

Counting on nature: how governments plan to rely on ecosystems for their climate strategies

An analysis based on Intended Nationally Determined Contributions and the Paris Agreement

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In Warsaw in November 2013, by its decision 1/CP.19, the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) invited “all Parties to initiate or intensify domestic preparations for their intended nationally determined contributions (...) towards achieving the objective of the Convention (...)”. In response to this invitation, we now have 188 intentions for national policies on climate change, and/or on adaptation.

This *Issue Brief* looks at how these contributions, or “INDCs”, translate intentions in terms of nature and biodiversity policies. The INDCs have been screened for that purpose, as well as the content of the Paris Agreement adopted on 12 December 2015. The brief identifies the countries which, in their commitments, have placed great emphasis on what are known as “nature-based solutions” (NBS), especially since the International Union for Conservation of Nature called for the development of such approaches in April 2015.

What importance is actually given to ecosystems, to nature and to biodiversity in these INDCs? In what way is “nature” put to use, and similarly, how are climate policies mobilised as a means of strengthening the protection of natural resources? How are the different countries positioned on this question, and what are the dynamics at work?

The analysis concerns 159 INDCs (including a single INDC for the EU) representing 186 contributions, which have been read and analysed individually².

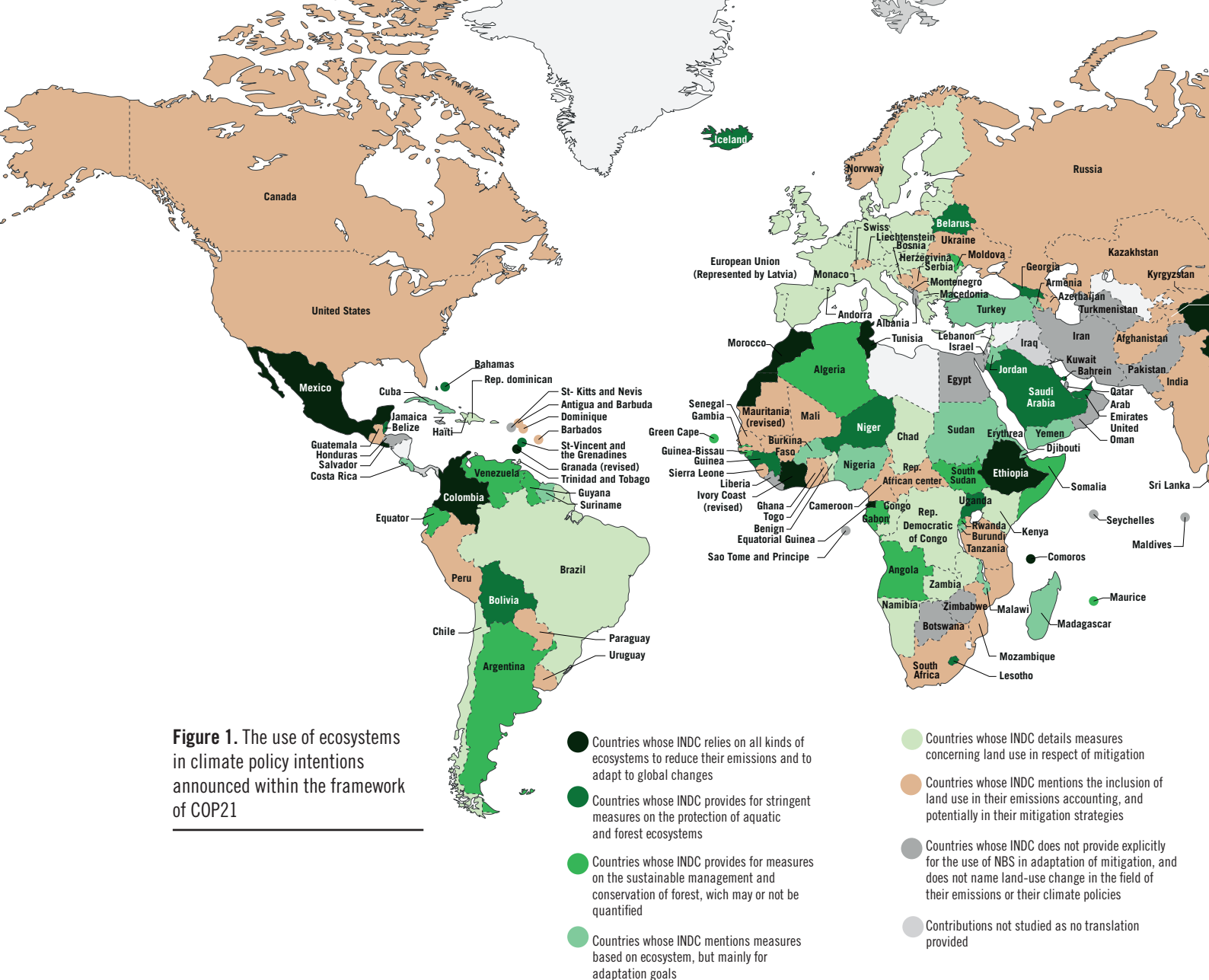
1. For *Intended Nationally Determined Contributions*.
2. Iraq and Kuwait submitted their contributions in Arabic with no translation at the time of this analysis; these INDCs have therefore not been taken into account.

KEY MESSAGES

- In terms of both climate change mitigation and adaptation, ecosystems represent an important element in around 40 INDCs, which have placed “nature-based solutions” (NBS) in a highly visible position. The use of NBS is common especially in Africa and South America/the Caribbean, and far less so in Asia (excluding China) and Europe.
- The drafting of the Paris Agreement confirms this importance by acknowledging the pivotal role played by nature in mitigation and adaptation. The Parties must ensure ecosystem resilience, especially in order to preserve the capacity of carbon sinks and reservoirs, and more specifically of forests.
- Most INDCs still fall very short of truly coherent mitigation and adaptation policy programmes. The diversity and heterogeneity of the commitments made by the different countries mean that the question of the effective organisation of policies capable of implementing these commitments is still unresolved. The countries that find themselves “leaders” in terms of NBS could contribute to maintaining and facilitating this governance.

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THE USE OF NATURE-BASED SOLUTIONS: DISPARITIES IN GLOBAL DISTRIBUTION

In terms of both mitigation and adaptation, ecosystems represent an important element in around 40 INDCs, which have placed “nature-based solutions” (NBS) in a highly visible position. This is a small number (45 out of 159, or just over 25%), but it is more than might be expected, given that these issues have only recently been taken seriously at these policy levels. At least 30 countries specify in their contributions climate adaptation and mitigation measures that make use, in different ways, of the potential represented by better management of forests, wetlands, coastal ecosystems and even marine areas. Most often, these measures consist in conserving natural areas. The specific way in which such kind of action should contribute to mitigation is not explicitly set out in the INDCs. Implicitly, we may assume that it involves modifying land-use change patterns that would have produced additional emissions: deforestation, agricultural intensification (and fertiliser use), and the drainage and oxidation of carbon

found in peatlands, etc. Similarly, the extension of protected areas is most often justified by the role forests play as carbon sinks.

The role of natural areas and woodlands in adaptation is clearer, by maintaining their resilience to drought and flooding, and to climate change in general. Some of these measures consist in simply conserving already protected areas, but in some cases contributions provide for the extension of these areas. In some INDCs, we even find ecological restoration measures aimed at increasing carbon stocks and ensuring more sustainable use of natural resources for development and social well-being. In addition, 11 countries provide for specific measures aimed at controlling land-use change, by limiting intensification patterns and changes that generate additional risks (in synergy with adaptation and mitigation).

The use of NBS is common especially in Africa and South America/the Caribbean, but far less so in Asia (excluding China) and Europe; China and Mexico in particular are emerging as “champions”. The INDCs of the Northern countries commit



mainly to results in terms of emissions, and say little about the programmes and measures to be undertaken. The most detailed INDCs from developed countries are Japan's and New Zealand's contributions. The European Union only specifies results to be achieved, and not the programmes or measures to be implemented, which remain at the discretion of its member states. Consequently, we observe a form of North-South divide in the drafting of the INDCs for NBS. But this divide concerns the objectives and results expected, and not necessarily implementation. Actual implementation of programmes and measures will give NBS their real political importance.

THE PARIS AGREEMENT GIVES A PROMINENT ROLE TO NATURE CONSERVATION AND RESTORATION POLICIES

It should be recalled that evaluations of INDCs show that, despite their universal nature and the substantial efforts made by some countries, "cumulative" efforts will not be enough to limit global warming to 2°C³. With a view to the necessary acceleration of actions and to the universal nature of the Agreement, action by a certain number of developing or emerging countries will inevitably imply harnessing their natural capital, since these resources are proportionately greater

than in the developed countries. This should not, however, exempt the latter from increasing their level of ambition in accordance with their capacities and responsibilities, for which purpose the use of nature-based solutions also seems appropriate.

The Paris Agreement⁴ provides a certain number of responses to these challenges. The Parties must ensure the resilience of ecosystems, especially in order to preserve the capacity of carbon sinks and reservoirs, and more specifically of forests (to which all of Article 5 is devoted). In the section on financing the agreement, the role of payments for environmental services in forest conservation is recognised as being very important. In any case, around 40 INDCs, concentrated in two continents including least developed, developing and emerging countries, provide for ambitious measures on NBS: this suggests the idea of a sort of "club of countries that use their natural capital", which could drive a more extensive, enhanced dynamic in this field, based on the Paris Agreement clauses mentioned above.

CHALLENGES FOR IMPLEMENTATION: PROGRESSING FROM "LISTS OF RESOLUTIONS" TO PRIORITISED, QUANTIFIED AND ORGANISED POLICY PROGRAMMES

The challenge of implementing the INDCs, and especially their "natural" content, means that lists of different types of measures, with different degrees of quantification and financing, must be turned into ambitious, operational and political impetus. A reading of these plans suggests a certain number of concerns, questions and sticking points.

In itself, the "technical" content of the NBS provided for in INDCs is nothing new. In almost all of the INDCs that include the use of these solutions, the goal is to strengthen forest or wetland conservation, to extend protected areas and to effectively manage watersheds. Even the restoration of coral reefs and mangroves refers to techniques for which there are at least some existing experiments and know-how that will need to be developed (especially in order to apply them on a much broader scale). In other words, the main objective is to ensure the large-scale implementation of nature

3. <http://unfccc.int/resource/docs/2015/cop21/eng/o7.pdf>

4. The first paragraph of Article 4 states that: "In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty."

protection and restoration policies that have already been the subject of numerous commitments and conventions for several decades, and have been insufficiently implemented to date, if at all.

The novelty, at this stage, is first the scope given to these pledges and, second, the fact that they are included in climate mitigation and adaptation policy-making. On the one hand, it could be feared that the factors that prevented the large-scale emergence of these conservation policies will remain prominent at all levels, or even increase in the future. Indeed, by construction, NBS are users of space: forests, natural coastal zones and wetlands need to be extended. How, in a world characterised by economic and demographic pressure, can we accept to “make room” for forests, dunes, marshlands and coral reefs? On the other hand, we can find hope in the fact that these policies are outlined within the framework of the UNFCCC and the INDCs: the urgency of climate action, which is more present in public opinion and on the political agenda than it is for biodiversity, could lead to more stringent trade-offs than today, in favour of ecosystems. It could help to better channel the pressure exerted on ecosystems by agricultural intensification, urban expansion and the densification of transport infrastructure, and to accommodate the “free expanses” that nature requires, which have so far been relentlessly eroded.

The diversity and heterogeneity of the commitments made by the different countries mean that the question of the governance of policies corresponding to these commitments is still unresolved. NBS in INDCs are collections of measures characteristic of those promoted by the authorities responsible for the environment and natural resources, international organisations such as the International Union for Conservation of Nature (IUCN), and environmental NGOs. These are stakeholders that are not generally in a strong position in the national and international power plays. The key challenge for implementation will therefore be the creation of integrated, and consistent policy networks, over and above the catalogues of measures announced. Likewise, the strengthening of their political and

institutional recognition is essential. This strengthening could come from the growing pressure that NGOs, intermediary bodies, the media and public opinion are exerting on states, sectoral authorities and economic operators for the production of responses adapted to the challenges of mitigation and adaptation to global changes.

Finally, the relative unity of the international community and the clearly defined nature of the INDCs should not mask the importance of the contradictions between the commitments made. First, in many INDCs, we find both ambitious intentions for the conservation, protection and restoration of ecosystems, and measures that could potentially thwart these very objectives, such as the exponential development of hydroelectricity, the use of fuelwood or biofuels, and the artificialisation of coastal areas to counter rising sea levels.

Second, most of the NBS found in the INDCs concern forest measures, or “afforestation”, in other words the (re)planting of trees. The question will then be to determine the nature of these forests, and of the type of land use they will replace. To take two exaggerated examples, monoculture tree plantations in the Brazilian or African savannas are a potential disaster for biodiversity, whereas the restoration of forests on intensive pastures or soybean fields recently carved from the tropical forest can provide advantages not only for the climate, but also for adaptation and biodiversity conservation. But resistance to reforestation put up by intensive agriculture or urban extension is not the same as that of nomadic herders in the savannah.

If proof were needed, these potential internal contradictions attest to the fact that the INDCs still fall very short of truly coherent mitigation and adaptation policy programmes. It is thus to be hoped that the movement perceived since the preparations for COP21 will be deployed in an effort to ensure the operational implementation of these contributions. The countries that find themselves “leaders” in terms of NBS, without this having necessarily been their intention, can help to maintain this movement, and should be encouraged to do so. ■