

IPBES template for the submission of requests, inputs and suggestions on short-term priorities and longer term strategic needs that require attention and action by IPBES as part of its future work programme.

Name and contact details of individual submitting requests/inputs/suggestions:

Date of submission:

Submission from: IPBES member: Brazil (Ministry of the Environment)

Observer allowed enhanced participation in line with decision IPBES-5/4:

MEA(s): _____

United Nations body: _____

Expert on, and holder of, indigenous and local knowledge: _____

Other Stakeholder(s): _____

Please provide the following information for any request and, where relevant, for any inputs and suggestions (additional attachments can also be submitted):

Request/input/suggestion: Assess and systematize information on impacts of climate change on biodiversity and ecosystems.

Information to accompany requests submitted to the Platform (see also Decision IPBES-1/3 Procedure for receiving and prioritizing requests put to the Platform):	
1.	<p>Relevance to the objective, functions and work programme of IPBES:</p> <p>Considering IPBES mission aimed at the provision of policy-oriented information from scientific assessments about the state of knowledge regarding the planet’s biodiversity, ecosystems and the benefits, as well as the tools and methods to protect and sustainably use these vital natural assets.</p> <p>The above suggestion is relevant to the objective and functions of IPBES and fulfils important knowledge gaps considering systematization of knowledge on observed and modelled impacts of climate change in biodiversity, since climate change has been pointed as the second most important threat to biodiversity conservation after ecosystems fragmentation and land use change.</p>
2.	<p>Urgency of action by IPBES in the light of the imminence of the risks caused by the issues to be addressed by such action:</p> <p>Climate change impacts are occurring faster and in a more intense way than it was predicted by climate change models and scientists, posing new challenges to monitoring and adaptation efforts. Different from constructed infrastructure, ecosystems cannot be relocated considering climate change impacts on globe territory.</p> <p>Depending on measured and modelled impacts of climate change on distribution of biodiversity and ecosystems, and other parameters as species interaction, species health and morbidity, survival rate,</p>

	<p>freshwater consume an availability, respiratory and photosynthesis rates, actual and future efforts aimed at biodiversity and ecosystems conservation can be unsuccessful.</p>
3.	<p>Relevance of the requested action in addressing specific policies or processes:</p> <p>Systematization of existing knowledge on measured and modelled direct and indirect impacts of climate change on biodiversity and ecosystems distribution, as well the consolidation and dissemination of spatial analysis on impacts of climate change on biome and ecosystems distribution in the future, can help countries to include climate change as a component of biodiversity conservation actual and future policies, helping the design of a more coherent special conservation policies.</p> <p>Definition of indicators of impacts and vulnerability of biodiversity and ecosystems can help the construction of monitoring systems of impacts of climate change on biodiversity in national and global level.</p>
4.	<p>Geographic scope of the requested action, as well as issues to be covered by such action:</p> <p>Regional and global, and if possible biome geographic scope.</p>
5.	<p>Anticipated level of complexity of the issues to be addressed by the requested action:</p> <p>Most papers and studies on impacts of climate change on ecosystems and biodiversity have been conducted in developed countries. This can lead to a unbalanced compilation and systematization of existing knowledge, which is not favourable for tropical ecosystems, which are mainly the most vulnerable.</p> <p>In many areas of globe there are more uncertainties concerning climate change modelling results.</p> <p>Complexity of interactions between species of different ecosystems. Complexity of indirect effects of climate change on biodiversity, and climate feedbacks from impacts of climate change on biodiversity must be considered at least in a theoretical manner, and if possible in studies cases.</p> <p>Major and not so precise results of climate change models applied to biodiversity and ecosystems distribution can be of great help if they are accompanied by spatial information and are developed based on regionalized models.</p> <p>Information on vulnerability of species and ecosystems, as well as impacts of climate change on endangered species, important migratory species, invasive species, as well as species of economic importance, can be threatened though study cases and help the construction of parameters for guidelines for national assessments of impacts of climate change on biodiversity.</p>
6.	<p>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 IPBES is best suited to take action.</p> <p>The recommendation of guidelines by the IPBES for policy accountability on biodiversity and ecosystems conservation results would foster several countries in mainstreaming climate change impacts on their national biodiversity and ecosystems conservation priorities and policies.</p>

7.	Availability of scientific literature and expertise for IPBES to undertake the requested action: To be considered by specialists.
8.	Scale of the potential impacts, and potential beneficiaries of the requested action: Potential beneficiaries of this action will be government agencies that coordinate public policies for the conservation of biodiversity around the world, the biodiversity and ecosystems themselves, general society, elaboration of more target oriented CDB and UNFCCC decisions Non-Governmental Organizations and others relevant stakeholders involved in conservation agenda.
9.	Requirements for financial and human resources, and potential duration of the requested action: The suggested study requires the involvement of scientific experts in climate change and biodiversity, and its complex impacts, interactions and feedbacks. On biodiversity and ecosystems distribution and biogeography. On indicators and vulnerability assessments of impacts of climate change on biodiversity and ecosystems.
10.	An identification of priorities within multiple requests submitted: We consider that all proposals submitted by the Brazilian Government are important and necessary to enhance the use of science in public policies related to biodiversity.
11.	Any other relevant information (including a list of any attachments provided):

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Please provide the following information for any request and, where relevant, for any inputs and suggestions (additional attachments can also be submitted):

Request/input/suggestion: Evaluate restoration monitoring actions with the objective of establishing protocols that evaluate the effective gains for biodiversity conservation and the provision of ecosystem services.

Information to accompany requests submitted to the Platform (see also Decision IPBES-1/3 Procedure for receiving and prioritizing requests put to the Platform):	
1.	<p>Relevance to the objective, functions and work programme of IPBES:</p> <p>This suggestion dialogues with the key message C2 of the Summary for Policymakers of the Assessment Report on Land Degradation and Restoration. This key message is “More relevant, credible and accessible information is needed to allow decision makers, land managers, and purchasers of goods to improve the long-term stewardship of land and sustainability of natural resource use”.</p>
2.	<p>Urgency of action by IPBES in the light of the imminence of the risks caused by the issues to be addressed by such action:</p> <p>Many restoration actions have been implemented around the world. Monitoring of these actions focuses their assessment on the biomass gain of the vegetation recovered most of the time. But there are still many gaps to assess gains in biodiversity in these actions. There are several methodologies for this, but it would be important to promote a global evaluation that aim to elaborate a protocol that could be adopted by the stakeholders.</p>
3.	<p>Relevance of the requested action in addressing specific policies or processes:</p> <p>Monitoring biodiversity in restoration actions can improve the allocation of resources used in projects and plans, prioritizing support for more effective initiatives. Such monitoring can also</p>

	contribute to the evaluation of the implementation of the National Restoration Plans of the countries.
4.	<p>Geographic scope of the requested action, as well as issues to be covered by such action:</p> <p>Compare studies and methodologies used around the world, especially in megadiverse countries such as Brazil, suggesting the best and most effective methodologies that could integrate a protocol for monitoring biodiversity in restoration actions.</p>
5.	<p>Anticipated level of complexity of the issues to be addressed by the requested action:</p> <p>Medium to high complexity. It depends on the number of criteria that will be considered sufficient to indicate the biodiversity gains in the restoration actions. This is very variable in relation to the local where this action occurred. In addition, in some cases field monitoring is necessary to qualify the information, which increases the degree of complexity of these evaluations.</p>
6.	<p>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 IPBES is best suited to take action:</p> <p>One of the key messages in the summary of the chapter 4 of the full report of the Land Degradation and Restoration Assessment is “There is an urgent need for the development of appropriate degradation and restoration indicators and strengthening of existing measurement and monitoring programmes (well established).”</p> <p>Part of the description of this key message says: “National, regional and global land degradation and restoration monitoring networks should be strengthened or established where absent. These are essential to determine the locations, extent and severity of degradation as a prelude to restoration and prevention. On-the-ground monitoring needs to complement remote sensing techniques and, in both cases, appropriate indicators need to be refined or established. Many existing indicators are flawed or not useful.”</p> <p>This consideration demonstrates the gaps still existing in this subject and highlights the important role that IPBES can play in the definition of guidelines for restoration monitoring that can be used by several stakeholders.</p>
7.	<p>Availability of scientific literature and expertise for IPBES to undertake the requested action:</p> <p>Proença, V., Martin, L. J., Pereira, H. M., Fernandez, M., McRae, L., Belnap, J., Böhm, M., Brummitt, N., García-Moreno, J., Gregory, R. D., Honrado, J. P., Jürgens, N., Opige, M., Schmeller, D. S., Tiago, P., & van Swaay, C. A. M. (2017). Global biodiversity monitoring: From data sources to Essential Biodiversity Variables. <i>Biological Conservation</i>, 213, 256–263.</p> <p>Chunbo Huangab; Zhixiang Zhoua; Changhui Pengb; Mingjun Tenga; Pengcheng Wanga (2018) How is biodiversity changing in response to ecological restoration in terrestrial ecosystems? A meta-analysis in China. <i>Science of The Total Environment</i>. V. 650, Part 1, Pages 1-9</p>
8.	<p>Scale of the potential impacts, and potential beneficiaries of the requested action:</p> <p>Potential beneficiaries of this action will be government agencies and other stakeholders that coordinate public policies for the conservation of biodiversity and restoration programs around the world.</p>

9.	Requirements for financial and human resources, and potential duration of the requested action: The suggested study requires the involvement of scientific experts in landscape ecology, restoration ecology and biodiversity monitoring and may take one year for finalization.
10.	An identification of priorities within multiple requests submitted: We consider that all proposals submitted by the Brazilian Government are important and necessary to enhance the use of science in public policies related to biodiversity.
11.	Any other relevant information (including a list of any attachments provided):

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Please provide the following information for any request and, where relevant, for any inputs and suggestions (additional attachments can also be submitted):

Request/input/suggestion: Make an evaluation of existing studies in the world about prioritization of areas for biodiversity and ecosystem services conservation, comparing different methodologies, results and impacts.

Information to accompany requests submitted to the Platform (see also Decision IPBES-1/3 Procedure for receiving and prioritizing requests put to the Platform):	
1.	<p>Relevance to the objective, functions and work programme of IPBES:</p> <p>The above suggestion is relevant to the objective, functions and work programme of IPBES, which has been mandated to identify and prioritize key scientific information needed for policymakers at appropriate scales, and to catalyse efforts to generate new knowledge in dialogue with scientific organizations, policymakers and funding organizations, while not directly undertaking new research.</p> <p>Further, the function of IPBES is to facilitate access to knowledge and data needed, e.g., the production of assessments and the use of tools and methodologies in support of policy formulation and implementation, and to provide guidance on how to manage and present knowledge and data, e.g., from and for different scales and sectors.</p>
2.	<p>Urgency of action by IPBES in the light of the imminence of the risks caused by the issues to be addressed by such action:</p> <p>Many studies have been identified priority areas for conservation in the world. In Brazil, there is a public policy for priority areas for biodiversity conservation since 2004. However, several methodologies can be used to model this prioritization, with different results. In addition, the results of implementation of conservation actions suggested by these studies are still poorly monitored.</p>

3.	<p>Relevance of the requested action in addressing specific policies or processes:</p> <p>The identification of priority areas for conservation has the potential to increase the effectiveness of conservation actions, allocating financial resources to regions of greater biological importance and with greater possibilities of success in the suggested actions.</p>
4.	<p>Geographic scope of the requested action, as well as issues to be covered by such action:</p> <p>Compare studies conducted around the world, especially in megadiverse countries such as Brazil, suggesting the best and most effective methodologies to be used in future studies.</p>
5.	<p>Anticipated level of complexity of the issues to be addressed by the requested action:</p> <p>The high complexity of these studies is related to the high number of conservation targets to be considered in megadiverse countries, the different conservation objectives and actions to be recommended, the environmental and socio-cultural differences between the regions compared, and the lack of spatial data systematized. Another issue concerns to the valuation of land opportunity costs and conservation costs still incipient in many countries.</p>
6.	<p>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 IPBES is best suited to take action:</p> <p>The recommendation of guidelines by the IPBES related to the methodologies of priority areas for conservation could guide several countries in the elaboration of similar instruments, in the improvement of existing public policies and in the enforcement of the suggested actions.</p>
7.	<p>Availability of scientific literature and expertise for IPBES to undertake the requested action:</p> <p>Margules, C. R. e R. L. Pressey. 2000. Systematic conservation planning. <i>Nature</i> 405: 243-253. Rodrigues e Brooks. 2007. Shortcuts for biodiversity conservation planning: The effectiveness of surrogates. <i>Annual Review of Ecology, Evolution, and Systematics</i> 38: 713–737. Ball, I.R., H.P. Possingham, and M. Watts. 2009. Marxan and relatives: Software for spatial conservation prioritisation. Chapter 14: Pages 185-195 in <i>Spatial conservation prioritisation: Quantitative methods and computational tools</i>. Eds Moilanen, A., K.A. Wilson, and H.P. Possingham. Oxford University Press, Oxford, UK. Trindade-Filho J. e R. Loyola. 2011. Performance and Consistency of Indicator Groups in Two Biodiversity Hotspots. <i>PlosOne</i> 6: e19746.</p>
8.	<p>Scale of the potential impacts, and potential beneficiaries of the requested action:</p> <p>Potential beneficiaries of this action will be government agencies that coordinate public policies for the conservation of biodiversity around the world and, indirectly, traditional populations that make sustainable use of biodiversity products and services.</p>
9.	<p>Requirements for financial and human resources, and potential duration of the requested action:</p> <p>The suggested study requires the involvement of scientific experts in landscape ecology and geoprocessing and may take one year for finalization.</p>

10.	An identification of priorities within multiple requests submitted: We consider that all proposals submitted by the Brazilian Government are important and necessary to enhance the use of science in public policies related to biodiversity.
11.	Any other relevant information (including a list of any attachments provided):

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Other Stakeholder(s): _____

Please provide the following information for any request and, where relevant, for any inputs and suggestions (additional attachments can also be submitted):

Request/input/suggestion: Assess and systematize guidelines and better practices, define global and regional indicator and global standardized parameters and criteria to guide national accountability efforts of biodiversity and ecosystems services conservation impact assessment.

Information to accompany requests submitted to the Platform (see also Decision IPBES-1/3 Procedure for receiving and prioritizing requests put to the Platform):	
1.	<p>Relevance to the objective, functions and work programme of IPBES:</p> <p>Considering IPBES mission aimed at the provision of policy-oriented information from scientific assessments about the state of knowledge regarding the planet’s biodiversity, ecosystems and the benefits, as well as the tools and methods to protect and sustainably use these vital natural assets.</p> <p>The above suggestion is relevant to the objective and functions of IPBES and fulfils important knowledge gaps for national governments concerning global, regional and national standardized policy accountability parameters and criteria for biodiversity and ecosystems services conservation impact assessment.</p>
2.	<p>Urgency of action by IPBES in the light of the imminence of the risks caused by the issues to be addressed by such action:</p> <p>In many developed and developing countries, national government faces difficulties to identify overarching and effective indicators for the monitoring and assessment of impacts of public policies for conservation of biodiversity and ecosystems services.</p> <p>Establishment of national and global indicators and establishment of systems and guidelines for monitoring biodiversity and ecosystems conservation efforts and results, based on the definition of global and regional standardized criteria and parameters targeted at the identification of effectiveness</p>

	<p>and results of biodiversity conservation and ecosystems efforts would help national governments to qualify the design and prioritization of public policies for biodiversity and ecosystems conservation, the identification of global and regional gaps of knowledge, to size the lacks and needs of financial resources aimed at this purpose, and improve and refine communication of results to society in general.</p> <p>This can promote a positive feedback on public environmental concern and reduce conflicts related to biodiversity conservation measures, while promoting a positive public policy accountability atmosphere for the environmental agenda, which is not always easy to reach.</p>
3.	<p>Relevance of the requested action in addressing specific policies or processes:</p> <p>As mentioned, the refinement of global and regional indicators and standards of effectiveness assessment of biodiversity and ecosystems conservation measures, when possible, would help governments better communicate results of biodiversity conservation policies and practices, reduce conflicts and would promote harmonization of parameters and language through countries fostering policy accountability practices in the conservation agenda.</p>
4.	<p>Geographic scope of the requested action, as well as issues to be covered by such action:</p> <p>Standards, indicators and guidelines could be elaborated for regional and global assessments and would establish the basis for guidelines targeted at national and when applied, subnational analysis.</p>
5.	<p>Anticipated level of complexity of the issues to be addressed by the requested action:</p> <p>The distribution of species and groups of species is highly diverse around the world. Some countries, mainly in the tropical region, are megadiverse, imposing extra burden on biodiversity and ecosystems conservation efforts analysis.</p> <p>Guidelines for policy accountability of conservation efforts must consider those differences, and refer the existing biodiversity knowledge, recent land use changes or other important threats to conservation of biodiversity, countries have faced in the last 30, 20 and 10 years. But the objective is not to identify only biodiversity losses, but positive results, future perspectives, and successful results of ongoing politics for biodiversity conservation, to positively influence the refinement of those actions.</p> <p>Lack of knowledge could be considered as an opportunity to target oriented efforts on biodiversity and ecosystems services monitoring, exploring also low cost, technological and participative monitoring tools.</p>
6.	<p>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 IPBES is best suited to take action.</p> <p>The recommendation of guidelines by the IPBES for policy accountability on biodiversity and ecosystems conservation results would foster several countries in the elaboration and implementation of similar efforts, improving communication of existing public policies results and refining future policies and measures.</p>
7.	<p>Availability of scientific literature and expertise for IPBES to undertake the requested action:</p> <p>To be considered by specialists.</p>

8.	<p>Scale of the potential impacts, and potential beneficiaries of the requested action:</p> <p>Potential beneficiaries of this action will be government agencies that coordinate public policies for the conservation of biodiversity around the world, scientists involved in biodiversity and ecosystems monitoring, funders of conservation projects, society through knowledge on the effectiveness of public investments, and, indirectly, traditional populations that make sustainable use of biodiversity products and services. Non-Governmental Organizations and others relevant stakeholders involved in conservation projects and agenda.</p>
9.	<p>Requirements for financial and human resources, and potential duration of the requested action:</p> <p>The suggested study requires the involvement of scientific experts in biodiversity and ecosystems monitoring indicators, policy accountability, tools for effectiveness analysis of biodiversity and ecosystem conservation policies, global and regional environmental and conservation results.</p>
10.	<p>An identification of priorities within multiple requests submitted:</p> <p>We consider that all proposals submitted by the Brazilian Government are important and necessary to enhance the use of science in public policies related to biodiversity.</p>
11.	<p>Any other relevant information (including a list of any attachments provided):</p>

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Please provide the following information for any request and, where relevant, for any inputs and suggestions (additional attachments can also be submitted):

Request/input/suggestion: Assessment about Community Biodiversity Protocols

Information to accompany requests submitted to the Platform (see also Decision IPBES-1/3 Procedure for receiving and prioritizing requests put to the Platform):	
1.	<p>Relevance to the objective, functions and work programme of IPBES:</p> <p>An Assessment about Community Biodiversity Protocols would be an important instrument providing policymakers with objective scientific assessments about the state of knowledge regarding biodiversity and traditional knowledge governance on indigenous people and local communities territories. Strengthening the knowledge foundations for better policy for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development, with indigenous people and local communities' participation and respecting their organizations. The Assessment about Community Biodiversity Protocols will provide recognition to the existent Community Biodiversity Protocols, will foment communities to develop their own Community Biodiversity Protocol, and could start a long-term plan on how to avoid biodiversity and traditional knowledge lost.</p> <p>The above suggestion is relevant to the objective, functions and work programme of IPBES, which has been mandated to identify and prioritize key scientific information needed for policymakers at appropriate scales, and to catalyse efforts to generate new knowledge in dialogue with scientific organizations, policymakers and funding organizations, while not directly undertaking new research.</p> <p>Further, the function of IPBES is to facilitate access to knowledge and data needed, e.g., the production of assessments and the use of tools and methodologies in support of policy formulation and implementation, and to provide guidance on how to manage and present knowledge and data, e.g., from and for different scales and sectors.</p>

2.	<p>Urgency of action by IPBES in the light of the imminence of the risks caused by the issues to be addressed by such action:</p> <p>Biodiversity and indigenous people and local communities' territories are deep related, and both are threatened. On the last 10 years one hundred languages died. Imagine how much knowledge about biodiversity is lost with one language death! Information is needed in order to conserve biodiversity, to safeguard traditional knowledge, and to keep the relationship among them working properly and healthy. As sooner as we know the World Community Biodiversity Protocols successful experiences, better we will plan how to conserve biodiversity, and safeguard traditional knowledge on a related manner.</p>
3.	<p>Relevance of the requested action in addressing specific policies or processes:</p> <p>Nagoya Protocol and Convention on Biological Diversity requires prior informed consent for access to traditional knowledge and genetic resources and calls for support of 'community protocols'. Community Protocols are important tools, that can define the terms on which outsiders may access the resources and knowledge of indigenous people and local communities, and how to share the benefits. Community protocols are not just about indigenous rights: they clarify expectations for business and government, preserve irreplaceable biological resources, and support sustainable development. An Assessment about Community Biodiversity Protocols would provide recognition and involvement from local governments, in order to respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities as stated by Convention article 8 j.</p>
4.	<p>Geographic scope of the requested action, as well as issues to be covered by such action:</p> <p>The Geographic scope on an Assessment about Community Biodiversity Protocols would be Worldwide, but focusing on indigenous people and local communities' territories, areas that by the difficulties are less addressed on government reports, for instance.</p>
5.	<p>Anticipated level of complexity of the issues to be addressed by the requested action:</p> <p>Like other IPBES initiatives, the complexity level is about ensuring participation and involvement of indigenous peoples and local communities, community protocol experts, civil societies organizations, non-government organizations and governments that has experience on conducting or recognizing community biodiversity protocols to provide information and support for the assessment.</p>
6.	<p>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 IPBES is best suited to take action:</p> <p>There are some surveys on Community Biocultural Protocols or works that seek to give them visibility, such as the <i>Raizeiras do Cerrado initiative</i> (https://www.cbd.int/financial/micro/brazil-cerrado-raizeiras.pdf), an example of local community initiative on Brazil. There are also initiatives such as the NGO National Justice (http://naturaljustice.org/publication/biocultural-community-protocols/) that compiles different experiences and foment new Community Protocols. However, these initiatives are scattered, some with local relevance, others more as a way to promote the use of protocols as a tool. The big gap is a study or assessment that brings together existing experiences worldwide, systemising objective and biodiversity-related criteria present on successful Community Biocultural. IPBES would be the ideal platform to carry out an Assessment about Community Biocultural Protocols in order to recognize and promote the importance of this tool with governments, contributing to the conservation of biological diversity and the protection and</p>

	<p>safeguarding of traditional knowledge in the territories of indigenous peoples and local communities.</p> <p>Another important initiative is the Globally Important Agricultural Heritage Systems – GIAHS (http://www.fao.org/giahs/en/).</p>
7.	<p>Availability of scientific literature and expertise for IPBES to undertake the requested action:</p> <p>IPBES already has extensive experience in biodiversity analysis and has been increasingly involved in and sought to cover issues related to indigenous peoples and local communities, whose territories conserve biodiversity and whose traditional knowledge is so closely associated with biodiversity. Thus, its specialists are able to gather the scientific literature that deals with the topic, as well as seek the necessary subsidies to carry out the Assessment about Community Biodiversity Protocols.</p>
8.	<p>Scale of the potential impacts, and potential beneficiaries of the requested action:</p> <p>An Assessment about Community Biocultural Protocols would have a worldwide impact, because it turns possible fairer and equitable relations among users and provider of genetic resources and traditional knowledge related to biodiversity. On countries and regions with more indigenous people and local communities' territories, on other words on the megadiversity ones, the impact on biodiversity conservation following customary laws will be stronger. There will be also impact on the users of genetic resources and traditional knowledge, because they will be able to stablish fairer and equitable mutually agreed terms easily.</p>
9.	<p>Requirements for financial and human resources, and potential duration of the requested action:</p> <p>The building of an Assessment about Community Biocultural Protocols will need the involvement of scientist's specialists team and subsidies from indigenous people and local communities' organizations, governments, non-government organizations, regional organizations, among others. The Assessment about Community Biocultural Protocols building may take two years or more, as a huge mobilization of different stakeholders is needed on this process.</p>
10.	<p>An identification of priorities within multiple requests submitted:</p> <p>Tools for the development of process able to respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities as stated by Convention article 8 j need to be better developed and is urgently. An Assessment about Community Biodiversity Protocols would provide recognition and involvement from local governments, indigenous peoples and local communities' organizations and other organizations to promoted more symmetric relations and mutually agreed terms fairer and equitable. This instrument will accelerate biodiversity conservations efforts and promote Biological Diversity Convention objectives as a hole, and promote well-being.</p> <p>We consider that all proposals submitted by the Brazilian Government are important and necessary to enhance the use of science in public policies related to biodiversity.</p>
11.	<p>Any other relevant information (including a list of any attachments provided):</p>

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Other Stakeholder(s): _____

Please provide the following information for any request and, where relevant, for any inputs and suggestions (additional attachments can also be submitted):

Request/input/suggestion: Thematic evaluation of the ecosystems services offered by continental aquatic environments and aspects of the use of their biodiversity with emphasis on the fishing resources.

Information to accompany requests submitted to the Platform (see also Decision IPBES-1/3 Procedure for receiving and prioritizing requests put to the Platform):	
1.	<p>Relevance to the objective, functions and work programme of IPBES:</p> <p>The above suggestion is relevant to the objective, functions and work programme of IPBES, which has been mandated to identify and prioritize key scientific information needed for policymakers at appropriate scales, and to catalyse efforts to generate new knowledge in dialogue with scientific organizations, policymakers and funding organizations, while not directly undertaking new research.</p> <p>Further, the function of IPBES is to facilitate access to knowledge and data needed, e.g., the production of assessments and the use of tools and methodologies in support of policy formulation and implementation, and to provide guidance on how to manage and present knowledge and data, e.g., from and for different scales and sectors.</p> <p>Besides that, by putting continental fisheries as a topic of study, the IPBES strengthens and expands knowledge already consolidated in the topic Deliverable 1 (c): Procedures, approaches and participatory processes for working with indigenous and local knowledge systems, because fishing is the basis of socio-cultural identity for many indigenous peoples and traditional communities, being an important cultural agglutinator and a relevant economic activity.</p>

2.	<p>Urgency of action by IPBES in the light of the imminence of the risks caused by the issues to be addressed by such action:</p> <p>The urgency of this action is characterized by the rapid population decrease of different continental aquatic species, for example in Brazil, there are more than 300 species of freshwater fish threatened with extinction, according to data from the national assessment of the risk of extinction of the Brazilian fauna, in 2014, by the Chico Mendes Institute for Biodiversity Conservation (ICMbio). This group represents 10% of freshwater fish species identified in Brazil (estimated at more than 3,100). Continental aquatic environments also harbor hydrocarbon plants, such as algae, and invertebrates that are critical in preserving these ecosystems and can be considered as fishery resources. The conservation of the continental aquatic ecosystems directly benefits the riverside populations, guaranteeing the access to natural resources and contributing to the improvement of the quality of life of these populations. From a sustainable development standpoint, societies are expected to use natural resources only in the amount they can naturally replenish. The maintenance of food production capacity contributes greatly to the reduction of poverty and quality of life. The biodiversity of continental aquatic ecosystems is under pressure from different vectors such as climate change, propagation of exotic species and anthropic vectors. These vectors have been drastically leveraged with technological advances and globalization, making ecosystems services increasingly vulnerable. Works to expand the supply of water, energy, mineral, agriculture and transport pressure the continental aquatic environments, natural or not. Among the causes of anthropogenic sources can be highlighted the changes in watercourses such as silting, consumptive uses of water (irrigation, public supply, industrial processing, etc.), destruction of marshes, buses, among others; landscape changes such as deforestation of riparian forests and the destruction of springs; overfishing; and pollution that can be caused by eutrophication, solid waste, noxious substances (mercury, agrochemicals, etc.) and environmental disasters (discharges of tailings dams, shipwrecks with noxious loads, etc.). To know the causes, consequences and forms of remediation of the vectors of change that affect continental aquatic biodiversity is of vital importance for the conservation of its ecosystems services and its socioeconomic overflows, especially for the poorest and most vulnerable sectors of society.</p>
3.	<p>Relevance of the requested action in addressing specific policies or processes:</p> <p>It is relevant to achieve Aichi Target 6 and the Brazilian Biodiversity Policy in its part related to sustainable use of fishes resources.</p> <p>As discussed above, to know the causes, consequences and forms of remediation of the vectors of change that affect continental aquatic biodiversity is of vital importance for the conservation of its ecosystems services and its socioeconomic overflows, especially for the poorest and most vulnerable sectors of Society.</p>
4.	<p>Geographic scope of the requested action, as well as issues to be covered by such action:</p> <p>The proposed thematic evaluation refers to the natural and anthropogenic vectors affecting the ecosystems services of continental aquatic environments, with emphasis on their repercussions on continental aquatic biodiversity and its effects on indigenous peoples and traditional communities. This work should seek to characterize how the riverine populations are being affected by the changes in continental aquatic ecosystems services, pointing out the vectors that most affect continental aquatic biodiversity. As well as quantifying and pricing the continental aquatic biodiversity and impacts of the loss of these resources, preferably using the initiatives The Economics of Ecosystems and Biodiversity (TEEB), proposed by the G8 + 5 Environment Ministers in 2007. bases for local decision-makers to integrate valuation of ecosystems services into development plans. Another topic to be addressed should be the mechanisms to protect, restore and establish sustainable management of continental aquatic</p>

	ecosystems services. The proposal is that the work be divided regionally, by large international river basins. Regarding Brazil, it is suggested to focus on the 4.3 million square kilometer basin of the River Plate, encompassing areas of Brazil, Uruguay, Bolivia, Paraguay and Argentina, and the Amazon Basin which has 7 million square kilometers and encompasses areas of Peru, Colombia, Ecuador, Venezuela, Guyana, Suriname, Bolivia and Brazil.
5.	<p>Anticipated level of complexity of the issues to be addressed by the requested action:</p> <p>For this evaluation, it would be necessary to choose international basins broadens the range of research centers and organ involved. Other river basins may be added at the suggestion of other members of IPBES. The evaluation should consider at least two hydrological cycles, requiring two years or more, as a huge mobilization of different actors needed for this process.</p>
6.	<p>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 IPBES is best suited to take action:</p> <p>The participation of the IPBES platform guarantees a global reach, with a high level of complexity, providing the participation and involvement of specialists, non-governmental organizations and governments that have experience in the different areas of the proposed work. The focus on continental aquatic environments such as swamps, lakes, ponds, mangroves, estuaries, rivers, streams allows a broad geographic scope, which harbors different local and indigenous knowledge, favoring the sharing of problems and solutions worldwide.</p>
7.	<p>Availability of scientific literature and expertise for IPBES to undertake the requested action:</p> <p>To be considered by specialists.</p>
8.	<p>Scale of the potential impacts, and potential beneficiaries of the requested action:</p> <p>To know the causes, consequences and forms of remediation of the vectors of change that affect continental aquatic biodiversity is of vital importance for the conservation of its ecosystems services and its socioeconomic overflows, especially for the poorest and most vulnerable sectors of Society. Besides that, potential beneficiaries of this action will be government agencies that coordinate public policies for the conservation of biodiversity around the world.</p>
9.	<p>Requirements for financial and human resources, and potential duration of the requested action:</p> <p>The evaluation should consider at least two hydrological cycles, requiring two years or more, as a huge mobilization of different actors needed for this process.</p>
10.	<p>An identification of priorities within multiple requests submitted:</p> <p>We consider that all proposals submitted by the Brazilian Government are important and necessary to enhance the use of science in public policies related to biodiversity.</p>
11.	Any other relevant information (including a list of any attachments provided):

IPBES template for the submission of requests, inputs and suggestions on short-term priorities and longer term strategic needs that require attention and action by IPBES as part of its future work programme.

Name and contact details of individual submitting requests/inputs/suggestions:

Date of submission:

Submission from: IPBES member: Brazil (Ministry of the Environment and National Water Agency)

Observer allowed enhanced participation in line with decision IPBES-5/4:

MEA(s): _____

United Nations body: _____

Expert on, and holder of, indigenous and local knowledge: _____

Other Stakeholder(s): _____

Please provide the following information for any request and, where relevant, for any inputs and suggestions (additional attachments can also be submitted):

Request/input/suggestion: Assess the state of biodiversity and the ecosystem services related with water, including studies on soil cover and water quality and quantity parameters.

Information to accompany requests submitted to the Platform (see also Decision IPBES-1/3 Procedure for receiving and prioritizing requests put to the Platform):	
1.	<p>Relevance to the objective, functions and work programme of IPBES:</p> <p>The above suggestion is relevant to the objective, functions and work programme of IPBES, which has been mandated to identify and prioritize key scientific information needed for policymakers at appropriate scales, and to catalyse efforts to generate new knowledge in dialogue with scientific organizations, policymakers and funding organizations.</p> <p>That suggestion is aligned with some of IPBES work programmes: Capacity building; Policy support tools and methodology; and Communication and stakeholder engagement.</p>
2.	<p>Urgency of action by IPBES in the light of the imminence of the risks caused by the issues to be addressed by such action:</p> <p>In accordance with IPBES (summary for policymakers of the regional assessment report on biodiversity and ecosystem services for the Americas - 2018), the share of the Americas' population with a water security problem is higher than 50%, and the renewable freshwater available per person decrease in 50% since the 1960s. The protected areas are known as one of the most important strategies to protect biodiversity and the provision and maintenance of the ecosystems services associated, including water.</p>

	<p>However, the Latin American countries systems of protected areas face scarcity of financing and depredation. The same IPBES document makes the point that biodiversity and nature's contributions to people are better protected when integrated into a broad array of economic and sectoral policies, such as payment for ecosystem services and voluntary eco-certification.</p> <p>Besides that, the development of indicators related to soil cover and parameters of water quality and quantity can be an important tool in decision making and support the adoption of actions that favor ecosystem services combined with actions in infrastructure. There is still a lack of more precise indicators of how riparian vegetation contributes to water quality over time. Although there is consensus about the benefit from this vegetation, little is known about its progressive effects on water quality. In addition to the question of water quality and riparian vegetation, it is even more incipient to understand the effects of vegetation of any type, such as forest, pasture, secondary vegetation, and the flow of a river. Several studies indicate that the removal of native vegetation has immediate effects on the increase in flow, but there is little information indicative of the consequences in the long term. This uncertainty is the motto for refractory positions to the actions of revegetation from the point of view of the availability and management of water resources, since there is a clear accounting of the resources necessary for its execution and the benefits derived from these actions. In general, when confronting infrastructure actions, measurable in cost and benefit aspects, and environmental actions of preservation and planting of native vegetation, whose measurement is still imprecise, there is no doubt that the former will be favored. In addition, this is a theme that has gained relevance for several countries considering that recurrence of extreme events asserted by climate change. In this scenario, consolidating a state-of-the-art survey of studies that focus on the relationship between vegetation cover and water quality and quantity is a fundamental step to reach the development of indicators and strategy of action in vulnerable territories.</p>
3.	<p>Relevance of the requested action in addressing specific policies or processes:</p> <p>In the context of countries rich in biodiversity and less economic development is important to access instruments to provides useful information for decision making and encourage investments in nature conservation. The decisions makers should increase the visibility of sustainability factors, including ecosystem services, in the basis for fiscal policy decisions. In addition, these countries need best communicate the benefits of ecosystem services generated by their protected areas in order to enhance them.</p> <p>Besides that, in the face of the scenarios of increased vulnerability associated to climate change, this type of survey can help to prioritize actions aimed at the recomposition of critical ecosystem services in the basin and reinforce public opinion on the importance of protected areas.</p>
4.	<p>Geographic scope of the requested action, as well as issues to be covered by such action:</p> <p>With regard to the bias of protected areas it is suggested to use the geographic cut of Latin America. However, to address the relationship between soil cover and water quality and quantity, it is suggested to use Water basin with differential characteristics.</p> <p>One way to prioritize is to define critical watersheds in terms of the availability of water resources and those whose future climate scenarios are less auspicious in terms of water availability. In addition, the studies that compose this survey should prioritize basins with different physical characteristics, such as soil type, geomorphology, degree of urbanization, type of water table, among others.</p>
5.	<p>Anticipated level of complexity of the issues to be addressed by the requested action:</p>

	<p>This proposal has two levels of complexity:</p> <ol style="list-style-type: none"> 1. One refers to the importance of better communicate and measure the importance of the national systems of protected areas for the maintenance and provision of ecosystem services, especially related with water. For this it will be necessary to establish methodology and data availability to measure the ecosystem service provided by the protected areas. 2. The other refers to a survey of the state of the art of studies on soil cover and parameters of water quality and quantity by water catchment area. In this case, the complexity lies in the multivariate characteristics of each river basin, but there are already several studies in progress on this subject that perhaps an intergovernmental effort may allow the exchange of experiences and knowledge on this topic.
6.	<p>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 IPBES is best suited to take action:</p> <p>There are some initiatives as “Quanto vale o verde: a importância econômica das unidades de conservação brasileiras / Carlos Eduardo Frickmann Young & Rodrigo Medeiros (Organizadores). – Rio de Janeiro: Conservação Internacional, 2018. 180p”.</p> <p>However, IPBES can contribute with the recommendation of the extensive experience of the multidisciplinary experts, bringing together existing experiences worldwide. Also, IPBES can go way forward the assessment report on biodiversity and ecosystem services for the Americas suggesting and promoting the consideration and use, by the governments, of tools and instruments to measure the ecosystems services provided by the systems of protected areas.</p> <p>There are already some studies that try to conjugate the variables of soil cover with the quality and quantity of water of the rivers, but, in general, the scales of the studies are limited. There is a need to promote bridges that stimulate dialogue and the exchange of results from different studies, in order to eventually establish a coefficient that can be used by public policies and in the monitoring of actions related to the recomposition of ecosystem services in river basins.</p>
7.	<p>Availability of scientific literature and expertise for IPBES to undertake the requested action:</p> <p>Although scientific research on ecosystem services has advanced since 2005 (Millenium Ecosystem Assessment), there are scattered publications about the measurement of ecosystem services provided by the national systems of protected areas.</p>
8.	<p>Scale of the potential impacts, and potential beneficiaries of the requested action:</p> <p>The assessment about the state of the ecosystem services related with water provided by the systems of protected areas is expected to have an important impact increasing the visibility, the protection and the financing of the protected areas systems. Thereby, lots of people and especially the biodiversity will be benefited, like local and national governments, decision makers on spatial planning policies and management of water resources. In addition, through the access of instruments and materials about the measurement of ecosystem services provided by the system of protected areas, the government decision makers will have inputs and clear arguments to justify policies related with the conservation of the biodiversity and protected areas. In other words, governments could highlight and make public the importance and contribution of the protected areas to people.</p>

9.	<p>Requirements for financial and human resources, and potential duration of the requested action:</p> <p>To carry out this survey, the main resource to be used is the involvement of scientific communities from different countries that are dedicated to the topic.</p>
10.	<p>An identification of priorities within multiple requests submitted:</p> <p>We consider that all proposals submitted by the Brazilian Government are important and necessary to enhance the use of science in public policies related to biodiversity.</p>
11.	<p>Any other relevant information (including a list of any attachments provided):</p>

IPBES template for the submission of requests, inputs and suggestions on short-term priorities and longer term strategic needs that require attention and action by IPBES as part of its future work programme.

Name and contact details of individual submitting requests/inputs/suggestions:

Katia Torres Ribeiro

General Coordinator – Biodiversity Research and Monitoring

Date of submission: Aug 30

Submission from: IPBES member: Brazil

Observer allowed enhanced participation in line with decision IPBES-5/4:

MEA(s): _____

United Nations body: _____

Expert on, and holder of, indigenous and local knowledge: _____

Other Stakeholder(s): _____

Please provide the following information for any request and, where relevant, for any inputs and suggestions (additional attachments can also be submitted):

Request/input/suggestion:

The Research and Knowledge Management Plan (2018-2021) of the Chico Mendes Institute for Biodiversity Conservation (ICMBio) was prepared by several experts from its National Research and Conservation Centers and Conservation Units (Brazilian protected areas excepting indigenous lands and marron territories). Based on a group of prioritized conservation strategies, the plan presents a set of key issues to be investigated, as well as guidelines for data management, biodiversity monitoring and capacity building, aiming increase in conservation effectiveness. ICMBio is ahead the management of 335 protected areas, summing 10% of Brazilian territory and 20% of Brazilian marine zone, and also responsible for conservation strategies for 1173 threatened animal species.

The Plan is based in the planning method Open Standards for Conservation (CMP 2013), often used in the strategic conception of programs and conservation projects. An adaptation of the method was necessary so as to identify throughout the planning process the hypotheses, doubts and expectations associated to each conservation strategy, thus deriving a set of knowledge demands. In Portuguese, the Plan is at http://www.icmbio.gov.br/portal/images/stories/o-que-fazemos/pesquisas/plano_de_pesquisa_03-07-2018_-_paginas_espelhadas.pdf

Strategy 1: Enhancement of biodiversity, cave and karst resources, and ecosystem services

- What are the economic values of ecosystem services provided by conservation units?
- What are the ecosystem services provided by conservation units, regarding provision, regulation, cultural and support features?
- Do current policies aiming to encourage sustainable economic practices have a positive impact on biodiversity?

- What are the sustainable agriculture / extractive practices used in the countries? How to disseminate them in areas that are critical to conservation?
- What is needed to ensure self-sufficiency and continuity of sustainable practices after projects end?
- How to make sustainable practices economically available in different situations?
- What is the social perception about conservation units, regarding their biodiversity and ecosystem services?
- How to measure and monitor social support for conservation actions?
- Does visitation in PAs promote recognition of the biodiversity value?
- What tools / interpretive resources are available in conservation units? What levels of behavior change can these tools promote?
- What are the best strategies to increase visitation in conservation units? How to improve methods of counting visitors in conservation units?

Strategy 2: Working with the Environment Authorities and other sectors to promote compatibility of different national interests in a single plan

- Identification of the vulnerability of biomes to the most impacting human activities
- Identification of specific species and environments that will be affected by different impacting human activities

Strategy 3: Participation of ICMBio at different levels of territorial planning (national, regional and local)

- How do the national action plans for the conservation of endangered species and other planning instruments of the ICMBio contribute to the conservation of species and ecosystems?
- What are the instruments / products that ICMBio needs to develop to influence territorial planning?

Strategy 4: Improved planning and implementation of protected areas

- Definition of criteria for prioritizing resource allocation in conservation units (financial, human, etc.) considering ecological priorities
- Development of tools that integrate and make available information (socio-environmental, biological, physical, etc.) to support management plans and management of conservation units
- What is the effectiveness of conservation units in achieving their goal of creation?

Strategy 5: Promoting the expansion and connectivity of protected areas

- How much of the biological attributes are protected by conservation units?
- How much of each biome needs to be conserved?
- What are the most appropriate connectivity instruments for each type of protected area?
- What are the most efficient methodologies for planning connectivity?
- Evaluation of the representativeness of conservation units

Strategy 6: Enhancement of Environment Authorities contribution to environmental licensing

- Elaboration of new planning instruments and geospatial biodiversity data analysis tools for use in licensing
- Continuous improvement of species distribution maps (use more current, compatible scale, as refined as possible) for use in licensing
- Definition of the data set of biodiversity produced by the entrepreneur, in the scope of the licensing, which will be systematized in database and widely available
- Definition of which data will be used in the evaluation and monitoring of the impacts of the enterprises
- What information and gaps exist for the preparation of licensing monitoring protocols, mitigating and compensatory measures?
- Evaluation of the effectiveness of the mitigating measures in use
- Definition of attributes that will be monitored by different types of enterprise or environments

Strategy 7: Strengthening fisheries management and production chains in sustainable use conservation units

- Consolidation of experiences and preparation of manuals of good practices in fishing in Conservation Units
- Analysis of the potentials of productive chains related to different species and fishing modalities, such as, for example, sports, ornamental, pirarucu management, baits, scientific and others

- Identification of more sustainable technological mechanisms and innovations for fisheries
- Identification of additional income alternatives aiming at reducing the pressure of use on fishing resources
- Structuring of systems for surveying and monitoring bio-ecological information on fishing in Conservation Units
- Structuring of socioeconomic monitoring and survey systems on fisheries in Conservation Units
- Study of the effectiveness of Conservation Units as repositories of natural fish stocks

Strategy 8: Promotion of good practices and regulation of the use of fauna in sustainable use PAs

- Preparation of diagnoses of the use of fauna resources in PAs of sustainable use by traditional populations
- Elaboration of a diagnosis of the populations of the target species of hunting in sustainable use: support capacity and population growth rate
- Monitoring the demographic evolution of traditional populations in PAs for sustainable use
- Assessment of sustainability in the use of wildlife resources
- Establishment of sustainable harvest rates for game species

Strategy 9: Strengthening the management of wood and non-timber products extracted or with potential for exploration at UC

- What are the impacts of the exploitation of non-timber resources in different scales and contexts?
- Compilation of data from experiences considered as good practices in the exploitation of non-timber products
- Identification and mapping of species with sustainable exploitation / extraction potential
- Identification of unsustainable practices for proposing improvements in exploration models
- Elaboration of a diagnosis of the impacts of the exploitation of timber and non-timber products on the fauna

Strategy 10: Strengthening participation in monitoring and management

- How have the results of participatory monitoring actions been perceived locally and which practices are appropriate or not?
- What is the effectiveness and costs of participatory monitoring in different formats in Brazil and worldwide?
- How are those involved in monitoring perceived or seen by your community?

Strategy 11: Enhancing the intelligence for effective enforcement and protection actions

- Identification of the key actors involved, as well as of the activities and economic chains that most negatively impact biodiversity resources
- Development of technological innovations to support intelligence actions in environmental monitoring (eg applications)
- Integration of inter- and intra-institutional databases for the improvement of intelligence actions focused on environmental monitoring

Strategy 12: Enhance the management of invasive alien species

- Under what conditions does the incentive to extract exotic species lead to its spread?
- How to encourage extractivism for control or eradication of invasive alien species?
- What is the ecological cost-benefit of the presence of exotic species in ecosystems?
- What are the social, cultural and economic costs associated with the presence of alien species in ecosystems?
- What are the social, cultural and economic costs associated with controlling exotic species in ecosystems?
- What is the threshold of occupation by exotic species in which it is possible to maintain a healthy native ecosystem?
- What is the susceptibility of environments to the invasion of exotic species?
- Mapping vectors of dissemination of invasive alien species

Strategy 13: Restoration of terrestrial and aquatic habitats

- Mapping of priority areas for habitat recovery also considering their sensitivity to climate change
- In what situations is it necessary to intervene in the process of ecological restoration of ecosystems?
- What are the most appropriate protocols and techniques for restoring each environment?
- How to measure habitat quality efficiently and on a large scale?
- How to restore aquatic environments also considering the consequences of climate change?

Strategy 14: Promoting the improvement of the conservation status of endangered species

- Availability and optimization of the use of the information generated in the process of evaluation of the state of conservation of the species for the decision making
- Integration of actions among the different action plans and of these with other conservation planning tools in a systematized manner
- Improvement of the collection of relevant information, actors and institutions in the preparatory stage of the National Action Plans for the Conservation of Endangered Species (NAPs)
- Creation and dissemination of protocols with data and measures of conservation and occurrence of threatened species that must be observed by enterprises prior to their installation
- Conducting research to improve the evaluation process from knowledge gaps and identified as those that most compromise its quality (eg age structure of fish)
- Generation of information that makes it possible to evaluate the state of conservation of data deficient species

Strategy 15: Integrated and Adaptive Fire Management (MIAF)

- Where is it necessary to use fire conservation management?
- What are the cultural, social and economic aspects involved in the use of fire in each location?
- What is the appropriate fire regime for each conservation objective on a local scale?
- What are the social benefits of MIAF for local people?
- Under what conditions can the use of fire be economically and environmentally feasible as an agricultural tool?
- How to remotely measure the severity of fires?
- What is the impact of fire on fauna and flora?
- Is the heterogeneity of natural landscapes a good indicator of biological diversity for the purpose of implementing MIAF on a local scale?

Information to accompany requests submitted to the Platform (see also Decision IPBES-1/3 Procedure for receiving and prioritizing requests put to the Platform):	
1.	<p>Relevance to the objective, functions and work programme of IPBES:</p> <p>The questions to be answered through research and knowledge management actions demonstrate high affinity with the mission of IPBES. The idea is to make biodiversity conservation strategies and ecosystem services more effective by generating applied knowledge and better communication tools and procedures.</p>
2.	<p>Urgency of action by IPBES in the light of the imminence of the risks caused by the issues to be addressed by such action:</p> <p>Actions can be developed according to the resource opportunities that arise.</p>
3.	<p>Relevance of the requested action in addressing specific policies or processes:</p> <p>These are very important subsidies for the conduct of conservation policies, which could benefit from the recognition of the international community represented by IPBES</p>
4.	<p>Geographic scope of the requested action, as well as issues to be covered by such action:</p>

	Continental
5.	<p>Anticipated level of complexity of the issues to be addressed by the requested action:</p> <p>The proposed actions present varying levels of complexity, but are all viable</p>
6.	<p>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 IPBES is best suited to take action:</p>
7.	<p>Availability of scientific literature and expertise for IPBES to undertake the requested action:</p> <p>There is a moderate availability of scientific literature on the subjects covered</p>
8.	<p>Scale of the potential impacts, and potential beneficiaries of the requested action:</p> <p>Impacts will occur at biome level, directly benefiting local communities, but indirectly across society</p>
9.	<p>Requirements for financial and human resources, and potential duration of the requested action:</p> <p>The plan did not quantify the resources needed to complete the actions</p>
10.	<p>An identification of priorities within multiple requests submitted:</p>
11.	<p>Any other relevant information (including a list of any attachments provided):</p> <p>The ICMBio Research and Knowledge Management Plan (2018-2021) is tightly related to investments in improving planning and management tools in general within the Institute, including more focused management plans for Protected areas or for threatened species and guidelines for environmental licensing, considering vulnerabilities and threats.</p>