

**ANNOTATIONS TO THE REQUESTS FOR CONSIDERATION BY THE  
INTERGOVERNMENTAL SCIENCE-POLICY PLATFORM ON BIODIVERSITY AND  
ECOSYSTEM SERVICES IN THE CONTEXT OF ITS STRATEGIC FRAMEWORK AND  
WORK PROGRAMME TOWARDS 2030**

(a) *Understand and assess the behavioural, social, economic, institutional, technical and technological determinants of transformational change, and how these may be deployed to achieve the 2050 Vision for Biodiversity;*

1. *Relevance to the objective, functions and work programme of the Platform* - This request is closely associated with the Platform's function related to identifying and prioritizing key scientific information needed for policymakers. It is also closely related to the Platform's conceptual framework, and in particular to the box entitled "institutions, governance and other indirect drivers" which lays at the centre of this framework. The output from the request would be a thematic assessment of the issues addressed.
2. *Urgency of action by the Platform in the light of the imminence of the risks caused by the issues to be addressed by such action* - Behavioural, social, economic, institutional, technical and technological factors are currently having an array of positive and negative effects on biodiversity. More comprehensive and in-depth information is needed to better understand how these factors impact on biodiversity. Given this and the time required for biological systems to respond to changes, this action is of high urgency.
3. *Relevance of the requested action in addressing specific policies or processes* - The requested action is directly related to the work of the Convention on Biological Diversity and would contribute to the attainments of its objectives. It would specifically address Strategic Goal A of the Strategic Plan for Biodiversity which addresses to the underlying causes of biodiversity loss. It is also relevant in light of the anticipated agreement of a post-2020 global biodiversity framework. Further, given the requested action's link to social, economic and technical issues this request is directly relevant to the Sustainable Development Goals.
4. *Geographic scope of the requested action, as well as issues to be covered by such action* - The requested action would address various factors which mediate societies' relationship with biodiversity. As such, the geographic scope of the requested action would be global and the information generated would be globally relevant.
5. *Anticipated level of complexity of the issues to be addressed by the requested action* - Addressing this issue is anticipated to be highly complex. The work would require the consideration of various socio-economic issues in order to determine how these affect biodiversity and how the identified interactions could be used to bring about a transformational change in societies' relationship with biodiversity.
6. *Previous work and existing initiatives of a similar nature and evidence of remaining gaps, such as the absence or limited availability of information and tools to address the issues, and reasons why the Platform is best suited to take action* - Research on transitions in fields such as energy, and health, have been undertaken and provide opportunities to learn from these processes. By comparison there have been few initiatives addressing the links between behavioural, social, economic, institutional technical and technological determinants of transformational change in relation to biodiversity. While the importance of these issues has been generally recognised the amount of in-depth and focused work on these issues has been limited.
7. *Availability of scientific literature and expertise for the Platform to undertake the requested action* - There are specific academic disciplines focused on understanding the drivers and motivations for broad societal changes and transitions. However, further work is required to link these fields of study with biodiversity issues specifically.
8. *Scale of the potential impacts, and potential beneficiaries of the requested action* - A greater understanding of the determinants of successful societal transitions would have potential global benefits. Such information would facilitate the development of policies and improve the effectiveness of actions

and policy measures. The requested action would have potential global benefits as the resulting information would link to human motivations for change. The requested action would directly support the implementation of the Convention on Biological Diversity and would also support the attainment of the Sustainable Development Goals.

9. *Requirements for financial and human resources, and potential duration of the requested action* – The request would likely be best addressed by reviewing existing literature, largely from the social sciences and humanities, and drawing conclusions from this for biodiversity. A team of researchers familiar with these fields would likely be able to complete the work over a two to three-year period.

10. *An identification of priorities within multiple requests submitted* – This request was developed by the Conference of the Parties to the Convention on Biological diversity, on the basis of a recommendation by the Subsidiary Body on Scientific, Technical and Technological Advice and therefore its priority among the other submitted requests cannot be indicated. Further scoping and prioritization of the needs of the Convention will arise from developing and implementing the post-2020 global biodiversity framework. However the need for better ways to draw on social sciences and humanities to motivate choices consistent with the objectives of the Strategic Plan for Biodiversity 2011-2020 and to develop new approaches through, *inter alia*, better understanding of behavioural change, production and consumption patterns, policy development, and the use of non-market tools has been previously identified by the Subsidiary Body on Scientific, Technical and Technological Advice in its recommendation [XVII/1](#).

(b) *Develop a multi-disciplinary approach to understand the interactions of the direct and indirect drivers of biodiversity loss;*

11. *Relevance to the objective, functions and work programme of the Platform* - This request is closely associated with the Platform's function of supporting policy formulation and implementation by identifying policy relevant tools and methodologies. The request's focus on multi-disciplinary approaches and on direct and indirect drivers of biodiversity loss is also consistent with the Platform's conceptual framework. The output from the request would be a thematic assessment of the interactions between the direct and indirect drivers of biodiversity loss and multidisciplinary approaches.

12. *Urgency of action by the Platform in the light of the imminence of the risks caused by the issues to be addressed by such action* - Given the time required for biological systems to respond to changes and that various direct and indirect pressures are already affecting biodiversity in multiple ways, this action is of high urgency. The action is given further urgency by the anticipated adoption of a post-2020 global biodiversity framework in 2020.

13. *Relevance of the requested action in addressing specific policies or processes* – A better understanding of the different ways the direct and indirect drivers of biodiversity loss interact would allow for the development of more tailored and effective actions, and policies for the conservation and sustainable use of biodiversity. Given this, this assessment would directly contribute to the work of the Convention on Biological Diversity and other biodiversity related multilateral environmental agreements, as well as to the attainment of the Sustainable Development Goals.

14. *Geographic scope of the requested action, as well as issues to be covered by such action* – Given the focus of the action on the direct and indirect drivers of biodiversity loss and their interactions, numerous issues would need to be covered. This includes, but is not limited to, issues related to habitat loss, climate change, unsustainable consumption and production, invasive alien species, pollution, economic activity, population change, technology change and other socio-economic issues. Given this, the geographic scope of the requested action would be global.

15. *Anticipated level of complexity of the issues to be addressed by the requested action* – Addressing interactions between direct and indirect drivers of biodiversity loss would be a highly complex task as it would require the consideration of information from multiple disciplines.

16. *Previous work and existing initiatives of a similar nature and evidence of remaining gaps, such as the absence or limited availability of information and tools to address the issues, and reasons why the Platform is best suited to take action* - Various initiatives have considered, to some extent, the links

between the direct and indirect drivers of biodiversity loss, including the IPBES global and regional assessments on biodiversity and ecosystem services, its thematic assessment on land degradation and restoration, as well as its upcoming work on sustainable use, invasive alien species and the diverse conceptualization of values of biodiversity and nature's benefits to people including ecosystem services. However, no initiative has specifically explored multi-disciplinary approaches to addressing these in a comprehensive manner.

17. *Availability of scientific literature and expertise for the Platform to undertake the requested action* – The direct and indirect drivers of biodiversity loss have been explored significantly in the literature. However less research is available on multidisciplinary approaches addressing their interactions. The work that has been undertaken has tended to be focused on specified fields of study and looked at these in isolation.

18. *Scale of the potential impacts, and potential beneficiaries of the requested action* – More comprehensive information on multidisciplinary approaches to understand the interactions of direct and indirect drivers of biodiversity loss would have potential global benefits. Such information would facilitate the development of policies and improve the effectiveness of actions and policy measures. The potential beneficiaries would also be global as the principle direct and indirect causes of biodiversity loss are similar globally. The potential benefits from such work would be relevant to the Convention on Biological Diversity but also be beneficial to the implementation of the 2030 Agenda for Sustainable Development.

19. *Requirements for financial and human resources, and potential duration of the requested action* - The request would likely be best addressed by reviewing existing literature by a multi-disciplinary expert team and drawing conclusions from this for action. A team of researchers familiar with multi-disciplinary approaches and direct and indirect drivers of biodiversity loss would likely be able to complete the work over a two to three-year period.

20. *An identification of priorities within multiple requests submitted* - This request was developed by the Conference of the Parties to the Convention on Biological diversity, on the basis of a recommendation by the Subsidiary Body on Scientific, Technical and Technological Advice, and therefore its priority among the other submitted requests cannot be indicated. Further scoping and prioritization of the needs of the Convention will arise from developing and implementing the post-2020 global biodiversity framework.

(c) *Assess issues at the nexus of biodiversity, food and water, agriculture and health, nutrition and food security, forestry and fisheries, considering trade-offs among these areas and related policy options regarding sustainable production and consumption, pollution and urbanization, including implications for energy and climate, taking into account the role of biodiversity and ecosystem services in addressing the Sustainable Development Goals, with a view to enabling decisions that support the coherent policy and transformational change necessary to achieve the 2050 Vision for Biodiversity;*

21. *Relevance to the objective, functions and work programme of the Platform* - This request is closely associated with objective 3 of the Platform (Strengthen the science-policy interface on biodiversity and ecosystem services with regard to thematic and methodological issues) as a greater understanding of various sectoral issues affecting biodiversity and ecosystem services represents an important thematic issue to address. The output from the request would be one or more nexus assessments.

22. *Urgency of action by the Platform in the light of the imminence of the risks caused by the issues to be addressed by such action* - Given the time required for biological systems to respond to changes and the need to ensure that by 2050 biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people, this action is of high urgency. The request also echoes the need to mainstream biodiversity within and across sectors to better align goals, actions and resources, feeding into a coordinated approach on biodiversity and sustainability actions, as a central element in a transition to sustainable development. In addition, the anticipated agreement on a post-2020 global biodiversity framework offers further urgency to this task.

23. *Relevance of the requested action in addressing specific policies or processes* – This requested action is highly relevant to the issue of mainstreaming biodiversity considerations across sectors. Further the Parties to the Convention on Biological Diversity have already invited the scientific and other relevant communities working on scenarios and related assessments to take into account (a) the broad range of underlying drivers and systemic and structural issues related to biodiversity loss; (b) the identification of potential synergies, trade-offs and limitations related to biodiversity that should be considered in order to identify effective policies and measures to enable the achievement of the Sustainable Development Goals; and (c) the potential positive and negative impacts of productive sectors such as inter alia agriculture, forestry and fisheries. Agriculture, forestry and fisheries all have potential impacts of biodiversity but also depend on biodiversity for their viability. Similarly, the provision of food, water and human health are all linked to biodiversity. All of these issues are also essential for human wellbeing and their attainment often entail trade-offs. Better understanding these nexus issues and identifying ways to assess and consider trade-offs is therefore essential in transitioning to a more sustainable society. As such this request is also highly relevant to the attainment of the Sustainable Development Goals.

24. *Geographic scope of the requested action, as well as issues to be covered by such action* – The actions are global in nature and would address issues related to a variety of sectors including forestry, fisheries, agriculture and health.

25. *Anticipated level of complexity of the issues to be addressed by the requested action* – Given the different sectors involved, the need to draw on different academic disciplines and consider different forms of knowledge as well as the need to synthesize and analyse this information in a coherent manner, the requested action is expected to have a high level of complexity.

26. *Previous work and existing initiatives of a similar nature and evidence of remaining gaps, such as the absence or limited availability of information and tools to address the issues, and reasons why the Platform is best suited to take action* - Various initiatives have considered the links between biodiversity, food and water, agriculture and health and nutrition, forestry and fisheries, including the IPBES global and regional assessments of biodiversity and ecosystems, though in a limited scope. So far, no scientifically independent initiative has specifically explored these issues using a nexus approach in a comprehensive manner. Similarly, potential trade-offs between the various issues, while known in a general sense, have not been explored comprehensively nor have policy options regarding sustainable production and consumption, pollution and urbanization, including implications for energy and climate, taking into account the role of biodiversity and ecosystem services been explored in a detailed manner.

27. *Availability of scientific literature and expertise for the Platform to undertake the requested action* – Each of the fields of study/issues identified in the request has been extensively explored in scientific, academic and grey literature. However, relatively little of this work has focused on nexus assessments explicitly linked to biodiversity.

28. *Scale of the potential impacts, and potential beneficiaries of the requested action* – Comprehensive information on the interactions and trade-offs between the issues identified above and biodiversity will allow for the development of more effective policy options. In turn this would have benefits not only for biodiversity but also for all of the issues being identified and addressed under the 2030 Agenda for Sustainable Development. As such the potential impacts of this work would be global and extend beyond the Convention on Biological Diversity.

29. *Requirements for financial and human resources, and potential duration of the requested action* - The request would likely be best addressed by reviewing existing literature, from various fields of study in the humanities, social and natural sciences and drawing conclusions from this for biodiversity-. A team of researchers familiar with these fields would likely be able to complete the work over a two to three year period.

30. *An identification of priorities within multiple requests submitted* - This request was developed by the Conference of the Parties to the Convention on Biological diversity, on the basis of a recommendation by the Subsidiary Body on Scientific, Technical and Technological Advice, and therefore its priority among the other submitted requests cannot be indicated. Further scoping and prioritization of the needs of

the Convention will arise from developing and implementing the post-2020 global biodiversity framework.

(d) *Undertake methodological assessments on the effectiveness of various policy instruments and policy and planning support tools for understanding on how to achieve transformational change, and to characterize and quantify successful approaches and cases of the conservation and sustainable use of biodiversity, and their impacts;*

31. *Relevance to the objective, functions and work programme of the Platform* - This request is closely associated with objective 3 of the Platform (Strengthen the science-policy interface on biodiversity and ecosystem services with regard to thematic and methodological issues) as a greater understanding of what types of methods can be used to assess the effectiveness of actions would help to address the current gap in policy research related to biodiversity. The outputs from the request would be methodological assessments on the effectiveness of various policy instruments and policy and planning support tools.

32. *Urgency of action by the Platform in the light of the imminence of the risks caused by the issues to be addressed by such action* – Information collected through various processes under the Convention on Biological Diversity indicates that many Parties are evaluating the effectiveness of the measures they are taking to implement their national biodiversity strategies and action plans, the Strategic Plan for Biodiversity 2011-2020 or other measures to implement the Convention. However, specific information on how these evaluations are being carried out is limited. Approximately 45 per cent of the fifth national reports received to date contain explicit assessments of progress towards the Aichi Targets. These assessments, however, have rarely included a critical analysis of the effectiveness of the measures taken to bring about the observed changes. Parties to the Convention on Biological Diversity have noted the need for additional advice on how to assess the effectiveness of the actions they have taken to conserve and sustainably use biodiversity. The need for such information is great as determining what types of actions are effective is a key element of the policy process. Similarly, it is anticipated that a post-2020 global biodiversity framework will be adopted in 2020 and such information would greatly assist in implementing this framework. As such this action has high urgency.

33. *Relevance of the requested action in addressing specific policies or processes* – Information from national reports, national biodiversity strategies and action plans and other processes under the Convention on Biological Diversity suggests that most countries are undertaking effectiveness evaluations in some form. However, there is little detailed information on these assessments. This makes it difficult for countries to learn from the experience of others and does not enable an analysis of effective measures globally or regionally. More detailed information on this issue could greatly benefit Parties in the context of numerous processes under the Convention, including the preparation of future national reports, the discussions on the review of national experiences in implementing the Convention, and the preparation of a follow-up to the Strategic Plan for Biodiversity 2011-2020. As such the requested action directly addresses a need identified by the Parties to the Convention on Biological Diversity. Improved information on determining the effectiveness of actions would be particularly relevant to the national reporting process under the Convention.

34. *Geographic scope of the requested action, as well as issues to be covered by such action* – The action would be globally relevant. It would cover methodological issues related to the assessment of effectiveness.

35. *Anticipated level of complexity of the issues to be addressed by the requested action* – The issue is moderately complex. Addressing the request would require that relevant literature on methods for effectiveness evaluation and policy instruments and policy and planning support tools be undertaken and related to biodiversity. The available literature on evaluating effectiveness suggests that there are multiple documented options and approaches for assessing the effectiveness of measures.

36. *Previous work and existing initiatives of a similar nature and evidence of remaining gaps, such as the absence or limited availability of information and tools to address the issues, and reasons why the Platform is best suited to take action* - There is a large amount of academic literature, handbooks and guidance related to assessing the effectiveness of actions. There are also organisations, such as the

International Organization of Supreme Audit Institutions, which have developed guidance relating to auditing and methods to assess effectiveness. However, there is no independent scientific body specifically looking at this issue from a biodiversity perspective. This request would help to make this type of information more available and accessible.

37. *Availability of scientific literature and expertise for the Platform to undertake the requested action* - There is a large amount of academic literature, handbooks and guidance related to assessing the effectiveness of actions but few systematic, comprehensive and objective reviews of the means of assessing the effectiveness of policy measures. Policy instruments and policy and planning support tools would be relevant however efforts may be needed to identify and access these.

38. *Scale of the potential impacts, and potential beneficiaries of the requested action* – The scale of the impacts of the requested action is global and would benefit Parties to the Convention on Biological Diversity generally.

39. *Requirements for financial and human resources, and potential duration of the requested action* - The request would likely be best addressed by reviewing existing literature on policy instruments and policy and planning support tools, and drawing conclusions on their effectiveness in achieving transformational change, and to characterize and quantify successful approaches for the conservation and sustainable use of biodiversity. A team of researchers familiar with these fields would likely be able to complete the work over a two to three-year period.

40. *An identification of priorities within multiple requests submitted* - This request was developed by the Conference of the Parties to the Convention on Biological diversity, on the basis of a recommendation by the Subsidiary Body on Scientific, Technical and Technological Advice, and therefore its priority among the other submitted requests cannot be indicated. Further scoping and prioritization of the needs of the Convention will arise from developing and implementing the post-2020 global biodiversity framework.

(e) *Assess the potential positive and negative impacts of productive sectors and undertake a methodological assessment of the criteria, metrics and indicators of the impacts of productive sectors on biodiversity and ecosystem services as well as the benefits derived from biodiversity and ecosystem services, with a view to enabling business to reduce such negative impacts and to promote consistency in assessment and reporting, taking into account the direct and indirect pressures on biodiversity as well as the interconnections between them.*

41. *Relevance to the objective, functions and work programme of the Platform* – This request is closely associated with the Platform's functions related to identifying and prioritizing key scientific information needed for policymakers, to performing regular and timely assessments of knowledge on biodiversity and ecosystem services and to identifying policy relevant tools and methodologies. The output from the request would be a thematic assessment of the issues addressed.

42. *Urgency of action by the Platform in the light of the imminence of the risks caused by the issues to be addressed by such action* - Productive sectors have a range of impacts on biodiversity. A better understanding of these impacts and more robust means of monitoring them is essential in ensuring the conservation and sustainable use of biodiversity.

43. *Relevance of the requested action in addressing specific policies or processes* – Productive sectors, such as forestry, agriculture and fisheries, tourism, energy and mining, infrastructure, manufacturing and processing, can have a range of positive and negative impacts on biodiversity depending on the actions they undertake. However, measuring these impacts is challenging and there is a need for tools and methods to further support this. Such tools and methodologies would better enable business to reduce their negative impacts on biodiversity and to promote consistency in assessment and reporting. Likewise, the development of criteria, metric and indicators of the impacts of productive sectors would facilitate changes in behaviours to reduce negative and increase positive impacts of these sectors on biodiversity. Assessing these impacts would also contribute to the understanding of the status and trends of biodiversity. The request is directly relevant to the work of the Convention on Biological Diversity.

Given the reference to productive sectors the results of the work would be relevant to other organisations, including the relevant organisations of the United Nations system as well as civil society and private sector networks, and to national and global businesses around the world.

44. *Geographic scope of the requested action, as well as issues to be covered by such action* – The geographic scope of the requested action would be global as it would address issues related to the world's major productive sectors.

45. *Anticipated level of complexity of the issues to be addressed by the requested action* – The complexity of the task would be high given the need to consider information from various sectors and to relate this to criteria, metrics and indicators in a coherent manner.

46. *Previous work and existing initiatives of a similar nature and evidence of remaining gaps, such as the absence or limited availability of information and tools to address the issues, and reasons why the Platform is best suited to take action* - Various initiatives undertaken by the Food and Agricultural Organisation, among others, has looked at the status, trends and impacts of forestry, fisheries and agricultural activities. However, these assessments have tended to address the sustainability of these sectors in general terms and have not specifically focused on their impacts on biodiversity. Less work linked to biodiversity has been undertaken on the other productive sectors.

47. *Availability of scientific literature and expertise for the Platform to undertake the requested action* – There is an abundance of literature and expertise on the productive sectors. However, there is comparatively less information on how the impacts of these sectors on biodiversity can be measured and monitored.

48. *Scale of the potential impacts, and potential beneficiaries of the requested action* – The potential impacts of the requested action would be global in nature as would the potential beneficiaries. The work would not only have benefits for the biodiversity community, but it would also be useful for the implementation of the 2030 Agenda. The request would also help to address requests from the productive sectors on how their negative direct impacts of biodiversity can be reduced and assist with the mainstreaming of biodiversity.

49. *Requirements for financial and human resources, and potential duration of the requested action* - The request would likely be best addressed by reviewing existing literature and drawing conclusions from this for biodiversity. A team of selected experts would likely be able to complete the work over a two to three-year period.

50. *An identification of priorities within multiple requests submitted* - This request was developed by the Conference of the Parties to the Convention on Biological diversity, on the basis of a recommendation by the Subsidiary Body on Scientific, Technical and Technological Advice, and therefore its priority among the other submitted requests cannot be indicated. Further scoping and prioritization of the needs of the Convention will arise from developing and implementing the post-2020 global biodiversity framework.

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