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**TOOLS TO EVALUATE THE EFFECTIVENESS OF POLICY INSTRUMENTS FOR THE
IMPLEMENTATION OF THE STRATEGIC PLAN FOR BIODIVERSITY 2011-2020**

Note by the Executive Secretary

INTRODUCTION

1. In paragraph 20(c) of decision XII/1, the Conference of the Parties requested the Executive Secretary to review national experiences in the use of tools to evaluate the effectiveness of policy instruments for delivery of the Strategic Plan for Biodiversity 2011-2020, using information contained in the fourth and fifth national reports, and to identify best practices and lessons learned. In paragraph 20(d), the Conference of the Parties requested the Executive Secretary to report on this item to the Subsidiary Body at a meeting held prior to the thirteenth meeting of the Conference of the Parties.

2. A background document on assessing the effects of the types of measures taken in accordance with the provisions of the Convention was made available to the Subsidiary Body at its eighteenth meeting (UNEP/CBD/SBSTTA/17/3). That document contains an overview of relevant previous work on this matter under the Convention, reflections on the understanding of effectiveness in the context of the Strategic Plan for Biodiversity 2011-2020, examples for successful types of measures as well as additional considerations. The present note builds on these previous considerations.

3. Accordingly, the present note presents information, in section I, related to the evaluation of the effectiveness of policy instruments and measures for delivery of the Strategic Plan for Biodiversity 2011-2020 contained in the fourth and fifth national reports; in section II, on challenges in assessing the effectiveness of policy instruments and measures; in section III, on approaches for assessing the effectiveness of policy instruments and measures; and in section IV, on the importance of policy coherence and mainstreaming. Section V contains conclusions, followed by a draft recommendation in section VI.

* UNEP/CBD/SBSTTA/19/1.

4. Matters related to those addressed in this note may also be considered by the Subsidiary Body on Implementation.¹

I. INFORMATION FROM PARTIES RELATED TO THE EVALUATION OF THE EFFECTIVENESS OF POLICY INSTRUMENTS AND MEASURES FOR DELIVERY OF THE STRATEGIC PLAN FOR BIODIVERSITY 2011-2020

5. Further to the analysis presented in document UNEP/CBD/SBSTTA/17/3, and in line with decision XII/1, the fourth and fifth national reports received by 15 July 2015 have been analysed with regard to information provided on experiences in the use of tools to evaluate the effectiveness of policy instruments and measures for the implementation of the national biodiversity strategies and action plans of Parties and, ultimately, the Strategic Plan for 2011-2020 and the achievement of the Aichi Biodiversity Targets.

6. Article 26 of the Convention calls upon Parties to report on measures taken to implement the Convention and their effectiveness in achieving the objectives of the Convention. Accordingly, the guidelines to the fourth national report called for information on the effectiveness of national biodiversity strategies and action plans and the effectiveness of their implementation by asking specifically:

(a) Whether observed changes in status and trends in biodiversity are a result of measures taken to implement national biodiversity strategies and action plans and the Convention;

(b) Whether the current national biodiversity strategies and action plans are adequate to address identified threats to biodiversity; and

(c) How implementation of national biodiversity strategies and action plans may be improved, where necessary, including suggestions of possible ways and means to overcome identified obstacles.

7. Information from the fourth national reports was provided in document UNEP/CBD/SBSTTA/17/3. As noted in that document only about 20 per cent of the submitted fourth national reports included an analysis of the effectiveness of actions. Where such analysis was undertaken, it focussed on the implementation of the national biodiversity strategies and action plans and provided little information about mainstreaming and implementation of the 2010 targets. Challenges found included lack of systematic monitoring of the impact of specific measures, lack of on-the-ground evidence or cases and insufficient consideration of the time lag between the implementation of measures and their effects.

8. In response to a request from the Subsidiary Body at its seventeenth meeting, the Executive Secretary prepared an analysis of methodologies used in self-assessments of progress towards the implementation of the Convention based on information contained in the fourth national reports (and fifth national reports were available) (UNEP/CBD/WGRI/5/INF/20). This report, which is complementary to the present one, contains information on the use of indicators and outcome frameworks, qualitative assessments of the implementation of national biodiversity strategies and action plans, case-based reviews and literature reviews. It also reports on a few cases of assessments of effectiveness of measures and these are reproduced in the present document.

¹ The Subsidiary Body on Implementation was established by decision XII/26. Its mandate includes: “(b) Assist the Conference of the Parties in preparing decisions on enhancing the implementation of the Convention, as appropriate”, including “(c)... recommendations to overcome, obstacles encountered in implementing the Convention and any strategic plans adopted under it.” Therefore, some of the elements of the present note will also be taken up in detail at the first meeting of the Subsidiary Body on Implementation.

9. In the guidelines to the fifth national reports, Parties were asked to analyse the effectiveness of the national biodiversity strategies and action plans as an instrument for mainstreaming biodiversity into relevant sectoral and cross-sectoral strategies, plans and programmes.

10. It was found that only few national reports contain information on specific tools that have been used. In order to gather further data, a related question has been included in the survey conducted in preparation for the Ad Hoc Technical Expert Group on Indicators for the Strategic Plan for Biodiversity (see notification 2015-037, SCBD/SAM/DC/RH/KM/84530 of 2 April 2015). 30 Parties indicated in the survey that they have undertaken efforts to assess the effectiveness of the actions or interventions undertaken to implement their national biodiversity strategies and action plans or related strategies. To gather further information, 12 (Brazil, Eritrea, the European Union; Germany; Japan; Mexico; New Zealand; Palau; Peru; South Africa, the United Kingdom of Great Britain and Northern Ireland) follow-up interviews were conducted with representatives of these Parties.

11. With regard to tools used to evaluate effectiveness in terms of progress towards the achievement of the Aichi Biodiversity Targets, many Parties noted the use of indicators. In assessing the changes in status it is implicitly assumed that measures undertaken in this area caused the changes in status (see also document UNEP/CBD/SBSTTA/17/3, para. 12). Further relevant information is contained in a note by the Executive Secretary on the use of indicators to assess progress towards the attainment of the Aichi Biodiversity Targets in the fifth national reports (document UNEP/CBD/ID/AHTEG/2015/1/INF/3). This note has been made available to the Ad Hoc Technical Expert Group (AHTEG) on Indicators for the Strategic Plan which will meet in Geneva, Switzerland from 14 to 17 September 2015. The matter of indicators will be addressed, by the Subsidiary Body, under item 3.4 of the agenda of its nineteenth meeting. The Subsidiary Body will consider recommendations on this matter based on the outcome of the AHTEG.

12. The following sub-sections present examples, in sub-section A, where Parties reported on the use of methods that explicitly address the causal link between measures and changes in status. Sub-section B contains information provided by Parties on evaluations of the effectiveness of protected areas as a specific example. Examples are presented from the fifth national reports as well as from follow-up interviews. Except where indicated otherwise, examples are taken from the fifth national reports.

A. Examples for reported effectiveness assessments

13. The European Union, in its interview, reported on the use of case studies in their assessments of the effectiveness of specific measures (see paragraph 47 below). Eritrea reported on the role of stakeholder participation in assessments (see paragraph 41 below).

14. Brazil reported on the evaluation and effectiveness of a variety of different policies and initiatives:

(a) Brazil reported on the evaluation of two policy actions with combined socioeconomic and environmental objectives: the Minimum Price Policy for Socio-biodiversity-based Products (PGPMBio), and the Environmental Conservation Support Program, known as “Green Stipend” (Bolsa Verde), and identified the achievements and limitations of these programmes;

(b) The effectiveness of tax incentives to local governments was assessed. These tax incentives have been implemented, since 2013, in 17 of the 27 Brazilian states. Municipalities that follow ecological criteria established by the state receive an additional share of the value-added tax on services and circulation of goods collected by the state. The evaluation identified benefits and shortfalls of the measure, including the need to earmark the additional funds for environmental expenditures;

(c) The Federal Court of Accounts of Brazil assessed the level of mainstreaming of the commitments undertaken at the United Nations Conference on Environment and Development in Rio de Janeiro in 1992, in particular with regard to the administration of the sustainable use of fisheries resources, and the shared management of fisheries resources involving government and civil society, and initiated the development of an action plan based on its findings;

(d) The Ministry of the Environment of Brazil signed a cooperation agreement with the Rio Grande Federal University Foundation to quantify the efficiency of the Inter-ministerial Ruling MPA/MMA INI 12/2012 on the populations of threatened and vulnerable aquatic species in the southeast and southern regions of Brazil. The assessment will include an estimate of the mortality rates of relevant species, a comparison of spatial distribution and intensity of by-catch and fisheries production before and after the implementation of the ruling, as well as a protocol for the effective monitoring of the fishing fleet using net gear through a national programme on on-board observers;

(e) The status of the humpback whale was reclassified from “threatened” to “almost threatened” on the Brazilian list of at-risk species. This was credited to the successful implementation of government actions, in combination with civil society initiatives, resulting in long-term measures such as the prohibition of hunting, redefinition of vessel routes in order to reduce collisions, and the creation of the Abrolhos Marine National Park.

15. Brazil also reported, in its fourth national report, that the Ministry of the Environment supported an inventory of peer-reviewed scientific research and published papers on the implementation of the National Biodiversity Policy and its various components, reviewing over 400 relevant documents from this inventory to assist with the analysis of the effectiveness of the Policy.

16. Dominica reported that a review of their national biodiversity strategy and action plan was undertaken in 2013 through stakeholder consultation. This review looked at the strategies as intended under the 2000-2040 national biodiversity strategy and action plan and findings indicate that: (a) all strategies are still valid though not to the same extent; (b) some strategies have been achieved through other initiatives and projects; and (c) some strategies can be combined but have different focal areas as necessary.

17. Mexico reported on an evaluation, undertaken in 2012, of the performance of more than 3000 registered wildlife management and conservation units (Las Unidades de Manejo y Conservación de la Vida Silvestre) from 1997 to 2008. A second phase of the evaluation will look at the conservation status of wildlife populations and their habitats under management as well as the socioeconomic impacts by region, to identify shortcomings and opportunities to overcome them.

18. In its interview, Peru reported that it assesses change in behaviour and change in the status of biodiversity at the regional level. They also reported on the development of criteria as part of regional assessments, against which the contribution of specific measures and different regions to progress in the achievement of the Aichi Biodiversity Targets was evaluated.

19. The United Kingdom of Great Britain and Northern Ireland reported in their interview that it supplemented, in its assessments, the use of qualitative indicators by additional information on policy measures and actions undertaken, case-studies, and a qualitative assessment on progress towards the Aichi Biodiversity Targets at the aggregate level of the goals in order to account for the multifaceted nature of the Aichi Biodiversity Targets.

20. In addition, a number of countries reported that they undertook effectiveness evaluations without mentioning specific methodologies:

(a) Burkina Faso conducted an analysis of the extent to which the national biodiversity strategy and action plan 2001-2025 and the 2011-2015 revised action plan have been implemented. They

identified as the main challenge to implementation the absence of targets and a quantitative assessment of the implementation of the planned actions;

(b) Djibouti reviewed the implementation of its national biodiversity strategy and action plan as part of the evaluation of its broader action plan in the areas of environment and spatial planning 2011 to 2016;

(c) Japan reviewed its Fundamental Plan of Forest and Forestry in July 2011;

(d) Rwanda reviewed sectoral policies and regulations concerning compliance with its national biodiversity policy and biodiversity law. As a result of the review, revision and updating of those laws and policies to enhance their alignment with the conservation and sustainable use of biodiversity and revised institutional arrangements were proposed;

(e) Togo reported that it assessed the percentage of implementation of each of the 10 objectives included in its national biodiversity strategy and action plan. The analysis found that none of the objectives was implemented at a higher rate than 50 per cent and seven objectives had a level of implementation ranging between 25-30 per cent.

B. Specific examples: management effectiveness tools to evaluate the effectiveness of protected areas

21. The evaluation of the effectiveness of protected areas is one specific field of effectiveness evaluations, where Parties, in their fifth national reports, provided more comprehensive information on the evaluations undertaken and the methodologies used.

22. Belize noted that their national management effectiveness assessment evaluates protected area effectiveness in key areas, including information availability, operational success, governance, socioeconomic benefit, institutional and financial management.

23. Egypt reported that they conducted an assessment of the management effectiveness of protected areas according to international standards using a management effectiveness tracking tool for seven protected areas and later extended to cover 11 protected areas.

24. In order to assess the management effectiveness of conservation areas, Indonesia developed a standardized practical guideline for the monitoring and assessment of management aspects of marine conservation areas. According to 2013 data on marine and fisheries, the management of three areas needed to improve, thirteen areas were managed in good status and one area was evaluated to have very good management.

25. Mexico reported on an analysis of the dynamic of change in land cover and land use with the objective of measuring the effectiveness of natural protected areas as environmental policy tools. This analysis was mainly done on the basis of satellite imagery, and although the majority of analyzed cases showed loss of forest cover, the data since 2000 coincides with a reduction in the rate of change within the natural protected areas, which was reported as a possible indicator of effectiveness.

26. Micronesia, through the Micronesia Challenge, national and state resource management agencies and local NGOs and community-based organizations in the country are benefiting from the development of a regional monitoring framework with a consistent set of indicators. This monitoring framework includes the development of a marine protected areas management effectiveness tool, (which is equally useful in terrestrial sites), indicators for socioeconomic monitoring, a climate change toolkit, and biological monitoring tools in marine areas.

27. South Africa has adapted the global Management Effectiveness Tracking Tool to the national context in order to track progress over time.

28. In Namibia, assessments of the management effectiveness of protected areas were undertaken in 2004, 2009 and 2011 by scoring each protected area based on criteria determined such as: drafting of regular work plans; research; resource management; staff training; education and awareness programmes; traditional authority involvement; economic benefits to communities; monitoring and evaluation; condition assessment; and law enforcement. The assessments show significant improvement in the management of all protected areas. Namibia also used a tool developed through the Namibian Coast Management and Conservation Project to assess the management effectiveness of marine protected areas.

29. The Philippines reported that they developed a management effectiveness-tracking tool to evaluate the effectiveness of protected areas.

30. Finland reported on the management effectiveness of 35 national parks evaluated in 2010. Natura 2000 site condition assessment of over 100 sites has been conducted since 2010, including all 37 national parks. A protected area system level management effectiveness evaluation is planned in 2015.

31. In Malta, standards, criteria and indicators to evaluate the effectiveness of protected area management are under development.

32. In Tonga, trends in coverage of protected areas show a positive change, mainly with the marine managed areas. With regard to effectiveness, consultations with various communities have highlighted an increase in diversity of fish, and an increase in fish catch.

33. In its fourth national report, Brazil used a Rapid Assessment and Prioritization of Protected Areas Management method (RAPPAM) to assess protected area management effectiveness.

II. CHALLENGES IN ASSESSING THE EFFECTIVENESS OF POLICY INSTRUMENTS AND MEASURES

34. The Conference of the Parties, in decision XII/1, paragraph 15, took note of the collation of further views of Parties with regard to the scientific and technical needs relating to cross-cutting issues and to specific Aichi Biodiversity Targets of the Strategic Plan for Biodiversity 2011-2020. This collation of further views is annexed to recommendation XVII/1 of the Subsidiary Body, and contains the following statement related to challenges in the assessment of the effectiveness of policy instruments and measures:

“While policy evaluation is a commonly applied approach, it is difficult to discriminate and measure the specific effects of policies, especially those which have multiple objectives and which are delivered in a complex policy landscape. The feasibility of such evaluations should be explored by undertaking pilot assessments of the effects of measures taken in specific thematic areas or case studies.”

35. As noted in document UNEP/CBD/SBSTTA/17/3, in order to fully understand the effectiveness of measures taken, it is necessary to understand the causal link between progress measured by indicators and individual measures undertaken. Taking this link into account in the evaluation of individual measures in practice is often considered difficult.

36. Germany, for example, noted during its interview that even though a comprehensive overview of the status of biodiversity in Germany exists, there is in many cases only limited knowledge and understanding as to whether specific measures achieve their desired effect. Lack of data, complexity of the causal relationship between measure and effect as well as the time lag between the implementation of a measure and its effect were mentioned as the main challenges. Germany plans further work to assess the

relationship between measures and their effects, in particular on the relationship between agriculture and energy policies and the degradation of agrobiodiversity.

37. The impacts of policies on environmental outcomes are often evaluated on a short-term scale albeit these outcomes may take decades to be revealed. Evaluations should be designed to assess the continuous impact of policies. In the literature it has been noted that a limited evidence base exists on the effectiveness of biodiversity policies and measures. While a limited set of rigorous studies suggests that protected areas cause reductions in deforestation, the evidence base for payments for ecosystem services, decentralization policies and other interventions has been found to be much weaker. Therefore, authors called for more evaluations from different biodiversity-relevant locations, systematic research on how programme impacts vary by socio-political and bio-physical context, joint tracking of economic and environmental impacts, identification of spatial spill over effects to untargeted areas, use of intervention theories to characterize causal mechanisms that can guide the collection of data and the interpretation of results.²

38. As noted in paragraph 30 above, it was also suggested at the seventeenth meeting of the Subsidiary Body to undertake pilot assessments of the effects of measures taken in specific thematic areas or case studies. In this context, the regional and subregional assessments of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services also provide an opportunity for gathering further experiences in the use of tools to evaluate the effectiveness of policy instruments and measures. It is expected that chapter 6 of these assessments, “Options for governance, institutional arrangements and private and public decision making across scales and sectors”, would “explore options for policy mixes and alignments in polycentric governance systems, assess the effectiveness of such options and consider who would gain or bear their cost”. In decision XI/2, paragraph 28, the Conference of the Parties invited IPBES to assess, inter alia, the effectiveness of responses in its global assessment on biodiversity and ecosystem services. In decision XI/3, the Conference of the Parties requested the Executive Secretary to explore with the Platform options for the preparation of the global assessment, including the issue of the effectiveness of responses to biodiversity loss. The scoping process for the global assessment of IPBES is currently underway (see document UNEP/CBD/SBSTTA/19/9 for further information).

39. Furthermore, the Subsidiary Body on Implementation, at its first meeting, is expected to recommend guidelines for the sixth national report (decision XII/1, para. 9(a)) for adoption by the Conference of the Parties at its thirteenth meeting. The guidelines for the sixth national report may provide another avenue to gather more information on the experiences in the use of tools to evaluate the effectiveness of policy instruments and measures.

III. APPROACHES FOR ASSESSING THE EFFECTIVENESS OF POLICY INSTRUMENTS AND MEASURES AND ENHANCING THEIR COHERENCE

40. The sections below provide an overview of a range of ways in which the effectiveness of policy instruments and measures can be assessed. The different approaches are illustrated by case examples reported by Parties (see section I above), and found in the literature (see footnotes for references). The evaluation of the effectiveness of existing measures in meeting their environmental objectives ex post can provide valuable information for policymaking, e.g. in the revision of regulatory standards, and offer model solutions for new problems.

² Miteva, D. A., S. K. Pattanayak, & P. J. Ferraro, Evaluation of biodiversity policy instruments: what works and what doesn't?, Oxford Review of Economic Policy, 28(1) 2012, 69-92.

41. As the different approaches require different levels of financial and technical capacities, it appears that all Parties should be in a position to undertake some level of effectiveness assessment. Some Parties, in their submissions, had also noted that the use of a combination of different evaluation methods increases the strength of their outcomes.

42. While there is a multitude of methodologies for policy evaluation available, it appears that these can be categorized into four broad categories: (a) Methods that focus on adaptive management and are applied during the implementation of measures (referred to below as formative/developmental evaluation); (b) methods that use a causal model of how a measure was assumed to work and test its assumptions (referred to as programme theory evaluation below); (c) methods that focus on the extensive description and analysis of a selected number of case studies (referred to as case study evaluation below); and (d) methods that compare the situation after a measure has been implemented to what would have happened in the absence of the measure (referred to as experiments and quasi experiments below).

*Formative/developmental evaluation*³

43. Formative evaluation, also called developmental evaluation, can be used to evaluate whether policies are effective, why policies succeed or fail in attaining their goals, and which adjustments in implementation need to be made. This approach is focussed mainly on the process of policy implementation. It is a mainly qualitative approach and includes the involvement of a broad range of stakeholders in the evaluation process.

44. It can be used to identify potential and actual influences on the progress and effectiveness of implementation efforts. Data is collected, mainly through interviews, but also other data collection methods, before, during, and after implementation. This allows for adaptive management of the implementation process and enhances the understanding of the nature of the measure concerned. It is useful to include the evaluation process as part of the policy design from the beginning.

45. Eritrea, for example, reported on the importance of evaluating the effects of policies on the ground and on involving local communities as main stakeholders during the assessment.

*Programme theory evaluation*⁴

46. This approach is used to evaluate to what extent policies help to attain set goals, whether the set goals correspond with existing policy needs, and whether available policy tools are suitable for achieving the set goals. The approach consists of two steps. Firstly, the development of a concise intervention theory explaining how the policy and measures in question cause intended or observed outputs and outcomes, based on certain assumptions and rationales. Assumptions and rationales can be derived, for example, from academic literature or information gathered through field work (interviews, observation of policymaking, document analysis etc). This can also include a broader consideration of the policy context and possible side-effects. Inputs, policies and measures, outputs and outcomes, as well as potential side-effects, where considered, are aligned in a causal model indicating the relationships between means and intended (as well as unintended) outcomes. Estimated probabilities for certain outputs and outcomes being achieved, from the perspective of the policymaker, can be added to the theory.

47. In a second step, the underlying assumptions and rationales are assessed, which provides information on whether the policies, measures, and expected outcomes connect in a logical manner. The intervention theory helps to identify on which outputs, outcomes and causal links data should be collected

³ For further information and references see Crabbé, A. and P. Leroy, *The Handbook of Environmental Policy Evaluation*, Earthscan, 2008, chapter 3.5.

⁴ For further information and references see Crabbé, A. and P. Leroy, *The Handbook of Environmental Policy Evaluation*, Earthscan, 2008, chapter 3.2 and Gysen, J., H. Bruyninckx, and K. Bachus, *The modus narrandi. A methodology for evaluating effects of environmental policy*, *Evaluation* 12(1) 2006, 95-118.

for a meaningful evaluation. At the same time the assessment provides information on the contribution of a specific policy to the achieved outcome. It helps to distinguish mere implementation deficits from flaws in the assumptions regarding causal relationships of policies and measures on the one and outcomes and outputs on the other hand.

48. The European Commission is in the process of conducting a “fitness check” of the European Union’s nature legislation (Birds and Habitats Directives) under its Regulatory Fitness and Performance Programme (REFIT).⁵ A detailed mandate has been developed for the evaluation, which also contains a logical framework, including the objectives, related actions, consequences, expected results and impacts, and relevant external factors of the nature legislation of the European Union. In a first phase of the evaluation questionnaires were sent to 47 European level organizations and representative bodies, and 112 stakeholder organizations at Member State level. The second phase comprised a 12-week public internet consultation which was completed in July 2015. The draft results of the evaluation are expected to be presented to the Member States in fall 2015.

49. Environment Canada, through its Audit and Evaluation Branch, conducted between September 2011 and May 2012 an evaluation of Biodiversity Policy and Priorities.⁶ For the evaluation, a logic model was developed that described the relationship between activities, outputs and intended outcomes of the Biodiversity Policy and Priorities. The achievement of the outcomes was evaluated based on information from a range of sources. The outcomes of the evaluation included a set of concrete recommendations.

*Case study evaluation*⁷

50. The assessment of well-chosen case studies allows insights into how a policy is functioning and why, allowing for an evaluation of the policy. Case study evaluation has the benefit to allow for consideration of the particular situation and context of the policy in question.

51. The European Union, in its interview, reported the importance of case-studies in the evaluation of the impact of the Common Agricultural Policy (CAP). Evaluating the impact of specific agricultural measures across all of Europe was found to be difficult due to variations in factors that affect success in different areas. Case studies have been used to develop an in-depth understanding of which measures worked where, and why.

*Experiments and quasi experiments*⁸

52. Experiments and quasi experiments had already been mentioned in document UNEP/CBD/SBSTTA/17/3 in relation to the establishment of counterfactuals.

53. In these approaches, a situation in which a measure was implemented is compared to a situation that was not affected by a measure. They usually involve the formulation of a hypothesis of the effect of a measure, the establishment of a control and an experimental group (often randomly allocated), the measure, and an assessment of the differences. While experiments and quasi experiments provide a way to ascertain a causal relationship, they are limited in their account for the context in which policy interventions take place.

⁵ Information summarized from http://ec.europa.eu/environment/nature/legislation/fitness_check/index_en.htm.

⁶ Information summarized from <http://www.ec.gc.ca/ae-ve/default.asp?lang=En&n=E87EDE3D-1>.

⁷ For further information and references see Crabbé, A. and P. Leroy, The Handbook of Environmental Policy Evaluation, Earthscan, 2008, chapter 3.3.

⁸ For further information and references see Crabbé, A. and P. Leroy, The Handbook of Environmental Policy Evaluation, Earthscan, 2008, chapter 3.4.

IV. THE IMPORTANCE OF POLICY COHERENCE AND MAINSTREAMING

54. Based on the conclusions contained in the fourth edition of the *Global Biodiversity Outlook*, the Conference of the Parties recognized that there has been encouraging progress towards meeting some elements of most Aichi Biodiversity Targets but that, in most cases, this progress will not be sufficient to achieve the targets unless further urgent and effective action is taken to reduce the pressures on biodiversity and to prevent its continued decline (decision XII/1, para. 6).

55. Information on which measures have been proven to be effective is key to support Parties in their decisions on future actions. Acknowledging that there are very different modes of governance and circumstances among countries, in which different mixes of policies will be preferred, it is nonetheless crucial to evaluate the impacts of policies to inform future decisions. This is particularly true considering the limited financial resources available for future measures.

56. A clear link has been established between effectiveness and policy coherence. Policy coherence supports the sustainability and effectiveness both of policies directly related to biodiversity and of other sectoral policies. Policy coherence presents an opportunity for freeing up resources traditionally used by environment authorities to counter and neutralize negative impacts of policies and actions not coherent with the conservation and sustainable use of biodiversity. As noted by the Conference of the Parties, policy coherence among biodiversity policies and sectoral and cross-sectoral policies and the corresponding government ministries, is an important objective in the context of mainstreaming (decision XII/1, para.7(c)).

57. Belgium reported, in its fifth national report, on its federal plan for the integration of biodiversity into specific sectors. A mid-term review was organized in 2011 in order to identify strengths and weaknesses of the implementation and, if relevant, address potential gaps. The review used data based on performance indicators and the evaluation of positive and negative effects of integration measures in the sectors 'economy', 'development cooperation', 'science' and 'transport'. A final assessment was planned in 2014 in order to assess the implementation of actions and measures and to assess the process of integrating biodiversity into sectors.

58. Azerbaijan reported in its fifth national report that the effectiveness of its initiatives to mainstream biodiversity into the strategies, plans and programmes of relevant production sectors has been improved by the recent adoption of the National Development Plan, Azerbaijan 2020: Outlook for the future, which has created the enabling framework for improving the mainstreaming of biodiversity into key production sectors.

59. As already noted in document UNEP/CBD/SBSTTA/17/3, examples demonstrate that a standalone conservation policy tends to be less effective than a coherent mix of mutually supporting policy measures.⁹ The strategy adopted by the Brazilian Government since 2005 to combat and reduce deforestation, illegal logging and fires in the forests and savannas of the Brazilian Amazon and since 2009 in the Cerrado biome, which led to a reduction by 80 per cent of the deforestation rate in the Amazon, is based on a combination of over 20 policy instruments combined with measures to enhance monitoring and public participation.¹⁰

60. Furthermore, as noted in document UNEP/CBD/SBSTTA/17/3, strategic environmental assessments have proven successful as a method to identify and evaluate the effects of proposed policies, plans or programmes before their adoption. Strategic environmental assessments intend to ensure that

⁹ Hirakuri, S.R. 2003, *Can Law Save the Forest? Lessons from Finland and Brazil*, Center for International Forestry Research, Jakarta, Indonesia, p. 95.

¹⁰ Federal Republic of Brazil, Ministry of Environment (MMA) 2012. *Strategies to Reduce Deforestation in Brazil*. From controlling illegal deforestation to the challenge of sustainable production in the country's forests and savannas. Report prepared for the Rio+20 Conference on Sustainable Development.

biodiversity impacts are fully included and appropriately addressed at the earliest possible stage of decision-making on a par with economic and social considerations. Therefore, they are an important tool for ensuring policy coherence and thereby, enhancing the effectiveness of policies.¹¹

61. As an example, Australia reported in its fifth national report that the Australian and Queensland governments are undertaking a comprehensive strategic assessment of the Great Barrier Reef World Heritage Area and the adjacent coastal zone. This assessment helps to identify, plan for, and manage existing and emerging risks to ensure ongoing protection and management of the Great Barrier Reef World Heritage Area and adjacent coastal zone. There are two components to the comprehensive strategic assessment: (a) the Queensland Government is analysing legislation, policies and planning frameworks that apply in the coastal zone to ensure land based development addresses direct, indirect and cumulative impacts; and (b) the Great Barrier Reef World Heritage Area is leading the marine component which will ensure effective protected area management arrangements are in place for the Great Barrier Reef World Heritage Area. Both components are evaluating the effectiveness of their respective legislative, policy and planning arrangements to protect matters of national environmental significance, including the Outstanding Universal Value of the Great Barrier Reef World Heritage Area.

62. Efforts undertaken in the area of mainstreaming to achieve policy coherence (including under agenda item 3.1, by the Subsidiary Body on Implementation at its first meeting under agenda item 5.2, and by the Conference of the Parties at its thirteenth meeting under agenda item 10) can also significantly contribute to strengthening the effectiveness of policies and measures.¹²

V. CONCLUSIONS

63. Evidence from national reports and other sources suggests that many Parties undertake assessments of the effectiveness of policy measures or management actions in certain areas and using a range of approaches. Methodologies, however, are rarely described in detail and the basis for statements on the effectiveness is therefore not always clear from the descriptions.

64. Also, information from the literature summarized above showed that the evidence base for different types of measures varies, for example, it is much weaker for measures such as payments for ecosystem services, decentralization policies and other interventions than for protected areas.

65. To more forward, the literature, summarized in section III above, suggests that there are multiple options and approaches for assessing the effectiveness of policy instruments and measures and the systematic use of appropriate approaches, including methodologies that are already widely applied in other domains, could help to improve biodiversity outcomes and lead to better integration of biodiversity considerations into other policy domains. Furthermore, as suggested at the seventeenth meeting of the Subsidiary Body, pilot assessments of the effects of measures taken in specific thematic areas or case studies would provide relevant information.

66. Building on the information available in the literature and experiences from pilot assessments, a theoretical framework to guide assessments of the effectiveness of measures for the next round of national

¹¹ The Conference of the Parties, at its eighth session, endorsed draft guidance on biodiversity-inclusive strategic environmental assessment (contained in annex II to the note by the Executive Secretary on voluntary guidelines on biodiversity-inclusive impact assessment, document UNEP/CBD/COP/8/27/Add.2). In addition, voluntary guidelines for the consideration of biodiversity in strategic environmental assessments in marine and coastal area are available in the annex to document UNEP/CBD/COP/11/23 (see decision XI/18 B).

¹² See also document UNEP/CBD/SBSTTA/17/3, which notes the importance of mainstreaming efforts for the effectiveness of measures to achieve Aichi Biodiversity Target 12. With regard to related methodologies for evaluating the effectiveness of policy measures see Mermet, L., B. Raphael, and M. Leroy, Concern-focused evaluation for ambiguous and conflicting policies: An approach from the environmental field, *American Journal of Evaluation* 31(2) 2010, 180-198.

reporting could be developed by the Executive Secretary to support the efforts by Parties. The theoretical framework would draw work undertaken and be conducted in close collaboration with IPBES.

67. It was suggested, in document UNEP/CBD/SBSTTA/19/9, to include the requirement for an evaluation of the effectiveness/effects of measures and actions taken into the guidelines for the sixth national reports. The Subsidiary Body on Implementation will consider the draft guidelines for the sixth national reports at its first meeting.

68. Complementing this work related to the process of national reporting, the Subsidiary Body, in accordance with its mandate, may also wish to strengthen its work regarding the effectiveness of types of measures undertaken under the Convention. The Subsidiary Body on Implementation may also wish to consider ways to improve the review of implementation of the Convention and to strengthen mechanisms to this end.

VI. SUGGESTED RECOMMENDATION

The Subsidiary Body on Scientific, Technical and Technological Advice may wish to adopt a recommendation along the following lines:

The Subsidiary Body on Scientific, Technical and Technological Advice,

Emphasizing the importance of evaluating the effectiveness of measures undertaken to implement the Strategic Plan for Biodiversity 2011-2020 in achieving continuous learning and improvement of implementation efforts towards the full implementation of the Strategic Plan and the achievement of the Aichi Biodiversity Targets by 2020,

Agreeing to strengthen its work regarding the effectiveness of types of measures undertaken under the Convention, while *noting* that the Subsidiary Body on Implementation may also consider ways to improve the review of implementation of the Convention;

1. *Encourages* Parties to undertake and document pilot assessments of the effects of measures taken in specific thematic areas or case studies, and to provide relevant information to the Executive Secretary;

2. *Requests* the Executive Secretary to prepare a framework to guide the evaluation of the effectiveness of measures undertaken to implement the Strategic Plan for Biodiversity 2011-2020, drawing upon available literature and case studies, and in close collaboration with relevant processes of IPBES and other partners.
