IUCN One Programme Strategy for Freshwater Biodiversity Conservation: Putting to work first actions

The idea was to generate a framework to promote a *One Programme Strategy for Freshwater Biodiversity Conservation* directed to raise the urgency of freshwater biodiversity conservation and motivate coordinated action among Members, Commissions and Secretariat to address critical threats. The IUCN One Programme Strategy for Freshwater Biodiversity Conservation will raise the urgency of freshwater biodiversity conservation and motivate coordinated action among Members, Commissions and Secretariat to address critical threats. Critical to this response will be the need to mobilize with the necessary speed and scale to reduce and eventually reverse the loss of freshwater biodiversity and degradation of freshwater ecosystems worldwide.

Specifically, the workshop attempted to address different topics such as a) Lack of data on freshwater ecosystems, b) The need to Integrate ecosystem conservation into the water agenda – including water supply, climate change and poverty, and implementation on, for example a range of the SDGs and the Paris Climate Agreement; c) Protected areas; d) Dams and water infrastructure; e) Multi-level water governance; f) Innovative finance and investment and ecosystem services

As a general diagnosis the workshop concluded that there is an important demand to change the approaches how freshwater biodiversity is considered and to stop its degradations. A problem that was well discussed was the fragmentation of the information among organizations and the weak perception that freshwater biodiversity still has within the UICN at broad scale. Even the workshop recognize the problem of the such fragmentation a main challenge was to consider how to integrate different approaches in order to be effective in the different UICN programs and how this topic could be scaled up and accelerate the perception on freshwater biodiversity. Attendants agreed that there is a lack of a common information platform for freshwater environments being difficult to recognize parallel initiatives.

One major difficulty that was identified also was the how freshwater biodiversity is perceived and the different languages that are used to communicate its relevance. Related to this problem lack of integration among disciplines is still a barrier as people tend to participate mostly in specific disciplinary events precluding to interact at a more multidisciplinary perspective about biodiversity conservation. In this context, main axis of this problem could be associated to the need of improving building capacity, develop

bio-engineering solutions, promote transparency and participation, integrate development and conservation, and support multidisciplinary trainings.

On the other hand the workshop recognized the complexity of balancing development and conservation and how to involve the society in this debate. Ecosystem services provided by freshwater environments were recognized as an important concept from which society can benefit but not in all cases such services are well understood. There is an inherent complexity in communicating how biodiversity need to be conserved in a broad perspective as healthy ecosystems require from species interactions, multi trophic levels, etc. Such limitations are well perceived with fish where target species become more relevant for societal perceptions than others species. Moreover, it is no rare that some governmental agencies relate biodiversity improvement with exotic species introductions in order to increase the recreational fisheries demands and quality.

The workshop identified 4 main outcomes;

- a) Legal framework, laws and governance
- b) Habitats conservation, restoration and species conservation
- c) Sustainable water use related to man-made impacts
- Major economic drivers impacts on biodiversity (dredging, agrivulture, mining, etc.)
- e) For each outcome some questions were posed: a) What actions, what interim targets could be achieved?; b) Which sectors must act differently; c) What stop us, d); How to overcome barriers; e) Who will be involves in practical actions, broader strategy, synergy, priority in outcomes?

Freshwater biodiversity was considered as a complex issue, even more complex than in marine environments as its integrity is affected by the basin effect. The workshop recognized such complexity and moreover, accepted that in transboundary basins the problem could be exacerbated under lack of common management policies. In this context, dams received during the workshop a great attention as a main source of fragmentation and biodiversity changes. The "smart dam concept" was discussed and the philosophy of the UICN was also considered under the XXI century perspective. Whereas in North America and Europe dam growth has reduced and even several projects are now oriented to dams removal, in South America, Asia and Africa dams development is still a main policy in different countries. The cases of the Meckong and

Amazon basins were mentioned as example of developing new visions related to dams installation. No less important, small dams were also included in the discussion as they are more numerous and mostly oriented to irrigation and ester management rather than to hydro-electricity. In this context, several cons were identified related to the lack of environmental studies and fund support to assess their impacts, but recognizing that small dams can be sometimes easily modified to become more "fish friendly". As noted, even dams of less than 2 m height are able to stop a fish migration or promote species alopatry.

As a conclusion, the workshop can be considered as a valuable avenue for continue the process started in Hawaii in 2016. The strategy needs to identify targets for transformative change in freshwater management and biodiversity conservation at different scales, recognize the specific contributions, roles and responsibilities for each of component of the Union and assure the mechanisms for coordination and collaboration among members. Outputs from the workshop could represent a first step to guide the work of the Union on freshwater biodiversity and water resource management and to promote the dialogue with the IUCN Council on the strategy and on IUCN's role in promoting renewal of global commitments to freshwater biodiversity conservation. The workshop recognized the need to conserve and restore what we want to protect, tackle the impacts of existing and planned water infrastructures, consider the development sectors represented by agriculture, mining, urban, etc., and promote better legislation frameworks and governance systems.

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