earning power, such as those who earn less than USD1-2 per day (World Bank, 2001) and it is generally recognized that the poor are those with the least in the way of assets (including income corrected for purchasing power), opportunities, power, child mortality and illiteracy.

Of those who live on less than USD2 per day, around 70% live in rural areas (IFAD, 2001), where chronic poverty is associated with remoteness and weak integration into society (Sunderlin et al, 2005; Woodhouse, 2002). The rural poor are classified into the landless, those with a low asset base, or small holders, pastoralists, rural women, ethnic minorities and indigenous populations (World Bank, 2003). Poor rural women are often found in family units where the patriarchal figures are relatively prosperous. This is a manifestation of a fundamental issue to address in terms of CITES and livelihoods, namely, that if implementation of CITES decisions is not undertaken in the context of a broader strategy to alleviate poverty, the negative impacts will be more severe, opportunities for income enhancement will be lost and ultimately, the relevant species may still face unsustainable harvest (C. O'Criodain, Pers. Comm.). Meanwhile 50% of the hungry come from farm households in high risk production areas and 8% are herders, fishers and forest dependent households (Scherr et al, 2003).

Definition for CITES purposes

For CITES purposes, 'the poor' may mainly be considered as the rural poor who are directly involved with collection of specimens from the wild as part of their livelihoods and "coping strategies".

These are the people with the fewest alternatives to harvesting or processing wild products, or that are otherwise dependent on the ecosystems necessary to support the species that supply such products, and those who use wildlife as part of their coping strategies. These people should be prioritized by Parties when considering how listing decisions impact livelihoods of the poor, including those directly involved in trade and those who depend on their own domestic use of wildlife.

This category of poor therefore encompasses those pivotal stakeholders (*sensu* Freese, 1997) for whom it is key to ensure they receive any benefits of trade, or any other benefits arising from the implementation of CITES listings, as incentives to conserve species and their associated habitats. In addition, there may be other traders and processors of wildlife products who could also be classed as 'poor', particularly as CITES becomes more involved with fishery and timber products. However, they are not pivotal stakeholders (*sensu* Freese, 1997).

Rapid

Parties will need to agree what is implied by the word “rapid” in relation to implementation of a “rapid assessment”. This is discussed in Chapter 5 *Issues to consider for a CITES tool*, in the section *CITES context*.

Trade monitoring or trade prohibition?

The impact of the implementation of a CITES listing decision on livelihoods of the poor will vary considerably depending on the nature of the control imposed by the decision. Decisions that limit or prohibit commercial trade (e.g. Appendix I listings; zero quotas; trade suspensions), may be expected to have very different impacts from an Appendix II listings which only necessitate the presence of a satisfactory non-detriment finding (NDF) and CITES export permit.

The intention of any CITES regulation is to ensure the long-term survival of the species, which may generally be expected to be considered a positive outcome, although this may not be true for all, such as poor farmers and their families if they or their crops are at risk from a CITES listed species.

In the short-term, a ban or limitation on trade may have a negative impact in relation to the ability of people to benefit directly from legal trade, but a positive impact if the continued presence of the species in the wild leads to either ongoing trade or increased revenue for the poor, for example through increased tourism and subsequent employment by poor people as park guards.

The process of monitoring trade *via* an Appendix II listing may have negative impacts due to the administrative costs incurred or as a result of public misperception of CITES leading to trade in the species being considered less favourably by importers. Alternatively, if CITES is seen as confirmation of sustainable trade, leading to increased revenue or ongoing trade opportunities, the impact could be positive.

The differences in implementation of regulations that restrict trade, compared to those that monitor trade need to taken into consideration in relation to both this paper, regarding the assessment of impacts and paper 2, regarding methods to address impacts.

What do Parties need to know?

In order to understand the impact of implementing CITES listings on livelihoods of the poor, the following key questions need to be answered, ideally in relation to each species:

1. What is its importance to livelihoods of the poor, such as providing a source of cash, availability for local use, or for customary reasons?

2. What is its importance in international trade?

3. What relevant CITES regulations have been and/or currently are in place?

4. What is the relative impact of the CITES regulations compared to other confounding factors?

A CITES rapid impact assessment process for use at the national level to understand the impact of implementation of CITES listings on the livelihoods of the poor will need to address all these issues. However, it is not likely to be practical for Parties to assess all their CITES listed species on a species by species basis and a preliminary screening process would therefore seem advisable, based on items 1-3 above, to prioritise species for inclusion in the rapid appraisal process.

Item 4 highlights the importance of attempting to differentiate the impact of CITES listings on livelihoods from the various other issues that influence availability of the species to the benefit of livelihoods. Hutton (2008), for example, notes that habitat loss generally has a far greater impact on species loss than does international trade. Unravelling the various factors involved will inevitably be a complex matter and would best be undertaken if comparable data were available pre- and post- CITES listing.

Identifying the particular impact of the CITES listing decision in relation to other confounding factors is the real challenge that an effective CITES rapid assessment tool would, in an ideal world, address. However this is unlikely to be possible and a more realistic solution is likely to be needed. In presenting the results of the CITES and Livelihoods workshop held in 2005 in South Africa, Dickson (2008) notes that "the rapid assessment tools should focus on making an assessment of whether a given package of measures does (or will, in the case of measures under development) have a beneficial impact, rather than attempting the very challenging task of assessing the causal role of CITES trade regulation alone".

As a final step, Parties will also need to understand how information about livelihood impacts can feed into evolving policy-making.

Information requested under the National Wildlife Trade Policy Review (NWTPR) process is relevant to the CITES and Livelihoods process. Since the NWTPR process is also a voluntary one, the CITES and Livelihoods cannot depend on this process having been undertaken. The integration of relevant aspects of the NWTPR into the current process is therefore discussed in Chapters 6 and 7, to ensure there is no duplication of effort either in designing questions or in data collection.

It should be noted that the CITES and Livelihoods process, which is a voluntary one, will not need to consider any issues relating to sustainable use, since assessing sustainable use is an obligation of the Parties under Article IV of the Convention, which requires the implementation of a non-detriment finding prior to the issuance of an Appendix II export permit. No information needs therefore exist in this respect in relation to the CITES and Livelihoods process.

3. The impact assessment process

International framework

Tools and guidance for assessing impacts of policies, projects and natural and humanitarian disasters on environment and livelihoods have been developed by many conservation and development organisations. These include the World Bank, regional organisations, such as the European Commission, international and national non-government organisations as well as Multilateral Environmental Agreements including the Convention on Biological Diversity (CBD), the Ramsar Convention on Wetlands (RAMSAR) and the Convention on Migratory Species (CMS), as well as UNEP (CBBIA 2004). Meanwhile, much of the research that informs developments in impact assessments comes *via* the International Association for Impact Assessment (IAIA).

Environmental impact assessment (EIA) developed in response to concerns over the environmental impacts of large infrastructure development projects and has now been extended by Social Impact Assessment (SIA). Meanwhile, Strategic Environmental Assessment (SEA) has been developed to review the effects of sectoral policies by using Environmental and Social Impact Assessments (ESIA).

Principles & framework

Impact assessment methodologies generally conform to a common framework and involve a number of common steps: Screening; Scoping; Data collection; Impact/ risk assessments; Mitigation/ avoidance; Monitoring of recommended actions (Fig. 1).

- **Screening**: One of the most important steps at the start of the process is to undertake a brief screening process to establish the nature of the impact assessment study. This step, will be one that CITES authorities are already familiar with through processes such as making non-detriment findings, as it involves weighing up the need for assessment and levels of detail required.

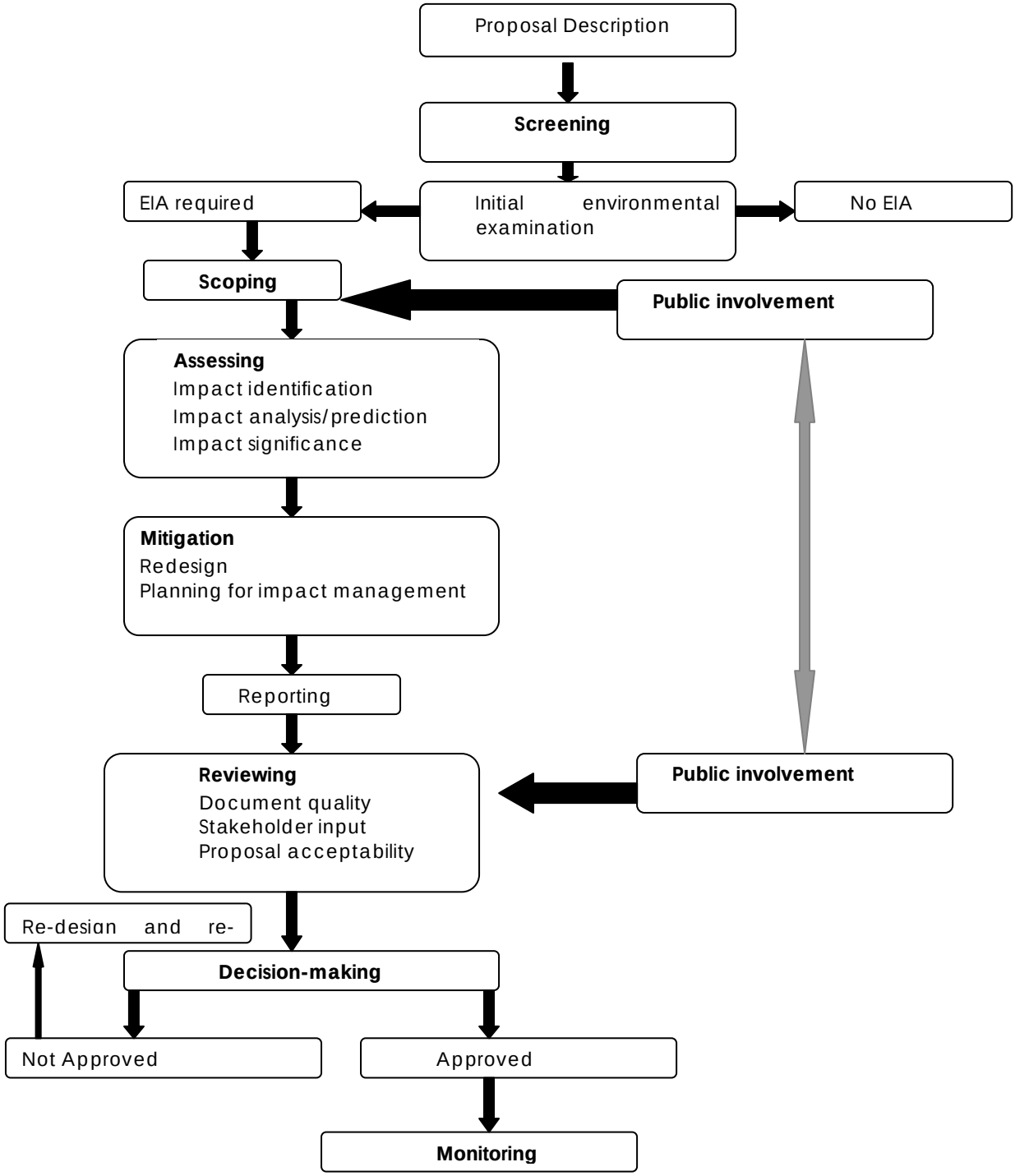

Figure 1: Steps in an Impact Assessment Process (MoE/METAP/UPP, 2001)

For example, given a finite budget for livelihoods assessment and a choice between assessing impacts of listing decisions for two taxa, one of which involves four poor harvesters and the other of which involves 200 poor harvesters, the latter is likely to be chosen for the full assessment.

- **Scoping and data collection:** Scoping involves public participation and establishing the framework and limits of the data collection and methods to be used. Meanwhile the Data collection step, should be relatively straight forward and continue to involve public participation. Many of the tools that are reviewed in the following paragraphs illustrate means of data collection. Once the necessary data has been collected, then stakeholders will be involved in assessing the risk of particular impacts and if necessary then designing methods to avoid or mitigate particular impacts. Finally, the success of recommended mitigation and/or enhancement action should be monitored to ensure that the action is having the proposed effect.

- **Risk assessment**: The CITES Secretariat has provided information on risk assessments as part of its inputs to the International Workshop on Making Non-detriment findings held in 2008 in Cancun, Mexico (Morgan 2008: background paper and presentation). The associated guidance indicates that data requirements should be proportionate to the potential risks; assessment should be based on the best information available; if extra information is needed and can be obtained, then it should be collected; and finally, experience can help with assessments.

Principles of risk assessments indicate that stakeholder participation is vital and that information collection and mitigation strategies should be proportionate to the risk. Therefore, when the risk is small, a small amount of effort should be expended and *vice versa*.

4. Current practice

Tools and guidance

A variety of guidance and specific tools have now been developed to guide users through the burgeoning field of Impact Assessment. For example, the OECD provides guidance on using Strategic Environmental Assessment (SEA) in developing countries (OECD, 2006) and information for EU countries is provided by the EC's Handbook for Trade Sustainability Impact Assessment (EC, 2006). Meanwhile to ensure that conservation and sustainable use of biodiversity is pursued as a fundamental objective of strategic decision-making, guidance on conducting Strategic Environmental Assessments (SEA) of proposed policies, plans or programmes has been developed by the Capacity-Building for Biodiversity Impact Assessment project (CBBIA, 2004). Likewise, the World Bank has also developed Poverty and Social Impact Assessment (PSIA) guidance (World Bank, 2003).

Many toolkits incorporate detailed instructions, training manuals and data collection sheets. Amongst conservation organisations, the toolkits have largely been associated with protected areas and landscape approaches, although IUCN is developing a livelihoods assessment module that aims to capture local information on the contribution of species to livelihoods. All these tools are generally for use at the local, rather than national level, as CITES might require. However local level tools are likely to be more appropriate, particularly in big heterogeneous countries (Brazil, DRC, South Africa, Indonesia) where a national level approach may be meaningless. Indeed, trade-offs at the national level (e.g. through substitution of products) could mask real gains for some communities and losses for others (C. O'Criodian, pers. comm.).

Quantitative and qualitative tools

Impact assessment tools may be either quantitative or qualitative. In a biodiversity conservation context, there is growing recognition of the need to account for social impacts of conservation actions (Adams et al, 2004) and also recognition of the need to measure and monitor project outcomes (Pullin and Knight, 2001, Sutherland et al, 2004). Thus conservationists have started to develop means to assess both social impacts

of projects as well as project success. Influenced by the quantitative backgrounds of many biological conservationists, the movement has generally adopted a quantitative target and indicator driven approach (Salafsky *et al.* 2002, Kapos et al 2008). However, such quantitative approaches are viewed with some concern by many social scientists, who view externally derived indicator-driven approaches as too restrictive and in danger of losing much important information about the drivers of particular social actions (World Bank, 2003). Social scientists and development workers have been quicker to use qualitative methods and participatory approaches to indicator development. At the local level, the development community has developed the use of qualitative stories of change, which have now been used with some success to monitor change in a conservation context at the site level (Wilder and Walpole, 2008). Meanwhile, many organisations now recognize the value of a mixed methods approach that includes both quantitative and qualitative approaches which can be used for either site-based, or national level policy assessments (World Bank, 2003).

Tools for social impact assessment

Participatory rural assessment methods have been used by development agencies for some time to understand livelihood strategies of different groups of people. Such tools may vary from rapid to longer term and from participatory to less participatory. In general, rapid assessment (RA) methods are used when time is short to deliver predefined data quickly, although community members participate in data collection, empowerment is not the aim. In contrast, Participatory Rural Assessment (PRA), which often uses many of the same methods, is designed to empower community participants and as such has an open design and less restricted time-frame (Bergeron, 1999). A description of various methods used in participatory research is available in Annex 1.

Rapid Appraisal Programmes (RAP)

Rapid appraisal tools were developed in the 1980s, when it became clear that quicker means of data collection were necessary in the development field and also that understanding of issues differed between data collectors and people living in the situation, due to differences in perceptions and values (See Chambers 1997). Thus Rapid Appraisal Programmes (RAPs) aim to involve local people and are used in health (World Health Organisation (WHO)), forestry, fisheries, agriculture (Food and Agriculture Organisation (FAO)) and biodiversity assessment programmes (Conservation International (CI)), as well as in disaster relief planning (FAO/International Labour Organisation FAO/ILO). Many of the organisations that undertake RAPs develop their own generic guidance.

In terms of RAP methodology a number of commonalities emerge: RAPs are generally undertaken by a multidisciplinary team, they involve training of assistants, and will vary in length, depending on the complexity of the issue, the geographic scope of area, data needs and funding available. It is generally acknowledged that the reliability of a RAP will vary depending on the rapidity of the survey, so follow-up and further monitoring on interventions will help to reduce uncertainty.

The basic stages of a RAP involve, defining the question to be assessed, collecting available background data, mapping the area of interest, undertaking stakeholder and institutional analysis to identify key actor groups and institutions involved in resource management. To identify impacts on livelihoods it will be necessary to interview individuals to understand their livelihoods strategies and to examine how these vary by gender and wealth group. Thus methods can involve key informant interviews, focus group discussions and household measures. In the CITES context, a key method for identifying stakeholder will involve trade chain analysis.

A summary of the different generic methods used in livelihood assessments is provided in Annex 1.

Livelihoods assessment tools developed by conservation and development organisations

Methods designed by conservation and development organisations to assess the impacts on local livelihoods are summarised in Table 1 and described in Annex 2.

They have focussed on different issues, such as: the outcomes of forest products trade on livelihoods (Kusters, 2005); successful commercialization of NTFPS (Marshall et al, 2006); benefits associated with protected areas (WWF PA BAT; TNC Natures' Investment Bank); and landscapes (WWF LOAM and CIFOR MLA) as well monitoring project success (FFI Stories of Change).

Table 1 Key characteristics of different livelihoods assessment tools

Organisation	Aim	Conceptual framework	Method[2]	Results	Rapid
1. Cambridge Conservation Measures Partnership	Project Impacts	5 capitals	Desk, Participatory	Spreadsheets, Reports	Variable
2. CIFOR Forest Product Trade	Outcomes of forest products trade	5 capitals: assets & earning checklist with Likert scale	Household, Community and National	Report	Variable
3. CIFOR Multi disciplinary Landscape Assessment	Landscape for project design	Hazards, taboos, vegetation types, prices, natural products	Desk, Participatory	Spreadsheet, Report	Variable
4. Commercialization of NTFP report	Researching NTFP commercialization	5 capitals + trade analyses: enterprise budget, market & value chain analysis	Desk, Participatory, Market Tool	Spreadsheet tool & reports	Variable 2 week initial
5. EC Handbook for Trade Sustainability Impact Assessment	Policy assessment	Economic, social and environmental indicators; asses impacts on equity, reversibility & change capacity	Desk, Participatory	Reports	Variable
6. FAO/ILO Livelihoods Assessment Tools	Disaster/hazard identification	SL Framework, capabilities, assets, activities	?	?	? baseline
7. FFI: Most Significant Change	Project Impacts	? Open	Desk, Participatory	Report	Variable
8. International Red Cross: Vulnerability and Capacity Assessment	Vulnerability./ hazard identification	Vulnerability, capacity and hazard analysis	Desk, Participatory Household	Reports	Baselines
9. The Nature Conservancy (TNC): Nature's Investment Bank report	PA Benefits	Opportunities, Empowerment, Security	Desk, Participatory Household	Report	Variable
10. ODI/AWF Methodologies for Livelihood Impact Assessment	Project impacts & contribution	5 capitals	Desk, Participatory Household	Report & method	Variable
11. OECD Strategic Environmental Assessment	Policy assessment to integrate environment	5 capitals	Desk, Participatory	Report	Variable
12. Provention consortium – Disaster relief and prevention	Development tools	Various	Various	Various	Various
13. Save the Children: Household Economy Appeal	Vulnerability/ drought, price, etc.	Household economy and Livelihoods framework, with market analysis. Baseline+Hazard+Coping =Outcome	Desk, Participatory Household	Quantitative results & maps, Spreadsheet	Baselines update 3-10 yrs
14. SIS Livelihoods module	Livelihoods	?	Household	?	?
15. WHO Rapid Appraisal	To inform design of Health provision	Structural, Community, Individual influences on health risk	Desk, Participatory Household	Report, Spreadsheet	12 week survey teams
16. World Bank PSIA	Policy assessment	Well-being- income and non-income based: assets, access, employment	Desk, Participatory Household	Report	Varies with impact & capacity
17. WWF: Protected Areas Benefits Assessment	PA Benefits	5 capitals- subsistence; economics, cultural, environmental services, political	Desk, Participatory	Report & spreadsheet	Variable
18. WWF: Landscape Outcome Assessment Methodology	Landscape change	5 capitals	Desk, Participatory	Radar plots, report, spreadsheet	Variable

Meanwhile, development organisations have for some time been using variations on the ODI/DfID Livelihoods framework to assess the impacts of their work and of policy reforms (World Bank PSIA), to plan for disaster relief (FAO/ILO; Save the Children) and to help people overcome periods of vulnerability (Oxfam).

Many of the tools for undertaking livelihoods assessments used by development and conservation practitioners are site- or project-based, use a complex array of methods and can be time-consuming for both staff and participants. Most tools combine desk-based initial data compilation with participatory data collection from key informants and at the community and household levels. The tools vary in the specific methods that they advocate, whether it be wealth rankings, focus groups discussions to identify either qualitative or quantitative indicators of change, transects walks to identify assets, and household surveys. They do however provide examples of methods and questions that could be extracted and modified and may be useful to CITES parties in assessing the positive and negative impacts of implementing CITES listing decisions.

For a rapid assessment, the method developed by Kusters et al (2005) which depends on expert assessment of the outcomes of forest product trade on livelihoods provides a rapid means of assessing potential impacts for further investigation and may be of particular relevance to the CITES and Livelihoods process, since this approach has been followed in the NWTPR to define assets against which social impacts can be identified (natural, physical, human, financial, social).

Methods described in Marshall et al (2006) are likely to be particularly useful in assessing market aspects of the trade. Meanwhile the baseline assessments undertaken by development agencies may help to pinpoint areas where livelihoods are particularly vulnerable. The method of Most Significant Change (Wilder & Walpole, 2008) is useful for understanding livelihood options and vulnerabilities of the poorest in the trade chain and is helpful in understanding causal links better, which might be a particular benefit in the CITES and Livelihoods process. However, it is not a rapid assessment tool. It is a participatory approach to monitoring and evaluating impact, that requires quite a lot of up front planning and development, plus on-going investment and engagement with communities to generate the kinds of data/stories required (M. Walpole, pers. comm.).

As mitigation/enhancement strategies are developed, further monitoring will be required to ensure that strategies continue to be effective. As parties develop their approach to livelihoods assessment it is likely that methods and tools for assessments may also be refined and further developed in future.

5. Issues to consider for a CITES tool: CITES context

CITES v. other management methods

A major issue in undertaking any assessment will be the problem of identifying impacts on livelihoods that result from a CITES-related decision, as opposed to other matters: other management measures, changes in demand, and changes in access to, or abundance of, the species in question.

With or without a CITES listing, management of a resource still rests primarily with communities and traders in conjunction with relevant authorities. Perceptions around CITES only arise when a species is proposed for listing or is listed. It may be more helpful for assessments to take a “CITES neutral” approach where the impact of implementing a CITES listing is just one of the management options whose impact is assessed.

Existing and new listings

Decision 14.3 does not distinguish between new or existing CITES listing decisions, hence the tool should be suitable for application to all CITES listed species. There was discussion amongst the CITES and Livelihoods working group regarding the need to assess livelihoods prior to a CITES listing proposal being discussed by the Conference of the Parties. Some working group members considered this was important, to generate important baseline information. The opinion was also voiced that this might impact the decision on whether to list the species, and that this should therefore be excluded.

CITES National Wildlife Trade Policy reviews

Identification of appropriate tools for use in a CITES context will benefit from consideration of other efforts that CITES Parties are already undertaking. In particular the CITES community has already invested resources in developing and testing a methodology to undertake National Wildlife Trade Policy Reviews (NWTPR), see Doc. 14 Inf. 17 (CITES/UED/UNEP, 2007). As with the CITES and Livelihoods process, implementation of the NWTPR is also voluntary.

The framework developed under NWTPR includes consideration of social and economic issues based on existing data, available knowledge, stakeholder discussions and other data gathering processes. If Parties have undertaken a NWTPR, information from this can feed into the CITES and Livelihoods process. Social and economic impacts are considered in Section 3.2 of the NWTPR, including questions and criteria against which to assess these impacts. The questions, which are all relevant in a livelihoods context, comprise:

Social impacts: has the wildlife trade policy had positive social impacts on harvesters?

1. Has the wildlife trade policy affected property (access, use and tenure) rights of indigenous and local communities engaged in harvesting?
2. Has the wildlife trade policy affected the financial assets of harvesters?
3. Has the wildlife trade policy affected harvesters' ability to engage in and benefit from sustainable trade?
4. Has the wildlife trade policy contributed to human development of the rural poor?

Economic impacts: has the wildlife trade policy had a positive economic impact?

1. Has the wildlife trade policy caused a change in the supply structure?
2. Has the wildlife trade policy caused a change in the demand structure?
3. Has the wildlife trade policy affected the competitiveness of legal traders?
4. Has wildlife trade policy created positive incentives for, or stimulate private investments in sustainable management of resources?
5. Has wildlife trade policy created jobs and incomes for more people?

If it were to be adapted for livelihoods impacts assessments, the NWTPR methodology would require further emphasis on the review of external factors that can influence the outcome of domestic policies and greater focus on livelihood impacts by making more explicit use of livelihoods frameworks such as the SLA framework; or the assets, capabilities and activities framework; or the opportunities, empowerment and security framework. The Annex to Doc COP14. Inf. 17 introduces basic social science methods that could be used, although value chain analysis should be added.

Scale of assessment

Parties will need to consider the scale of the assessment being undertaken, and the resources available for the assessment, since this will affect the choice of tool. The larger the scale of an assessment, i.e. the greater the number of taxa and the larger the geographic areas involved, the less detailed the assessment will be. Conversely, the greater the likely impact of an action, the more information is likely to be needed

In terms of scale of assessment it may be helpful for the working group to consider whether they should provide guidance to Parties to help them to decide whether they should prioritise rapid assessments of:

i) generic impacts of the implementation policies applied to CITES listings generally, including differences in implementation of listings of species on Appendices I, II and III (including policies addressing various types of production systems and different categories of use), with the aim of contributing to development of generic guidelines on mitigation (where necessary) or on maximizing any positive benefits, alternative strategies of use, and the integration of CITES implementation into broad management policy-making; **or**

ii) specific impacts related to the implementation of CITES listings for particular species or categories of species, with a view to developing mitigation strategies for any negative impacts or strategies for the maximizing of positive benefits

An individual Party could decide to undertake a rapid assessment of:

i) the potential impacts of the full variety of all listing decisions for all taxa being implemented in that country – in order to develop a national mitigation strategy or a strategy to maximize potential positive impacts of implementation, perhaps in conjunction with its national wildlife trade policy or other policies affecting the livelihoods of the poor; or

ii) the implementation of a particular listing or proposed listing with a view to developing a mitigation strategy or a strategy to maximize potential positive impacts of implementation.

Further guidance on the envisaged usage or role of the impact assessments would help to inform the selection of appropriate tools.

Impacts

CITES Decision 14.3 makes clear that the positive and negative impacts of implementation of CITES listing decisions should be addressed in papers 1 and 2. Dickson (2008) has recommended that CITES Parties adopt the 'Do no harm' position (see Recommendation V.29 Poverty and Protected Areas IUCN, 2003; Hedden-Dunkhorst et al., 2007). If this position is adopted, the immediate focus of an assessment process should be to identify whether the implementation of a CITES listing decision is likely to have a negative impact on the livelihoods of the poor so that Parties can subsequently develop mitigation strategies (Paper 2), to prevent the negative impact from occurring in the first place.

Impacts of the implementation of CITES listing decisions can be both positive and negative, depending on particular stakeholders' perspectives and whether these can be delivered in the short or long-term. For example, restriction of unsustainable international trade may negatively impact a harvester who depends on income from species traded internationally, but may positively impact a harvester who depends on the product for their own use, if the population starts to recover. Thus impact assessment will need to consider which stakeholders are directly involved in the trade, as well as those who depend on domestic use of the product.

Impacts of the implementation of CITES listings may include direct impacts such as reduction or cessation of wild harvest levels which in turn can affect income levels from international trade both negatively, if trade volume declines and price remains stable; or positively if volume declines but price increases or if a reduction of trade is followed by a corresponding increase in revenue or other benefits arising from other uses of the species. Trade restrictions can also have indirect impacts by encouraging the development of other sources of the product such as development of *ex situ* production, or use of substitutes. They may also affect increased illegal use of the local resource either by encouraging open-access use through illegal harvesting and trade or by making such use more difficult (i.e. by eliminating loopholes for laundering illegally-taken specimens into legal trade.

Further information on the potential positive and negative impacts of the implementation of CITES listings is drawn from case studies and is presented in Paper 2.

As well as the initial impact assessment, Parties could also consider monitoring the impacts or effectiveness of mitigation strategies (in the case of negative impacts) or enhancement strategies (in the case of positive impacts), using methods such as indicators of change or most significant change stories (Wilder and Walpole 2008). Another method may be to look for improvements in certain indicators, as in the Nature Conservancy study which used the World Bank definition of poverty and quantified poverty reduction by looking for increased opportunities (e.g. education and alternative livelihoods), greater empowerment (e.g. decision-making and resource ownership) and enhanced security by reducing risks from natural hazards and food shortages (Leishner et al, 2007).

6. Issues to consider for a CITES tool: general

Rapid

Desk based v. local surveys

Parties will need to determine what they mean by Rapid Assessment (RA). Rapid Assessments generally involve some field visits, but the necessity for, and length and extent of these, will vary depending on the extent of the trade, of the trade regulation, of the numbers of people involved and prior information on livelihood and poverty issues. When undertaking rapid assessments, the temptation may be to use desk-based exercises or surveys of expert opinion, as have been used to assess some socio-economic aspects of wildlife trade (Kusters et al, 2005; TRAFFIC, 2008). However, livelihoods experts are generally clear that livelihoods should be assessed at the local village and household levels, and by the communities themselves (see Wilder and Walpole 2008). Inclusion of the communities is very important and is the essence of the Most Significant Change process (see Case Study 6) (M. Walpole, pers. comm.).

Narrowing the scope

The rapidity and form of the assessments will depend to some extent on when and how the assessments are envisaged to be undertaken. Parties could undertake assessments on a case by case basis. Alternatively a more generic approach could be adopted to review categories of listing decisions that have been prioritised for assessment.

CITES Parties could also adopt an approach that involves national mapping of areas of harvest for export followed by household investigations of likely dependence on wildlife, and on the nature of that dependence (e.g. for trade, local use for food or medicine, cultural purposes, as a source of ecotourism revenue etc) to form a baseline for further specific data collection on impacts of specific CITES regulations.

An examination of trade levels in different species, coupled with information from key informants on areas of collection and value to harvesters and processors could prioritise areas for both conservation and development work. Rapid appraisals of impacts on livelihoods will ideally require participatory data collection at the household levels to assess the importance of CITES listed species in household strategies.

Multi-sector approaches

Partnerships and multi-sectoral approaches are likely to be important in implementing rapid appraisals and there will be a need to benefit from relevant experience of other governmental and non-governmental agencies.

In the case of disaster relief and other humanitarian interventions, development agencies use methods to provide baseline poverty and hazard maps at regional and even national levels. They subsequently undertake further rapid and in-depth assessments on specific aspects as necessary (See Cruciano, 2007FAO/ILO; Save the Children). CITES parties could explore partnerships with relevant intergovernmental agency teams (e.g. Food and Agriculture Organisation/ International Labour Organisation (FAO/ILO)) and development NGOs (e.g. Care, Oxfam, Save the Children) to determine if their baseline surveys could fit CITES purposes and thus speed-up assessments. CITES national authorities will also need to work with ministries responsible for poverty reduction, social development and agriculture, etc. These partners will be well versed in livelihoods assessment, using participatory techniques, whether for disaster planning, or for planning poverty reduction assessments and projects.

Mixed methods

Mixed methods that combine both quantitative and qualitative approaches are advocated by most commentators for undertaking livelihoods impact assessments. Traditionally, conservationists have focussed on use of quantitative methods, whilst social scientists recognise the value of qualitative methods in gaining greater understanding and insight of the perceptions of those being impacted. Thus participatory rural appraisal methods are generally used for rapid livelihoods assessments. Most recently, conservationists have advocated the use of Most Significant Stories of Change methods which are based on collection of individual perceptions of change (see Wilder & Walpole, 2008). Such methods, although originally used for monitoring project success, if carefully targeted at wildlife harvesters, may provide useful qualitative

information to begin to understand perceived impacts of CITES listing decisions, but definitely require project support (M. Walpole, pers. comm.).

Indicators of poverty

Although one possibility is to ask the poor themselves how to characterize poverty (Brocklesby & Hinshelwood, 2001), in the CITES context the use of indicators that are case and context specific would be more objective (Ashley & Hussein, 2000).

When considering indicator selection, aspects of poverty that may prove relevant include hunger and health, as identified by UNDP (2009) and the heads of the five biodiversity conventions (Zedan et al, 2005). Others have used infant mortality rates as poverty indicators because they correlate with income, education and health status of populations (see Redford et al, 2008 citing Dasgupta 1993 and Balk et al., 2006).

HDI/HPI

In 1990, UNDP introduced a new way of measuring development by combining indicators of life expectancy, educational attainment and income into a composite human development index, the Human Development Index (HDI). The UNDP also developed the Human Poverty Index (HPI) which concentrates on deprivation in the three essential elements of human life already reflected in the HDI: longevity, knowledge and a decent standard of living as well as a Gender-related Development Index (GDI) and Gender Empowerment Measure (GDM), all of which are of relevance to this paper (UNDP, 2009).

It is difficult to use the HDI to monitor changes in human development in the short-term since two of its components, namely life expectancy and adult literacy change slowly. However, to reflect national or sub-national priorities and problems the HDI can be tailored so that additional components are included in the calculation. This could involve expanding the breadth of existing component indices to include components that are more sensitive to short-term changes, e.g. rate of employment, the percent of population with access to health services, daily caloric intake as a percentage of recommended intake, under-five or maternal mortality rates. For further details see *Country Specific HDIs* at http://hdr.undp.org/en/statistics/indices/hdi/ (UNDP, 2009).

UNDP note that the usefulness and versatility of the HDI as an analytical tool for HD at the national and sub-national levels would be enhanced if countries choose components that reflect their priorities and problems and are sensitive to their development levels, rather than rigidly using the three components presented in the HDI of the global HDRs.

CBD & 2010 Biodiversity Indicators Partnership

Indicators are currently being developed for the CBD as part of the 2010 Biodiversity Indicators Partnership www.twentyten.net of which CITES is a partner including those of relevance to poverty. The most relevant indicator is "Health and well-being of communities directly dependent on ecosystem goods and services", which lies within the focal area *Ecosystem Integrity and ecosystem goods and services*. Other indicators of indirect relevance include "Nutritional indicators for biodiversity" and "Biodiversity for food and medicine", both being of the same focal area, and "Wild Commodities Index" (*Sustainable use*). Indicators on access and benefit sharing have not yet been developed.

An overview of the current status of indicator development can be found in the report of the Expert Workshop on the 2010 Biodiversity Indicators and Post-2010 Indicator Development in July 2009 (see http://www.cbd.int/doc/meetings/ind/emind-02/official/emind-02-0709-10-workshop-report-en.pdf). Through decision VIII/15, the CBD COP has urged Parties and other Governments to develop national indicators and Parties have reported, through the 4th national reports, on their action in this regard.

The 2010 indicators will be reviewed by CBD SBSTTA 14 in May 2010 and at CBD COP 10 in October 2010. Although these indicators only provide a broad framework, a further CBD process is underway to guide Parties in the development of indicators for national use.

Adopting indicators developed in relation to the CBD would support synergy between the CBD and CITES (see CoP15 Doc. 10.1), and would complement the draft Resolution in Doc. 10.1 under the 2010 Biodiversity Indicators Partnership, which provides for support from CITES to the CBD.

The CITES and livelihoods working group could encourage Parties to ensure close liaison between CITES Management Authorities and CBD focal points in relation to any use of CBD related indicators.

7. Designing a tool for CITES use

Many of the tools already described above and those summarised in Table 1, are site- or project based, use a complex array of methods and can be time-consuming for both staff and participants. They do however provide examples of methods and questions that could be extracted and modified and may be useful to CITES parties in assessing the impacts of the implementation of listing decisions.

For a rapid assessment, the method developed by Kusters et al (2005) which depends on expert assessment of the outcomes of forest product trade on livelihoods provides a rapid means of assessing potential impacts for further investigation. Sample questions modelled on the questions included in Annex 3 of Kusters et al (2005) are included in the proposed tool to illustrate their approach (Chapter 7).

Methods described in Marshall et al (2006), and the CITES National Wildlife Trade Policy Reviews are likely to be particularly useful in assessing market aspects of the trade. Meanwhile the baseline assessments undertaken by development agencies may help to pinpoint areas where livelihoods are particularly vulnerable. The method of most significant change is likely to be useful for understanding livelihood options and vulnerabilities of the poorest in the trade chain. As mitigation/enhancement strategies are developed, further monitoring will be required to ensure that strategies continue to be effective. As parties develop their approach to livelihoods assessment it is likely that methods and tools for assessments may also be refined and further developed in future.

Testing and refining data collection tools

Testing and refining of data collection tools will be an important aspect of undertaking livelihoods assessments. This will help to ensure that the assessments can be undertaken in a cost-effective, yet rigorous manner, and are proportionate to the risks involved. To refine the tool outlined in Chapter 7, trade and livelihood questions that may be useful can be found in questions, questionnaires and data sheets provided in CITES CoP14 Inf. 17; Kusters et al (2005); Marshall et al (2006) and TRAFFIC (2008). The manuals compiled by Catley et al (2007) and World Bank (2003) provide excellent summaries of participatory methods.

Following experience and testing of the general toolkit outlined in Chapter 7, development of a more specific toolkit for CITES purposes will require guidance from the working group on how and when the assessments are likely to be used. Examples of data collection sheets prepared by conservation agencies including CIFOR, WWF and TNC may prove useful models, although they are targeted at landscape and protected area evaluation (CIFOR 2008; Dudley and Stolton 2008; Aldrich and Sayer 2007; Leishner et al 2007). IUCN's ongoing development of a livelihoods module associated with the Red List for use in evaluating the livelihood contributions of species may also provide a useful model.

Final considerations and caveats

In using such livelihoods assessment tools, it is important to remember that

1) data collection should be proportionate to the risk;

2) poor people may characterize their livelihoods and impacts on those livelihoods differently from outsiders, and therefore participatory assessments should be considered;

3) a variety of tools and methods are available ranging from the simple to the complex and the tools chosen in a given situation will depend on the particular form of assessment in mind and available resources;

4) livelihoods assessments generally involve desk collation of existing data followed by key informant interviews and possibly focus group discussions;

5) collaboration with other organisations, including international and national IGOs or NGOs who already work in a livelihoods context may be advisable;

6) Standardised tools have been developed by some organisations, but others argue that flexibility is required and the great variety of tools developed for different organizations and uses suggests that a flexible approach is more pragmatic.

7) Specific trade related analyses such as trade chain analysis should be considered

8. Proposed tool for use by CITES Parties

CITES Parties could consider adopting some or all of the following steps in implementing a rapid appraisal to identify the impact of CITES listing on the livelihoods of the poor.

Step 1: Define current circumstances & collate and assess existing CITES information

1. Identify relevant indicators of poverty against which to assess change (in conjunction with CBD National Focal Point)

2. Identify whether a generic and/or a taxon based assessment is to be carried out.

The steps below assume a taxon based assessment is being implemented. If a generic assessment is being undertaken, input from a NWTPR or use of the NWTPR framework will be of particular importance.

3. Describe existing domestic and international management processes currently in place, particularly stricter domestic measures.

3.1. Draw on the results of the NWTPR, if this voluntary process has been undertaken.

4. Prioritise species for assessment

A prioritisation process by Parties of species within their national jurisdiction, including, for example, the steps listed below, will help identify key species for rapid assessment.

1) **Unlisted species.** Review prior to the development of a proposal to list a species in the Appendices to CITES. This would provide information on the impact of existing management systems as a comparator for post-CITES listing assessments.

Note: the working group was not in agreement concerning review prior to CITES listing.

2) Prioritisation of taxa based on the CITES controls imposed, and level of trade. The following order could be considered:

a) Listed in **Appendix I**, and:
   i) with no positive measures or mitigation strategies following previous extensive trade;
   ii) associated with strategies to provide incentives for conservation (mitigation strategies) such as *ex situ* artificial propagation or captive breeding, ranching, and trophy hunting quotas;

b) Listed in **Appendix II**, and:
   i) subject to Significant Trade Review recommendations
   ii) with evidence of regular/high trade
   Available from CITES Trade database: http://www.unep-wcmc.org/citestrade/trade.cfm)
   iii) with little evidence of historic trade

c) Listed in **Appendix III.**

d) In addition, taxa which have the following attributes could be prioritised:

i) those whose listing has changed within the last ten years; and/or
ii) for which harvesting from the wild was the major source of supply; and/or
iii) for which the poor are known to be major suppliers/ domestic users; and/or
iv) for which the income from trade has been reduced either through a decline in volume and price or a decline in price.

5. For selected species:

5.1. Summarise existing and previous CITES history
Available from CITES Species Database http://www.cites.org/eng/resources/species.html

5.2. Characterise the CITES implementation measures taken with respect to the species, including methods of permit issuance, apportionment of licences, enforcement with respect to illegal trade etc, as well as associated measures (e.g. education, capacity building).

Step 2: Undertake desk based work to gather new data for selected species

6. Map the distribution of the species and collection areas if known;

7. Collate information on extraction and trade levels to assess numbers of people likely to be involved; (part of overall NDF)

8. Undertake trade chain analysis through targeted key informant interviews and focus group discussions, coupled with examination of available trade data to identify stakeholders and numbers involved at each stage;

9. If a NWTPR had not been implemented or has not been implemented in relation to the species under consideration, address the questions below, modified from questions included in section 3.2 of the NWTPR. (New wording is in red and underlined.)

Social impacts: has the wildlife trade policy had positive social impacts on poor harvesters?

9.1. Has the wildlife trade policy affected property (access, use and tenure) rights of poor indigenous and local communities engaged in harvesting?

9.2. Has the wildlife trade policy affected the financial assets of poor harvesters?

9.3. Has the wildlife trade policy affected poor harvesters' ability to engage in and benefit from sustainable trade?

9.4. Has the wildlife trade policy contributed to human development of the rural poor?

Economic impacts: has the wildlife trade policy had a positive economic impact on the poor?

9.5. Has the wildlife trade policy caused a change in the supply structure that impacts the poor?

9.6. Has the wildlife trade policy caused a change in the demand structure that impacts the poor?

9.7. Has the wildlife trade policy affected the competitiveness of legal traders that impacts the poor?

9.8. Has wildlife trade policy created positive incentives for, or stimulate private investments in sustainable management of resources that impacts the poor?

9.9. Has wildlife trade policy created jobs and incomes for more poor people?

Step 3: Obtain data from other agencies and identify key villages for field work

10. Contact development/ disaster/ health/ and conservation organizations access existing information is available on livelihoods, vulnerabilities and resilience.

11. From this initial analysis, identify a sample of key areas or villages from which to collect livelihoods information, *via*:

    11.1. participatory livelihoods assessments;

    11.2. documentation collected by other organisations;

    11.3. expert witnesses

Step 4: Undertake field based participatory livelihoods assessments in key villages

12. Identify potential impacts and market responses through key informant interviews/ stakeholder workshop. Key villages which supply a significant portion of the trade and are likely to be representative of the first stages of the supply chain (see Kuhl et al, 2009). Stories of Change methods (Wilder & Walpole, 2008) targeted at particular stakeholders may provide a means to gain some understanding of change after a CITES listing has been implemented.

13. More traditional Participatory Rural Appraisal (PRA) tools may include:

    13.1. Village meetings at the start and end of the data collection and assessment period coupled with Stories of Change methods, which need to be implemented as an on-going process.

    13.2. Village transects and mapping to provide an inventory of all households.

    13.3. Historical timelines to provide some evidence of change.

    13.4. Focus group methods to assess the importance of supply of the CITES specimens. Focus groups can be used to compile information on: the livelihoods options available to the villagers (e.g. farming; supplying CITES species; fishing; hunting; ecotourism employment etc); the seasonality of different livelihood options and of hunger seasons through the use of seasonal calendars; relative income and wealth rankings. Participants can also be asked to rank the entry barriers and popularity of different livelihood options.

    13.5. Household questionnaires administered to randomly selected households through semi-structured interviews can be used to collect information on household demography, livelihood activities and sources of income including potential or actual changes following any modification of implementation measures (e.g. following adoption of amendments to the Appendices by the Parties), as well as on wealth indicators.

    Questions could be modelled according to format provided in Annex 3 of Kusters et al, (2005) (Substituted wording is in red and underlined), for example:

    1. Has implementation of CITES listing led to much worse (-2) worse (-1), better (+1), much better (+2) physical access by producer households to the target resource?

    2. Has implementation of CITES listing led to much reduced (-2); reduced (-1); increased (+1); much increased (+2) cash income for the producer households or no impact (0)?
    3. Has implementation of CITES listing led to much worse (-2); worse (-1); better (+1); much better (+2) health and nutritional status of the producer households, or no impact (0)?

    13.6. Interviews with key informants identified through focus group and other discussions as being involved with harvesting of CITES species can provide further information.

Step 5: Final assessments

14. Final assessments should be undertaken through meetings with key stakeholders.

15. These should include identification of potential impacts on different wealth/gender/cultural groups.

16. A focus will need to be kept on identifying the impact of the CITES listing decision, compared to other confounding factors/management measures.

Step 4: Monitoring changes of impacts over time

17. A periodic review of these assessments, including consideration of changes in poverty indicators, would allow changes of impacts over time to be monitored.

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Annex 1:
Methods used in participatory research and livelihoods assessments

Comprehensive references to appropriate tools

Comprehensive references to appropriate tools are provided in:

Catley, A., John Burns, Dawit Abebe, Omeno Suji. 2007. The Participatory Impact Assessment, A Guide for Practitioners - Feinstein International Center, Tufts University www.proventionconsortium.org/themes/default/pdfs/CRA/PIA_Feinstein_meth.pdf

Marshall, E., Schreckenberg, K., Newton, A. (Eds.) 2006. Commercialization of non-timber forest products: Factors influencing success. Lessons learned from Mexico and Bolivia and Policy Implications for Decision-makers. UNEP-WCMC, Cambridge, UK. 136pp. including CD-ROM.

PCLG. 2009. Poverty and Conservation.info The information portal of the Poverty and Conservation Learning group, providing all project documentation, meeting notes and hosting of the four PCLG database. www.povertyandconservation.info/en/tools.php

Livelihood assessments are based on a range of generic approaches, including those listed below. These details are based on material extracted from a wide variety of sources. It is usual for a combination of these approaches to be used in any assessment.

CITES National Wildlife Trade Policy review.

Where national reviews have been undertaken, these will provide a useful baseline for subsequent assessment of the impact of specific listing decisions (Doc. 14 Inf. 17) and can also provide some information on methods that may be useful. However, the National Wildlife Trade Policy Review (NWTPR) methodology would require some modifications such as:

- further emphasis on the review of external factors that can influence the outcome of domestic policies and;
- greater focus on livelihood impacts by making more explicit use of livelihoods frameworks such as the SLA framework; or the assets, capabilities and activities framework; or the opportunities, empowerment and security framework.

Qualitative and contextual data can be collected through methods such as participatory appraisals, asset mapping, and structured interviewing of individuals, communities, or focus groups. This information can be used to undertake stakeholder analysis.

Participatory rural appraisal (PRA).

These tools can be used at village meetings with women's, men's and youth groups conducting separate exercises where appropriate. Groups consist of around 10-12 persons each. Exercises are typically conducted over a three to four day period in each village. During meetings, resource maps are drawn and discussions held with groups selected from the village.

Transect walks.

This method involves walking around the village, its land, or the protected area and asking questions that provide information on natural resource use/livelihoods issues.

Seasonal Calendars.

These calendars are generally compiled with community informants to map out the seasonal tasks and opportunities of the villagers, as well as the seasonal income and outgoings to identify periods of stress.

Participatory wealth ranking

Participatory wealth ranking exercises aim to define four well-being categories, i.e. very poor, poor, rich and very rich. They are normally done with village leaders to provide some context to the exercise, and to set

criteria for the divisions. After setting criteria, each household in a village is assigned to a wealth class. This list can serves as a sampling frame for a stratified random sample of the different wealth classes.

Key informant interviews

Interviews with key players in the village/ trade chain that provide additional information which can be used to cross check information on livelihoods obtained from other sources.

Household surveys

Many field approaches use household questionnaires to gather basic data on demography, wealth, social structures, health, etc. These forms of data gathering techniques form the basis of many national surveys, such as those on household incomes, livestock, etc. Household survey data are generally pivotal to undertaking quantitative poverty and distributional analysis. Although, increasingly workers are using semi-structured interviews and focus groups to collect similar data.

Participatory Environmental Valuation (PEV)

PEV is essentially a participatory rural appraisal (PRA) scoring exercise in which the value of a cost or benefit is estimated by assigning scores in relation to known costs/benefits. PEV may be conducted with groups or with individuals. PEV focuses primarily on costs and benefits that cannot be valued by more standard methods based on market prices, but can also include the costs and benefits that have already been valued through market price-based tools so as to "calibrate" the tool and provide triangulation.

Market structure

Surveys among consumers and producers of goods and services can be useful approaches to understanding market structure. Identifying the nature of the market is an important step toward understanding the conditions needed for market reform to lead to improvements in performance and better outcomes for the poor. Trader surveys can be useful for understanding the nature of the market, the number and types of economic agents, and market constraints, as well as barriers to entry and transaction costs. Quantitative or qualitative household surveys can also reveal who buys services, where, and at what price. Citizen report cards can be used to assess the effectiveness of co-operative and state marketing agencies and price analysis can provide information on Market opportunities and competitiveness.

Trade Chain or Value Chain analysis

Value chain analysis is used to identify the main actors in the chain from the harvesters onwards to identify impacts that may affect the poor. A value chain analysis should be carried out with traders and producers or harvesters. Interviews with the traders help to determine the source and volume of products for international trade and to identify the harvesters/producers, or the areas that they come from. Meanwhile interviews at the community level help to identify the harvesters and assess the impacts of the implementation of a CITES listing on their overall livelihood strategies.

Annex 2: Livelihood Assessments & Tools

Examples of livelihood assessment methodologies and tools developed by conservation and development organisations are provided below. Summary details are provided in Table 1. Cambridge Conservation Measures Partnership

In an effort to respond to calls for more empirical data on the success of conservation interventions, a Cambridge based consortium has developed a spreadsheet to guide organisations in assessing project success (Kapos et al, 2008). This tool includes questions to measure aspects related to livelihoods, that may be relevant in a CITES context. However, the tool is designed for monitoring project success rather than impacts on livelihoods and thus may be of limited value in the context of rapid assessments.

Kapos, V., Andrew Balmford, Rosalind Aveling, Philip Bubb, Peter Carey, Abigail Entwistle, John Hopkins, Teresa Mulliken, Roger Safford, Alison Stattersfield, Matt Walpole, & Andrea Manica 2008. Calibrating conservation: new tools for measuring success. *Conservation Letters* 1 155–164.

http://www.cambridgeconservationforum.org.uk/projects/measures/outputs/

1. CIFOR: Method to Assess the Outcomes of Forest Product Trade on Livelihoods and the Environment

As part of a multi-collaborator research project on the potential of non-timber forest product (NTFP) trade for conservation and development, the authors designed tools to assess the effects of NTFP trade on people's livelihoods and the environment (Kusters et al, 2005). To assess livelihood outcomes of NTFP trade, they used the Sustainable Rural Livelihoods framework and identified indicators to capture changes in financial, physical, natural, human and social assets at the household and community level. They also selected indicators to assess livelihood related changes at the national level. To assess the environmental impacts of commercial NTFP production, this paper identifies indicators at four levels: target species population, land use ecosystem, landscape, and global level. The method presented in this paper is intended to provide a time and cost effective tool to measure the effects of NTFP trade, based on expert judgment. The paper first presents a brief overview of the research project and the challenges faced in the design of the method, followed by a description of the method.

Kusters, K., Belcher, B., Ruiz Perez, M., & Achdiawan, R. (2005). "*A method to assess the outcomes of forest product trade on livelihoods and the environments*". CIFOR Working Paper Vol. 32. CIFOR, Bogor, Indonesia. 23pp. www.cifor.cgiar.org/publications/pdf_files/WPapers/WP32Kusters.pdf

2. CIFOR: Multi-disciplinary Landscape Assessment (MLA)

CIFOR has also developed a comprehensive Landscape Level assessment approach. This combines traditional scientific and participatory recording of site characteristics including soil types and herb and tree transects with village surveys. The village surveys include structured interviews with key informants to glean information on use and regulation of natural resource use as well as household surveys to collect information on income, taboos, perceptions and aspirations. Scoring methods are then used to assess the importance that people place on access to different resources. The CIFOR tool is very detailed with a large number of sample data sheets collecting data on historic hazards, taboos, vegetation types, prices of local commodities, types of natural products that are collected and the income that they generate. Questions are also included on threats to the forest and way of life and exploring how householders perceive the future. Some of the data sheets could provide useful examples of questions for CITES Parties to adapt.

CIFOR, 2008. Multidisciplinary Landscape Approach Methods
http://www.cifor.cgiar.org/mla/_ref/method/index.htm

3. Commercialization of NTFP report

The report provides results of a multidisciplinary project, implemented in Bolivia and Mexico, that analysed the structure and function of 16 non-timber forest product (NTFP) value chains in order to identify attributes that make a chain successful. Six key hypotheses were identified and a set of research questions devised.

Data collection tools used included: community reports; market reports; questionnaires; policy studies; information-needs assessment. The main findings of the project are described under the themes:

- Success means different things to different people
- NTFP activities can help alleviate poverty
- NTFP activities involve poor people and less-poor people
- Status of women, which can be improved
- Increased commercialization initially leads to overexploitation
- Little relevant legislation exists in either of the project countries
- Lack of market information is the key barrier to trade

Marshall, E., Schreckenberg, K., Newton, A. (Eds.) 2006. Commercialization of non-timber forest products: Factors influencing success. Lessons learned from Mexico and Bolivia and Policy Implications for Decision-makers. UNEP-WCMC, Cambridge, UK. 136pp. including CD-ROM.

4. EC Handbook for Trade Sustainability Impact Assessment

The European Commission Handbook for Trade Sustainability Impact Assessment (EC, 2006) provides general guidance on assessing the impacts of reform in trade policy. It sets out the steps to follow for a macro-level assessment and as such, could be helpful for the national level approach that CITES may require. However, the guidance is very general and methods and tools are presented as a decision for the consultants to make on the basis of the particular case in question. It provides an example of a Trade Sustainability Impact Assessment report that presents a summary of key economic, social and environmental factors that could be impacted and the potential impacts in terms of equity, reversibility and capacity to change. Although these assessments are developed at the national level, with an apparently high proportion of desk-based research compiling existing national level data, the approach does stress the need for participation of key stakeholders.

EC. 2006. Handbook for Trade Sustainability Impact Assessment. DG Trade, European Commission.

5. FAO/ILO Livelihood Assessment Tools

For disaster planning and recovery, the FAO and the International Labour Organization (ILO) recognize the importance of livelihood strategies other than farming, and so their toolkit calls for a comprehensive review of the livelihood strategies. They use the sustainable livelihoods framework and aim to understand the capabilities, assets and activities required for a means of living. They have developed a common framework: the Integrated Post-Disaster Livelihood Assessment and Planning System (LAPS), which includes three stages.

The first step is to use the Livelihood Assessment Toolkit (LAT) to carryout **baseline surveys**, the second is to assess the initial livelihood impacts within 10 days of the disaster, followed-up by another assessment three months after the disaster to allow plans to be made for livelihood early recovery. The initial livelihood base line collects quantitative and qualitative data to describe the livelihood activities in a specific area by gender, it includes hazard mapping, population data, livelihood income and activities and Key Indicators for the Labour Market (KILM).

The second step, the **Initial Impact Analysis** uses the baseline, then updates the market information and examines the severity of the disaster and the exposure, and maps the availability of relief work – all from desk work. This is followed by field visits to assess the impact of the disaster on local livelihood, to assess coping strategies, suggest livelihood recovery responses and examine opportunities for employment intensive investment opportunities for recovery. Key interviews are undertaken, with local businessmen; traders and shopkeepers; community focus groups, gender groups; and household interviews. The key questions to use in assessing impact include information on the magnitude and exposure to risk by the disaster; the livelihood characteristics, livelihood impact information, and recovery opportunity and needs.

The third step is the **Livelihoods Rapid Assessment** which provides a more detailed assessment of the impact of the disaster on livelihoods coping strategies, potentials and constraints. This assessment is conducted with the help of templates and checklists to form the basis for semi-structured interviews with i) district levels players such as key institutions, business men and traders; ii) community level participants through group discussions and gender groups and iii) household surveys. In brief, the method involves deskwork coupled with quick field visits as outlined :

FAO/ILO Impact analysis steps:

1 **Livelihood Baseline:**
   - **a.** Use Livelihood Assessment Toolkit (LAT) to design baseline surveys;

2 **Initial Impact Analysis: Assess initial livelihood impacts**
   - **a.** Assess impacts within 10 days of the disaster
   - **b.** Follow-up with another assessment three months after
   - **c.** .....

3 **Livelihoods Rapid Assessment**....

DESK WORK:

1 Pre-disaster livelihood baseline
2 Updating labour market information
3 Severity of disaster exposure
4 Mapping agency capacity for relief and recovery

QUICK FIELD VISITS:

1 Impact of disaster on local livelihoods
2 Initial coping strategies
3 Suggested livelihood recovery responses
4 Employment- intensive investment opportunities for recovery

Cruciano, A. 2007. The FAO – ILO Livelihood Assessment Toolkit: a comprehensive rapid assessment of the impact of disasters on livelihoods from Cruciano, A. 2007. Briefing.
http://www.ilo.org/public/english/employment/crisis/events/peer/download/tool7-ppt.pdf.
See http://www.fao-ilo.org/fao-ilo-emergencies/en/)

6. FFI: Most Significant Change Method

Fauna & Flora International (FFI) tested the Most Significant Change method (MSC) for use in a conservation context (Wilder and Walpole, 2008). The MSC method is a non-indicator based participatory monitoring method used by the development sector for assessing outcomes and impacts of projects. As such, it is a systematic way of collecting anecdotal information on change that is missed by conventional quantitative methods. Thus, it could potentially be explored to provide a means of collecting information on how livelihoods have changed following CITES listing decisions. However, the authors note that the system is burdensome to establish and maintain. They also note that it is most appropriate for projects that are complex, with divergent outcomes, have many sites and organisational layers are participatory and focussed on social change and have regular contact between communities and field teams. This analysis suggests that the MSC method is not appropriate for rapid assessments, but may be of use in longer term studies.

Wilder, L and Walpole, M 2008. Measuring social impacts in conservation: experience of using the *Most Significant Change* method**.** *Oryx*, Volume 42, 529-538.

7. International Red Cross: Vulnerability and Capacity Assessment

The Red Cross, like many disaster relief organisations, is increasingly working with communities to help them develop their resilience to disasters. As part of this programme, the Red Cross have updated their Vulnerability and Capacity Assessment tool kit (VCA) (IFRC, 2007). This is a community-based tool that enables communities first to identify vulnerabilities and then to develop an action plan to increase their own capacity to address many of the issues. As such, this is not conceived as a rapid assessment tool, but nonetheless has lessons for a CITES approach.

More importantly, the tool box provides a clear exposition of a number of tools used in participatory research and participatory action research (IFRC, 2007) and draws on the FAO community toolbox (FAO, 1990). It also underlines the importance of choosing tools depending on the situation, recognising that different tools will be more appropriate in certain situations, and finally, stresses the importance of triangulation to check results. The tool kit presents examples of a matrix for collecting data on livelihood assets and resources; and on household level activities; and a matrix for summarising results. It also provides information on developing a seasonal calendar outlining livelihood activities, stress periods such as hunger seasons, or periods when school fees are due.

IFRC matrix for Data collection on Livelihoods household assets and resources

Natural	Physical	Financial	Human	Social
Land	Tools equipment	Savings	Education	Community groups
Water supply	Transport links	Access to credit	Training	Kin elsewhere
Forest resources	Water supply/ taps		Skills	Religious groups
Fishing resources				Political groups
Wild plants				Social networks

FAO. 1990. The community's toolbox: The idea, methods and tools for participatory assessment, monitoring and evaluation in community forestry, D'Arcy Davis Case. www.fao.org/docrep/x5307e/x5307e00.htm

IFRC 2007. VCA toolbox with reference sheets. International Federation of Red Cross and Red crescent societies. International Federation of Red Cross and Red Crescent Societies, Geneva , Switzerland www.proventionconsortium.org/themes/default/pdfs/CRA/VCA-toolbox-en_meth.pdf

8. The Nature Conservancy: Nature's Investment Bank

The Nature Conservancy's Nature's Investment Bank report compared the livelihoods of people in areas with a Marine Protected Area (MPA) with those living in areas without MPAs in order to assess the potential benefits of protected areas (Leishner *et al* 2007). Researchers used a conceptual framework of opportunities, empowerment and security developed by the World Bank. They measured aspects of this framework using focus group discussions, key informant interviews and finally household surveys. Focus groups and key informant interviews were undertaken before selecting a sample of respondents for deeper household surveys. They interviewed over 1000 people in four areas of the Pacific and spent around 30 days at each site. The household surveys included qualitative data collection using indicators of improvement such as "fish catches have increased" with possible responses such as "strongly agree, agree, don't know, disagree, and strongly disagree". Finally, opportunity or welfare indicators were plotted on radar plots for a graphic comparison of measures associated with protected areas and those not associated with PAs. Researchers concluded that MPAs were associated with improved fish catches; new jobs, mostly in tourism; stronger local governance; benefits to health; and benefits to women. This study was site based.

Leishner, C, van Beukering, P. and Scherl, L.M. 2007. Nature's investment bank how marine protected areas contribute to poverty reduction. The Nature Conservancy, Washington, USA.

9. ODI/AWF: Developing Methodologies for Livelihood Impact Assessment

The ODI/AWF (Overseas Development Institute/African Wildlife Foundation) tool was designed to assess how conservation projects are either impacting or contributing to livelihoods. The approach uses a multi-disciplinary team but is recognised to be somewhat time consuming – both for the assessors and also for the local participants, with the main visit to each project taking between 7-10 days. The report does, however, provide a useful summary of a variety of assessment tools and presents examples of a framework for data collection and analysis (Figure 1). It also provides examples of topics that could be covered in the assessment (Table 2).

Although the ODI tool is site-based and very labour intensive, it could possibly be modified for a more overarching process, if such simplification does not go against the whole livelihoods ethos.

There were however, a number of criticisms of this type of participatory approach from both the ODI/AWF project. The time required to carry out full participatory assessments was viewed as an issue, both from the researchers and subjects point of view. Concerns have also been voiced over the usability of indicators derived in a participatory manner and over the difficulty of integrating participatory data with other data. In addition there have been questions raised over the separation of results by gender, as well as over SLA lack of recognition of issues such as empowerment, politics and power.

Figure 1. Livelihoods Assessment from the ODI AWF Methodology (After Ashley & Hussein 2000).

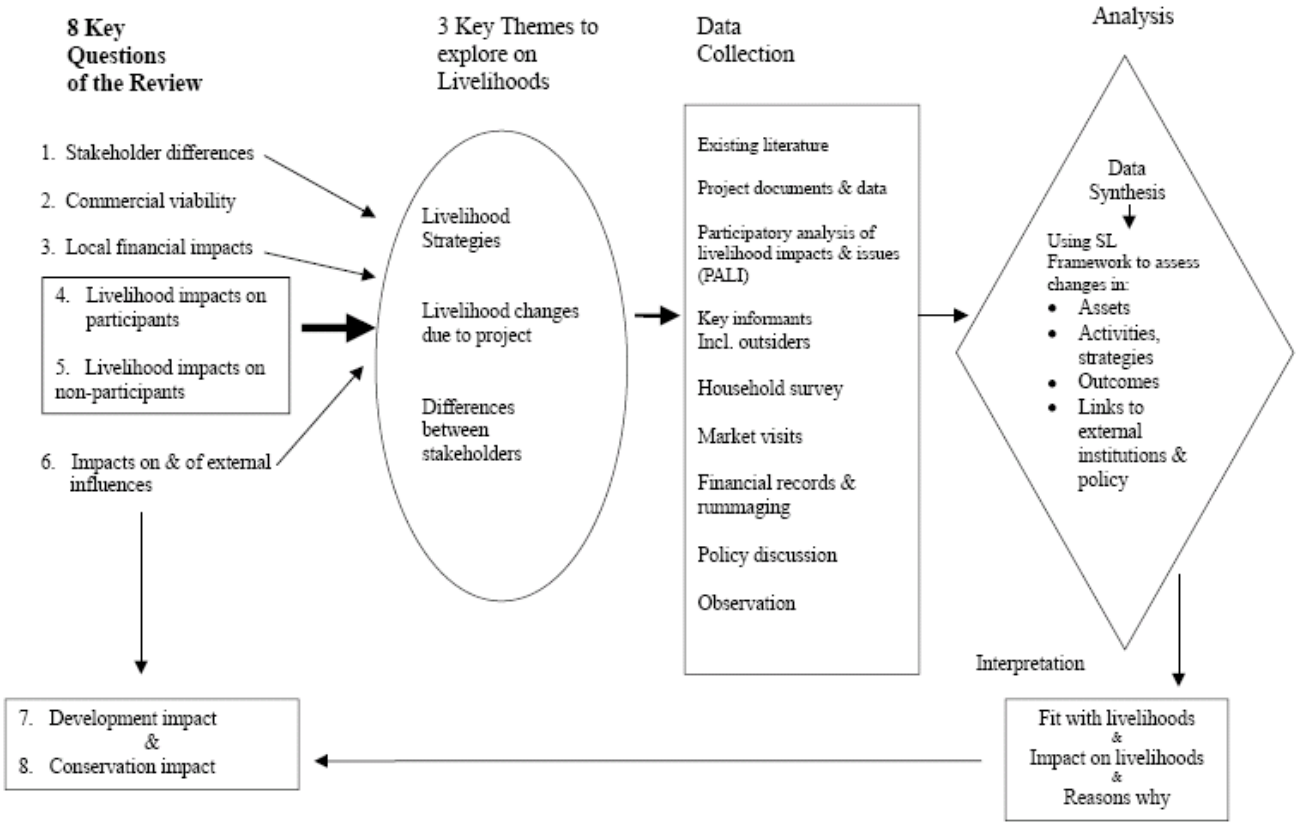

Table 2. ODI/AWF. Topics for a Participatory Assessment of Livelihoods Impact (PALI) process from Ashley & Hussein 2000.

Topic	Activity	What can be learned
Current livelihood activities	List pros and cons	Livelihood strategies. Criteria for judging
	Rank according to: Contribution to income Preference Importance to HH. Discuss	Key activities and assets. Ball park figures for income from different activities. Values other than cash income. Criteria can then be discussed/ expanded/ ranked
	Generate *criteria* for scoring activities and construct matrix.	As above, but more complex. Focus on locally generated criteria (which can then be ranked). Scoring against criteria is easier to visualize for consensus building and comparing across SH groups.
	Incorporate the wildlife enterprise in the above.	How wildlife enterprise fits into strategies, how it meets livelihood criteria.
	Construct matrix of activities and needs	What needs are, which activities are pursued and why. Which activities have multiple functions
	Construct matrix of positive and negative impacts of WE on other activities	Impacts of PROJECT on other livelihood activities
	Carryout any of the above in stakeholder groups	Differences between SHs in terms of activities, strategies, and impacts.
Seasonality	Construct matrix or discussion of seasonality of income, work, food availability.	Livelihood strategies. Main needs. Human Capital availability.
Wealth ranking	Carryout wealth ranking of participants and explanation of criteria.	Stakeholder identification. Local criteria for livelihood security.
	Compare with previous wealth ranking.	How people move in and out of poverty and why?
Scenario-building (positive and negative)	Paint picture (verbally or literally) of positive and negative future – in general or resulting from this enterprise.	Long-term trends. Long-term impacts of project. Useful if going on to joint planning.
Current assets and resources	Discuss what are the assets and resources you currently rely on to support the family (building blocks)? How?	Should identify livelihood assets, and relative importance.
Constraints	Discuss: What are the constraints that prevent livelihood improvement?	Encourages focus on external influences.
Pros and Cons of WE	List pros and cons	Direct and indirect impacts of project.
	Rank pros and cons	Priority concerns, significance of impacts
	Identify who bears and receives benefits	Distribution of impacts between stakeholders
Participation in the project	Discuss who does and who does not participate, why?	Stakeholder roles. Impacts as perceived by each.
	Discuss how participants are selected?	Barriers to participation (external or internal).
Expenditure of earnings	Rank/ matrix of items of expenditure Who decides?	Impact of earnings (e.g. on needs, HH assets). Who benefits
Time-line and trends	Construct time line. Discussion of key events and gradual trends. How people coped or adapted? How are they preparing for the next change? Household action, community action.	Adaptive livelihood strategies and coping strategies. Influence of external policies and organizations. Dynamic processes. Role of internal organization.
Changes and causes	Construct matrix of recent major changes and their causes, then rank the most influential causes of each.	Changes in livelihoods over time. Role of external influences. Significance or not of the project as a major influence.

The use of impact analysis and assessment of livelihoods in a conservation context is relatively new and valuable advice is available from a project undertaken by a development-conservation partnership (Ashley & Hussein, 2000). The authors stress the importance of involving participants for a full understanding of impacts and how to address them and also recognition that different wealth and gender groups will be impacted differently.

Ashley, C. & Hussein, K. 2000. Developing Methodologies for Livelihood Impact Assessment: Experience of the African Wildlife Foundation in East Africa. ODI/ AWF. http://www.odi.org.uk/resources/download/2032.pdf

10. OECD Strategic Environmental Assessment

The OECD Strategic Environmental Assessment methodology is designed for use at the national level and, as such, may be useful in a CITES context (OECD, 2006). The guidance notes that there is no best method for impacts assessment and that the tools and methods will vary depending on the particular case. It also notes that in terms of developing cross-sectoral linkage it will be important to have "champions" in particular departments and ministries.

OECD. 2006. Applying Strategic Environmental Assessment: Good Practice Guidance for Development Co-Operation DAC, OECD: Paris.

11. Provention Consortium – Disaster relief and prevention assessment tools

The Provention consortium is co-ordinated by a Geneva-based secretariat that aims to co-ordinate efforts by NGOs and others in disaster prevention and relief. It provides a comprehensive list of tools available via their website. In particular, the work by Catley *et al* 2007 provides a helpful introduction to participatory methods, including sampling strategies and descriptions of tools such as stakeholder analysis, wealth ranking, seasonal calendars, etc. One of the tools linked through the website, CRiSTAL, although designed for community-based screening of climate change risks, might provide an interesting example of how a CITES screening tool could be developed (see CRiSTAL, 2008). CRiSTAL is presented as an excel spreadsheet which leads participants to identify the main hazards of particular scenarios. So it could arguably provide a framework for CITES Parties to work with stakeholders to identify and assess impacts of listing decisions on livelihoods of the poor, unless the approach is deemed too restrictive.

Catley, A., John Burns, Dawit Abebe, Omeno Suji. 2007? The Participatory Impact Assessment, A Guide for Practitioners - Feinstein International Center, Tufts University
http://www.proventionconsortium.org/themes/default/pdfs/CRA/PIA_Feinstein_meth.pdf

CRiSTAL Community-based Risk Screening Tool – Adaptation and Livelihoods (CRiSTAL) - IISD, IUCN, SEI-US, Intercooperation, financed by the Swiss Agency for Development and Cooperation (SDC)
http://www.iisd.org/pdf/2008/cristal.xls)

12. Save the Children: Household Economy Approach

Save the Children has developed "The Practitioners' Guide to the Household Economy Approach (HEA)" (Boudrea, 2007). The HEA is a framework for analysing how people obtain food, non-food goods and services, and how they might respond to changes in their external environment, like a drought or a rise in food prices. The Guide presents material on how to use market assessment to help determine an appropriate response to acute food insecurity and is complemented by The Household Economy Approach: A guide for programme planners and policy-makers and The Household Economy Approach Facilitator's Resource Pack: Guidance materials for trainers. The guide is very detailed and, as with some of the other tools, results in checklists and spreadsheets for quantitative analysis. Save the Children uses rapid appraisal methods such as focus groups as the primary means to collect baseline data, but this can be supplemented by random sampling and surveying. Their analysis is based on the idea that geography, production system, markets and trade determine both vulnerabilities and coping strategies. By assessing the baseline, hazard, and coping strategy, it is possible to predict the potential outcomes. The main benefit to CITES of this programme, is that livelihood zone maps have been developed by Save the Children and Partners in a number of countries, which might provide baseline information for CITES purposes.

Table 3 Steps in the Framework Information collection methods used (to date)

Baseline	
Livelihood	Zoning Semi-structured interviews; participatory workshops; secondary data review
Wealth Breakdowns	Semi-structured interviews; proportional piling; census data review (to cross-check household composition)
Analysis of Livelihood Strategies	Semi-structured interviews; review of secondary data (to cross-check yields, production, livestock numbers, etc.); proportional piling; participatory seasonal calendars and community mapping

Outcome Analysis	
Problem Specification	Household surveys (to gather monitoring data such as crop production and prices); Semi-structured interviews; review of secondary information, especially time series data
Analysis of Coping Capacity	Semi-structured interviews; review of secondary data (on labour markets, herd composition, viable off-take rates, etc)
Projected Outcomes	No additional information goes into this step; this step comprises an analysis and processing of the data and information gathered in the previous steps

Boudrea, T. 2007. (Ed). The Practitioners' Guide to the Household Economy Approach (HEA). The Household Economy Approach: A guide for programme planners and policy-makers and The Household Economy Approach Facilitator's Resource Pack: Guidance materials for trainers (http://www.savethechildren.org.uk/en/54_6781.htm).

14. Species Information System: Livelihoods Component

The IUCN Species Information System (SIS) is being further developed to cover issues of use and livelihoods, including details on what a species is used for, and its importance to human livelihoods (Oldfield *et al*, 2008).

Although it is currently possible to collect data on species and livelihoods through the SIS, additional revision of the framework to capture this information has been identified as a necessity / priority to increase the value of this information. The livelihoods module will allow information to be captured on a case study basis, which can be at a local, national or global (i.e. the range of the species) scale. It will collect information on value of both direct use and of harvesting, which can therefore be international, national or local, and so the estimated harvest levels, value to economy, primary users and harvesters and value to livelihoods all reflect the chosen scale. Many case-studies can be added to one species (or sub-species), so you can have many case studies for a species all at different scales (and localities) (T. Oldfield and K. Smith, pers. comm.).

The scheme may offer potential for use in the CITES and Livelihoods context once these issues have been addressed.

Oldfield, T., Smith, K. & Allen, D. 2008. Developing the framework for collecting information on use and livelihoods. Report from workshop held at UNEP-WCMC. (Report by David Allen for Livelihoods).

15. WHO: Rapid Assessment and Response Technical Guide

The World Health Organisation (WHO) has developed a "Rapid Assessment and Response Technical Guide TG-RAR" which is designed to collect data to inform the design of health related projects (Stimson *et al,* 2003). Whilst some aspects of the data collection methodology could be adapted, it is probably overly detailed for CITES purposes. Nonetheless, the manual does have a useful Methods module with sections on research skills, sampling and data collection methods. The method uses a simple model to identify the different levels of influence on health risk behaviour.

Stimson, G.V., Donoghoe,M.C., Fitch, C., Rhodes,T.J., Ball, A., and Weiler, G. 2003. Rapid Assessment and Response Technical Guide, Version 1.0 (2003). World Health Organization: Department of Child and Adolescent Health and Development, and Department of HIV/AIDS, Geneva. http://www.who.int/docstore/hiv/Core/Chapter_9.1.html

16. World Bank: Poverty focal areas

Focal areas adapted by Leisher et al (2007) are listed in the table below:

OPPORTUNITES	EMPOWERMENT	SECURITY
Income	Governance Mechanisms	Health
Housing	Community Participation	Social Cohesion
Luxury Goods	Benefits to Women	Cultural Traditions
Fish Catch	Access and rights	
Education		
Alternative Livelihoods		

Leishner, C, van Beukering, P. and Scherl, L.M. 2007. Nature's investment bank how marine protected areas contribute to poverty reduction. The nature Conservancy, Washington, USA.

16. WWF: Protected Areas Benefits Assessment (WWF PA-BAT)

The WWF Protected Areas Benefits Assessment Tool (PA-BAT) was designed originally to assess the benefits of protected areas for a specific study, but it has since been developed as a more general tool and may be applicable to areas other than protected areas (Dudley & Stolton, 2008). The tool is based on the conceptual framework of the Sustainable Livelihoods approach developed by DfID (1999) and OECD (2001).

The WWF tool is an assessment tool; it was not designed as a monitoring tool. It does not record illegal use and or specific quantitative economic values, rather it assesses qualitative values and benefits. The Tool consists of two sections to be completed for each site – the first collects specific information on site name etc and a qualitative evaluation by the team on overall contributions to well-being.

The second section collects information on the benefits to protected area stakeholders such as: the types of benefits; who they are important to; and qualitative information about their level of importance, their relationship to the protected area and the times of year in which they are important. For example, a sheet on the benefits of hunting includes the questions listed below.

The guidance recommends that "a broad range of stakeholders should be involved in carrying out the assessment, for example in a workshop involving park staff, local communities and others with an interest in the site. In this case there may be competing views about various benefits and it is possible that alternative views may have to be represented – for instance positive benefits for some stakeholders may be matched by negative impacts on others which will need to be recorded in the comments section of the report".

Example of stakeholders and questions assessed as part of the WWF PA BAT
Stakeholders included in the assessment:

- Indigenous people in Protected Areas;
- Other people in Protected Areas;
- National population;
- Government;
- Global community

Questions asked: Is hunting/ plant collection/ medicinal use:

1. of minor importance to subsistence?
2. of major importance to subsistence?
3. of minor importance as a source of revenue?
4. of major importance as a source of revenue?
5. of sacred value to identified stakeholders

DFID (1999); Sustainable Livelihoods Guidance Sheets, Department for International Development, UK.

Dudley, N and Stolton, S. 2008 (revised 2009). The Protected Areas Benefits Assessment Tool: A methodology. WWF, Gland, Switzerland.

OECD. 2001. The DAC Guidelines Poverty Reduction, Organisation for Economic Co-operation and Development (OECD), Development Assistance Committee (DAC), Paris, France

17. WWF: Landscape tools (WWF LOAM)

WWF, with other partners, has developed another tool for use at the landscape level, appropriately named: the Landscape Outcome Assessment Methodology (LOAM) (Aldrich and Sayer, 2007). This tool aims to measure how a landscape is changing over time by assessing the progress in delivering agreed, predefined conservation and livelihood outcomes. LOAM also helps to develop a participatory process and common understanding amongst stakeholders.

LOAM uses the Capital Assets/Sustainable Rural Livelihoods Framework (Carney *et al*., 1998). A stakeholder process is used to develop a small representative set of locally appropriate indicators grouped under each of the five assets. A scoring system is then applied to measure, monitor and communicate the nature and extent to which the landscape is changing over time. The scores can be graphically illustrated using radar plots. This process begins with initial desk-based scoping studies and is followed by stakeholder analyses and the development of a participatory process which examines possible scenarios for change and subsequent development of indicators.

Aldrich, M. and Sayer, J. 2007. Landscape Outcomes Assessment Methodology (LOAM) In Practice. WWF, Gland, Switzerland

Carney, D. et. al. (1998) Sustainable rural livelihoods: what contribution can we make? Department for International Development, London.