



Introduction

The project 'Scaling Up Mountain Ecosystem-based Adaptation: building evidence, replicating success, and informing policy' implemented between 2017–2022, was built upon the success of the Mountain EbA Flagship Programme, carried out in Nepal, Perú and Uganda (which were named flagship countries). The project expanded its ambit to include three additional countries – Bhutan, Colombia and Kenya (named expansion countries).

It was expected that in flagship countries, EbA measures already implemented would be consolidated, replicated and scaled-up. In expansion countries, successful EbA actions in flagship countries were expected to be replicated and these countries made EbA ready, for future, larger investments.

In June 2022, IUCN commissioned an impact evaluation of the project for the generation of lessons learned. This brief presents these lessons learned.

Lessons learned

Often, the impact of EbA activities, such as ecosystem

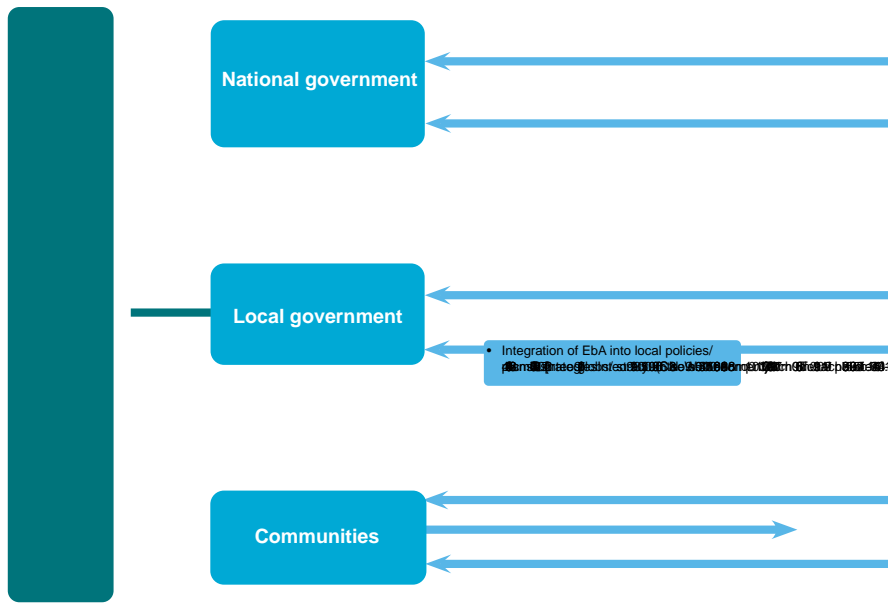
When the impact becomes quickly evident and there are tangible benefits, EbA actions are successful and sustainable. Shown in the table below are some examples.

Whether the project contributed to climate change mitigation (that is, how much carbon will be sequestered by the extent of ecosystem restored or better managed) has not been assessed.

Contribution to the conservation of threatened/conservation-dependent species was targeted both in Nepal (with a focus on *Paris polyphylla*), and the conservation of the tree fern (*Alsophila spinulosa* formerly *Cyathea spinulosa*), which is not threatened but is listed on Appendix II of CITES (where international trade is restricted); as well as in Perú (for *Vicugna vicugna*) where a specific EbA action and a management plan were implemented, respectively.

Co-benefits included the added conservation of the globally Vulnerable Andean condor (*Vultur gryphus*) and Peruvian guanaco/Taruca (*Hippocamelus antisensis*) because of the improved management of the Puna grasslands, in the NYCLR, Perú.

A remarkable co-benefit of the project ensued in Kenya



More knowledge sharing and learning opportunities among partners about project actions, achievements and the project as a whole, would have been beneficial. Many respondents of the interviews conducted, for several questions answered, 'Don't know'. Also, there was a missed opportunity to connect with many respondents in the interviews planned and with the interviews conducted, there were some gaps regarding the information they possessed about the project. TMI's field and global staff leaving because of the project interruption in 2019, as well as COVID-19, were major contributing factors to these gaps. Communicating project goals and objectives, as well as outputs, results and most importantly, achievements, is ultimately beneficial to the project. To this end, communication using social media and field tours would be valuable.

different policies. After the hiatus, it was found that there had been government re-structuring, which meant that the ministry with which the country focal point had worked for two years, would likely no longer exist.

Exemplifying admirable adaptive management, the project in Bhutan modified its course as a result of the consultations with the actors and collaborated with the Tarayana Foundation and the College of Natural Resources, Royal University of Bhutan, to enhance their ongoing programme on springshed management in the Gawa Phuntsum and Tsezusachu springsheds. The project provided technical support in the preparation of several briefs and in capacity building.

The efforts of the project teams (both at the global and country level) in restarting the project under conditions of a 'perfect storm' is an excellent example of adaptive management.

In EbA, there are external factors which often cannot be controlled or managed. For example, an unpredicted storm can wipe out seedlings that have just been planted during restoration activities. In addition, ecosystems themselves are inherently complex, often with unknown and unexpected variables compounding the restoration of the ecosystems' full functionality. Adaptive management is, therefore, essential for EbA.

At the end of 2019, the project was overwhelmed by an unexpected administrative issue that resulted in its abrupt cessation. This was followed almost immediately by the global pandemic of COVID-19, which resulted in long and repeated lockdowns in the target countries.

The resolve and persuasiveness of IUCN's global team in negotiating with the donor to restart the project, under the sole management of IUCN, ultimately revived it at the end of 2021. Adaptive changes to the results framework and adjustments to work plans were made, and work was recommenced in January 2022.

The role that the country focal points played in spurring work after the long pause and continuing to endeavour to build relationships with new government officers³, is also laudable.

In Bhutan, before the hiatus, a review of the environmental policy framework had been completed, ready with recommendations for improved integration of EbA within



Before 2019: working with Watershed Management Division (© IUCN)



After 2020: working with the Tarayana Foundation and the College of Natural Resources (© IUCN)

³ as frequent political change is often experienced in the Global South

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across different times zones in different continents, but if quarterly meetings are held annually, each country can take a turn to be present at a virtual meeting at a difficult time to overcome this problem.

developed and funded, the programme officer could work – one-on-one with each country focal point – to develop a ToC specific to the country, but within a general framework, to make it more meaningful for each country.

10. The Global Environment Facility (GEF) proposal model is one in which a skeleton project information form (PIF) is drawn up with brief consultation and a given general direction of the project – a somewhat detailed concept note. After this, there is money provided by GEF to hire a team of consultants to flesh out the project document (ProDoc) and a results framework with extensive stakeholder, field and other consultations in project regions. This process takes up to six months, but when there is a validation of what is expected, every partner has agreed to what is to be done and a common results framework is available for tracking the progress of the funded project.

11. The project in Bhutan would have benefitted from an on-site

In the design phase of the project, it will be productive if discussions could be held with proposed government partners and country focal points, as is done in the GEF model. This will generate ownership of the project among government officers and allow country focal points to highlight what is possible and not. This would also allow for the design across countries of actions that can be achieved in practice and the development of a common results framework for all countries. (It should be noted that once the project started, county focal points made considerable efforts to forge relationships with partners and work closely with them and managed to kick-start project actions even after the hiatus. However, this was after the results framework was drawn up, the project developed and the money received.)

If this model of proposal writing is not practicable with other donors, alternatively, after a general project proposal is



application of the selected standard (to be used throughout the project, not just at the beginning) is needed.

FEBA element	FEBA criterion	NbS Global Standard criterion
A: helps people adapt to climate change	Criterion 1: Does it reduce social and environmental vulnerabilities?	Criterion 1: NbS effectively address societal challenges
	Criterion 2: Does it generate societal benefits within the context of climate change adaptation?	
B: uses biodiversity and ecosystems	Criterion 3: Did it restore, maintain or improve ecosystems and their services?	Criterion 3: NbS result in a net gain to biodiversity and ecosystem integrity
C: it is part of a broader climate change adaptation strategy	Criterion 4: Supported by policies at every level	Criterion 8: NbS are sustainable and mainstreamed within an appropriate jurisdictional context
	Criterion 5: Supports equitable governance and enhances capacities	Criterion 5: NbS are based on inclusive, transparent and empowering governance processes

3.1.2.2. Ecosystem-based Adaptation (EbA)

EbA is centred on ecosystems and their services. Healthy ecosystems provide a suite of services for human well-being. Ecosystems are the sum of all living organisms and their interconnections with their non-living environment, in a given space, at a given time. The healthy functioning of these ecosystems and the delivery of ecosystem services depend on these interconnections. For example, for many food crops, for the ecosystem service of pollination, insects and nectar-feeding birds are essential. Without these species, this service will not be provided by ecosystems.

In biodiversity conservation, the increase in species diversity (i.e. increase in the number of species) is used as a proxy to measure the improvement of ecosystem health (and in turn, the delivery of ecosystem services). Such increases have been assessed anecdotally during the project, although they could have been assessed more robustly using established methods.

In addition, EbA that involves restoration/better management of ecosystems will generate not only climate adaptation benefits but also carbon sequestration and therefore, ecosystem-based mitigation. These linkages need strengthening in future projects. Shown in the box in the next column is a very approximate calculation of the likely increase in carbon stock.

For Perú, a very rough assessment using a number provided as average carbon stocks for different biomes⁵, assuming that all other variables (such as temperature, soil type, plant species diversity and soil microorganism diversity) between the temperate grassland biome and the Puna grasslands correspond, is shown in the table below. However, to assess the actual impact of the EbA action, a baseline assessment of the carbon stock is necessary.

Rough estimate of climate change mitigation in two sites

Ecosystem restored/ under better management regimens	No. of hectares	Very approximate estimation of current carbon stock when fully grown (tonne) ⁴	Baseline stock	Increase in carbon stock as a consequence of EbA action
Puna grasslands	8,881	2,150,125.624	Not known	Quantity in column 4 - quantity in column 5



A grassland in Miraflores, after EbA interventions (© IdM)

⁵ Gorte, R. W. (2009). Carbon Sequestration in Forests. Congressional Research Service 7-5700 www.crs.gov RL31432. CRS Report for Congress Prepared for Members and Committees of Congress.

Key Messages

Although beset with major issues that resulted in a two-year hiatus, the Scaling Up Mountain Ecosystem-based Adaptation: building evidence, replicating success, and informing policy' has yielded several valuable lessons. The lessons from long-term project sites (the flagship sites) show the effective sustainability of project and community ownership, showing that longer durations for project implementation are needed for EbA. The three pronged approach of the creation of awareness and capacity building at community, local and national government levels has been unparalleled in achieving results.

The undeterred resolve of the global mountain EbA team in negotiating with the donor to re-start the project and the

country teams efficiency and effectiveness in kick-starting the project after the hiatus and achieving what they have is laudable.

However, the method and quality of reporting must be improve by using a clear theory of change approach that allows for more effective self-monitoring and evaluation.

Lead Author Information

Ali Rizvi Raza
Head, Climate Change Team
Centre for Economy and Finance
IUCN (International Union for Conservation of Nature)