



## CONVENTION ON BIOLOGICAL DIVERSITY

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### INDICATIVE OUTLINE FOR CASE STUDIES ON AGRICULTURAL BIOLOGICAL DIVERSITY.

#### Background

The programme of work on agricultural biodiversity, adopted by the Conference of Parties in decision V/5, makes provision for case studies on various topics to identify management practices, technologies and policies that promote the positive and mitigate the negative impacts of agriculture on biodiversity, and enhance productivity and the capacity to sustain livelihoods.

More specifically, activity 2.1 of the Programme of Work calls for a series of case studies, in a range of environments and production systems, and in each region:

- (a) To identify key goods and services provided by agricultural biodiversity, needs for the conservation and sustainable use of components of this biological diversity in agricultural ecosystems, and threats to such diversity;
- (b) To identify best management practices; and
- (c) To monitor and assess the actual and potential impacts of existing and new agricultural technologies.

This activity would address the multiple goods and services provided by the different levels and functions of agricultural biodiversity and the interaction between its various components with a focus on certain specific and cross-cutting issues, such as:

- i.) The role and potential of wild, under-utilized and neglected species, varieties and breeds, and products;
- ii.) The role of genetic diversity in providing resilience, reducing vulnerability, and enhancing adaptability of production systems to changing environments and needs;
- iii.) The synergies and interactions between different components of agricultural biodiversity;

- iv.) The role of pollinators, with particular reference to their economic benefits, and the effects of introduced species on indigenous pollinators and other aspects of biological diversity;
- v.) The role of soil and other below-ground biodiversity in supporting agricultural production systems, especially in nutrient cycling;
- vi.) Pest and disease control mechanisms, including the role of natural enemies and other organisms at field and landscape levels, host plant resistance, and implications for agro-ecosystem management;
- vii.) The wider ecosystem services provided by agricultural biodiversity;
- viii.) The role of different temporal and spatial patterns in mosaics of land use, including complexes of different habitats;
- ix.) Possibilities of integrated landscape management as a means for the conservation and sustainable use of biodiversity.

Additionally, COP decisions V/6 and V/24 call for case studies on the application of the ecosystem approach and on best practices for the sustainable use of biological diversity, including studies within the context of the thematic areas of the Convention.

The use of a common framework can facilitate synthesis of lessons learnt from the case studies and integration of the ecosystem approach and considerations of sustainable use. The following indicative was originally made available to the Conference of the Parties in document UNEP/CBD/COP/5/INF/10. It has been revised in the light of COP decisions.

### **Indicative Outline**

Overview: In one page, please provide a summary of the case study using bullet points to highlight: the context/problem to be solved; the objectives; the approach; application of the ecosystem approach; and lessons learnt.

I. Background/Problem statement: Please describe the context or situation of the case study, and identify problem that is addressed by the activities of the case. Consideration of threats to biological diversity, the goods and services derived from it, and the distribution of benefits among stakeholders may be included, and, if known, the underlying causes of such threats may be described.

II. Objectives/Purpose of the Activities: Please provide, in one or few sentences the main objective(s) of the activities proposed and/or carried out.

III. Details of the case study and the approach taken: Please describe the activities, the approach taken, and the main actors involved.

IV. Analysis: Please analyse the case study in the framework of the various programmes of the Convention, using, as appropriate the checklist in Appendix 1. (Note, this should be used as an *aide memoir*, i.e. it is not necessarily appropriate to address each and every

part in the appendix). This section might be presented in tabular form, and should complement section III.

#### V. Conclusions.

A. Outcome of the activities. Please provide a brief note of the results, or expected results, of the case study, and the extent to which the objectives were met.

B. Lessons Learnt. Please highlight any critical factors that led to the success or failure of any of the activities carried out. It would be useful to note any practical conclusions that would assist others in carrying out similar activities, as well any policy-relevant lessons.

### **Appendix: Checklist for the analysis of the case study (section IV)**

#### A. Application of the Ecosystem Approach.

1. Describe how the case study illustrates any of the 12 principles of the ecosystem approach under the Convention (see COP decision V/6), and identify any constraints in applying these principles.
2. For the case study:
  - (a) Identify goods and services provided by biodiversity in the area of case study (and additional ones that could be provided with improved management), and identify the components of biodiversity and the functional relationships between these components which give rise to such goods and services;
  - (b) Identify the beneficiaries of these goods and services as well as additional groups who could become beneficiaries, and identify any barriers to their access to the benefits;
  - (c) Describe approaches to adaptive management noting, what is most effective and what is least effective;
  - (d) Describe the scale(s) of management used, additional scale(s) of management that may be needed to address the problem, and any barriers to exercising management at the appropriate scales.
  - (e) Identify sectors involved, those that should be involved, and identify changes required to provide an enabling policy environment.

#### B. Relevance to the operational objectives of the Programme of Work on Agricultural Biological Diversity

3. Indicate whether and how the case study contributes to:
  - (a) An assessment of status and trends of the world's agricultural biodiversity and of their underlying causes;
  - (b) The identification of management practices, technologies and policies that promote the positive and mitigate the negative impacts of agriculture on biodiversity, and enhance productivity and the capacity to sustain livelihoods;

- (c) Strengthening of the capacities of farmers, their communities, and organizations and other stakeholders, including agro-enterprises, to manage agricultural biodiversity, and the promotion of increased awareness and responsible action;
- (d) The development of national plans or strategies for the conservation and sustainable use of agricultural biodiversity and their mainstreaming and integration in sectoral and cross-sectoral plans and programmes.

#### C. Relevance to the thematic work programmes of the Convention

4. Indicate whether or not the case study is relevant to the following thematic areas, and describe how they are relevant:
  - (a) Forest biological diversity
  - (b) Marine and Coastal biological diversity
  - (c) Biological diversity of inland waters
  - (d) Biological diversity of dry and sub-humid lands (including Mediterranean, Savannah and Grasslands)
  - (e) Biological diversity of mountain areas

#### D. Relevance to the cross-cutting workprogrammes of the Convention

5. Indicate whether or not the case study is relevant to the identification, control or mitigation of the effects of invasive alien species.
6. Indicate whether or not the case study employs indicators of biological diversity, or of impacts on biological diversity.
7. Indicate whether the case study employs the use of incentive measures for the conservation and sustainable use of agricultural biodiversity, or identifies perverse incentives.
8. Indicate whether the case study employs impact assessments (environmental, socio economic) or indicates the need for impact assessments.
9. Indicate whether or not the case study furthers the taxonomic understanding of the organisms concerned, or elucidates the need for further taxonomic work.
10. Indicate whether the case study employs the use of benefit-sharing measures.
11. Indicate whether the case study draws upon the knowledge, innovations and practices of indigenous and local communities and whether it contributes to the protection and wider application of such knowledge, innovations and practices.
12. Indicate any other measures taken to promote the sustainable use of biological diversity.
13. Indicate if the case study is part of, or contributes to, a National Biodiversity Strategy and Action Plan.