From 2011 to 2015, the global Ecosystem-based Adaptation (EbA) in Mountain Ecosystems Programme (hereafter referred to as the Programme) has been testing EbA measures in pilot mountain sites in the Himalayan foothills of Nepal, the Andes in Peru and Mount Elgon in Uganda.

EbA planning and implementation predominantly takes place at the local and landscape level in order to prepare for anticipated localized climate impacts. To achieve adaptation success at scale, EbA initiatives need to shift from one-off, smaller-scale activities to become integrated into broader climate adaptation strategies at all levels including national. To support scaling up and mainstreaming, however, EbA must be supported by an enabling policy environment. While integration of EbA into policy frameworks is gradually emerging, some of the challenges include fragmented national policies; weak institutional and governance structures; and weak enforcement of existing policies, laws and regulations (Chong 2014). This learning brief highlights how the Programme has made the case for the policy changes that will need to happen at community, district, regional, national and global levels to bring about this shift in scale.

In addition, climate change policies need to be translated into budget allocations and expenditures, thereby making climate change part of the national budgeting process (Adelante et al. 2015). Funding for adaptation, however, remains one of the main gaps in transferring societally set goals into actual implemented adaptation measures (UNEP 2014). It is therefore critical to identify public financing options and other sources of funds to secure long-term/continuous EbA interventions. This learning brief further explains how the Programme has made the case for long-term, sustained financing for EbA through public finance, incentive schemes and Payments for Ecosystem Services. The information is a summary from the Programme’s legacy report, *Making the Case for Ecosystem-based Adaptation: The Global Mountain EbA Programme in Nepal, Peru and Uganda.*
Lessons from policy change for EbA

The following presents some key lessons from the Programme’s efforts on making the case for policy change in support of EbA at all levels in Nepal, Peru and Uganda.

**Start by identifying effective entry points.** The first step in bringing about policy change for EbA is to identify concrete opportunities available for policy change. These will differ and so will timing and which stakeholders to involve, depending on country context and governance structures. It is therefore important to examine how policy development processes are unfolding, who are involved and identify if and how policies of relevance to EbA are being developed, revised or updated. Such processes will provide opportunities for integrating EbA into them. Concrete Programme examples are elaborated below.

As was highlighted in Learning brief 1,1 EbA has been endorsed at global scale by decisions of both the Convention on Biological Diversity (CBD) and the United Nations Framework Convention on Climate Change (UNFCCC). Signatories (i.e. Parties) to these conventions can use the global guidance on how to mainstream EbA into broader policy frameworks, when developing national key legislation and policy. This is particularly relevant for policies such as National Adaptation Plans (NAPs), Intended Nationally Determined Contributions (INDCs) and National Biodiversity Strategy & Action Plans (NBSAPs).

To influence the global policy audiences, the Programme applied a range of approaches for making the case for EbA. Programme partners, supported by the Government of Germany, have engaged in dialogues; presented experiences and lessons learned on planning and implementing EbA; provided technical advice; and carried out policy advocacy at global level, including through events at the UNFCCC and CBD meetings. Box 1 highlights how local level evidence-based experiences in planning and implementing EbA can be used to make the case for needed policy changes for EbA at global level.

At the national level, key entry points for policy change for EbA include policies such as National Development Plans, National Climate Change Policies, environment and conservation strategies, sectoral plans and policies. Overarching national development plans, which acknowledge the importance of ecosystems for human well-being and adaptation, constitute an ideal entry point. For example, the National Development Plans and Climate Change Policies of Nepal, Peru and Uganda provide supportive frameworks for planning and implementing EbA measures nationally.

EbA can be made more explicit, when these plans are further elaborated in sectoral and local level budgeted plans and strategies. National climate change policies and strategies also provide opportunities to integrate EbA as one of the explicit adaptation approaches being taken. For example, the Programme provided technical guidance and policy review inputs for integrating EbA into the new Forest Policy being developed in Nepal, the INDC in Peru and the National Climate Change Strategy in Uganda. The Peru INDC even refers to the Programme specifically in the context of results and practical experiences provided by key projects, which have informed the Programme specifically in the context of results and practical experiences provided by key projects, which have informed the Peru INDC adaptation proposal.

**Ongoing sharing of lessons learned on EbA, organizing site visits to show the benefits of EbA on the ground and engaging in policy dialogues helped include EbA in these national policy agendas.** The Programme has successfully generated increased interest in EbA at country level by piloting this approach. These efforts have increased understanding of and buy-in for EbA amongst policy makers and have contributed, for example, to the process of establishing a High Level Committee on EbA in Nepal (Box 2) and a high-level profiling of protected areas and climate change by Peru during UNFCCC COP 20.

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**Box 1 | Bridging EbA practice and policy between local and global levels**

The United Nations Environment Assembly (UNEA), the governing body of UNEP, has the mandate to take strategic decisions, provide political guidance on the work of UNEP and promote a strong science-policy interface. At its first session in 2014, the UNEA adopted a resolution on ecosystem-based adaptation. The resolution was advocated for by Uganda, who brought in its experience of implementing EbA in practice through the Mountain EbA Programme (K Alverson 2015, pers. comm.). This helped make the case on the value of EbA to other countries and, together with Zimbabwe, Uganda proposed the resolution that was adopted. The UNEA Resolution 1/8 requests UNEP, in partnership with Governments and other stakeholders, to develop and implement EbA programmes, and encourages all countries to include EbA in their policies. The UNEA experience shows how, through a government partner and based on national level experience on implementing EbA in practice, the Programme managed to make the policy case for EbA to an intergovernmental governing body of the UN, thereby empowering governments to include EbA in their national plans and policies.
In this regard, it proved critical to actively engage with and implementation works best at landscape or ecosystem level, given that planning and local level is especially relevant.

Making the case for policy change for EbA at regional district level. In addition to collaboration with line agencies Local level budgeting is often also decided at municipal or clearly defined boundaries, such as those of protected areas. are implemented across different landscapes or outside large rural and urban populations downstream (G Quiroz 2015, pers. comm.). This provides an opportunity for including EbA in planning for a broader scale requires planning and oversight beyond community level, and across sectors, making district or regional level a relevant scale. This is especially relevant where measures are implemented across different landscapes or outside clearly defined boundaries, such as those of protected areas. Local level budgeting is often also decided at municipal or district level. In addition to collaboration with line agencies such as agriculture, forestry or water, it is relevant to consider broader land use planning and engagement of infrastructure and works sectors to avoid maladaptation and explore opportunities for hybrid grey-green infrastructure solutions, for example.

Protected areas were found to be ideal entry points for planning and implementing landscape-level EbA (Box 3). Protected areas often have existing management plans and governance structures, into which EbA can be mainstreamed. This has been experienced by the Programme – both in the Nor Yauyos Cochas Landscape Reserve (NYCLR) in Peru, working jointly with the protected areas agency SERNANP, and in the Panchase region in Nepal, working with the Panchase Protected Forest. In these cases, planning and implementing EbA measures has been a powerful way to make the case for EbA to local protected area managers and communities. These efforts provided entry points for making the case for national level policy change to better integrate climate change and EbA measures into protected area management across both countries.

At district and local level, existing natural resource management groups have been important entry points for making the case for EbA and how to integrate it into district- and local-level natural resource management plans. In Nepal, for example, the Programme has worked with Community Forest User Groups (CFUGs) as the major participants in and beneficiaries of many of the implemented EbA measures. The CFUGs have recognized the importance of ecosystem services and the long-term value added by EbA measures, such as promotion of multi-use, climate-resilient plant species. The

Box 2 | Bridging between sectors in Nepal

In Nepal, the Programme is engaged in the process of forming a High-Level Technical Committee on EbA to be led by the Ministry of Forest and Soil Conservation. The main role of the Committee is to coordinate and mainstream EbA into sectoral plans and programmes. This will be done, for example, through technical guidance, facilitating discussions on investment opportunities and identification of capacity development needs. The Committee will include representatives from various Ministries, such as the National Planning Commission; Ministry of Forest and Soil Conservation; Ministry of Science, Technology and the Environment; Ministry of Agriculture; and Ministry of Federal Affairs and Local Development. The Programme’s role in showcasing benefits on the ground and identifying opportunities for EbA planning and policy has helped make the case for national level recognition of the importance of EbA in Nepal.

Box 3 | Promoting EbA in protected areas in Peru

In Peru, a key partner for planning and implementing EbA at landscape level in the Nor Yauyos Cochas Landscape Reserve (NYCLR) has been SERNANP, the national protected areas agency. Collaboration with SERNANP has enabled an entry point into planning processes at community and landscape level and an important avenue for making the case for EbA. The Reserve has provided a well-defined and appropriate scale for implementing EbA, the NYCLR Master Plan has acted as a guiding framework for prioritizing and embedding EbA activities, while the staff of SERNANP at the NYCLR Headquarters have provided an essential institutional framework and technical expertise for sustainable delivery of EbA.

Climate change and EbA are now integrated into the new Reserve management plan, which also means that measures will be scaled-up from the initial three communities. Further, SERNANP is now collaborating more closely with the regional governments of Junin and Lima on the management of middle and lower stretches of the watershed, given the critical ecosystem services provided by the upstream Reserve contribute directly to the large rural and urban populations downstream (G Quiroz 2015, pers. comm.). This provides an opportunity for including EbA in planning for a broader area, beyond the Reserve. The Programme has promoted and enhanced engagement between different levels of government on climate change planning. The regional government of Junin and SERNANP in the Reserve are now looking to promote visits and exchanges to increase interest in climate change planning in other protected areas and communities in the region (W Lopez & G Quiroz 2015, pers. comm.). In addition, the Programme has played an important role in making the case for EbA being part of protected area planning and management at national level in Peru.

Programme has been supporting CFUGs through capacity development trainings towards integration of the EbA approach into their Community Forest management plans (PRai 2015, pers. comm.).

**EbA is relevant across sectors, but policy change is still needed in all Programme countries for integrating EbA into sectoral planning and budgeting.** Promising progress is being made in Nepal, however, where the Programme supported the formation of a High-Level Technical Committee on EbA (see Box 2). Policy work with the private sector has not been undertaken through the Programme on a significant scale and remains a key challenge.

In conclusion, delivering needed policy change for EbA requires collaboration across all policy scales. To effectively make the case for EbA it is vital to engage in the policy discourse at all levels, ranging from global to local, and including the private as well as the public sector. The role of different levels of public policy and planning in achieving EbA is summarized in Table 1. These efforts must also be undertaken simultaneously, given that decisions made on one level may impact the ones made at other levels. For example, in Peru, the National Climate Change Strategy has provided a framework for developing Regional Climate Change Strategies and has also helped guide the work of the SERNANP. The NYCLR Management Plan has, in turn, influenced how local government natural resource management plans have been developed. On the other hand, a bottom-up process has also taken place, where the NYCLR experience in integrating EbA and climate change is being scaled-out to other communities and protected areas in the region and scaled up to national level. Maintaining flows of dialogue, technical support and sharing of experiences can, in the medium- to long-term, help achieve needed policy changes for EbA across sectors and scales in a given country.

**Table 1 | Opportunities for policy change for EbA at various policy and planning levels**

<table>
<thead>
<tr>
<th>Policy level</th>
<th>Global level policies and plans</th>
<th>National level policies</th>
<th>District and/or regional plans</th>
<th>Protected area management plans</th>
<th>Local natural resource management plans</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Examples of policies</strong></td>
<td>UNFCCC decisions CBD decisions NWP</td>
<td>National development plans</td>
<td>Environment plans</td>
<td>Water management plans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Climate change policies and strategies</td>
<td>Climate change plans</td>
<td>Forest management plans</td>
<td>Pasture management plans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sectoral policies: water, agriculture, forests, infrastructure, DRR, environment, etc.</td>
<td>Development plans</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>How relevant for EbA</strong></td>
<td>Define EbA; provide guidelines and tools; influence adaptation funding; defines national reporting e.g. NAP and NBSAP</td>
<td>National priorities and visions for adaptation; influences national and sectoral budgets for adaptation; sets institutional priorities for adaptation; ensures political buy-in</td>
<td>Can provide an appropriate scale for EbA (landscape, watershed); multi-sectoral approach to EbA; Upstream-downstream linkages; local budgeting for EbA; technical support for implementation and monitoring of EbA; political buy-in</td>
<td>Guiding frameworks for EbA planning at landscape scale; governance and capacity to work at landscape scale; ownership; sustainability; monitoring of EbA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Detailed planning and implementation of EbA measures; management plans; sustainability across political changes; ownership; monitoring of EbA; political buy-in</td>
<td></td>
</tr>
<tr>
<td><strong>Key stakeholders to engage</strong></td>
<td>UNFCCC; SBSTA, NWP; CBD; Donors</td>
<td>Ministers; Technical officers; Parliamentarians; Cross-sectoral working groups</td>
<td>Line agencies; Extension workers; District officials and leaders</td>
<td>Protected area managers and staff; National protected area agencies</td>
<td>Natural resource management groups; Local leaders; Community assemblies; Community members</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Additional, cross-scale bodies</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Project coordination mechanisms and bodies: platforms for dialogue and coordination on roles and responsibilities for implementing EbA across sectors and levels; cross- scale institutions and agencies, such as: research institutes</td>
</tr>
</tbody>
</table>
Lessons on securing financing for EbA

Implementation of identified EbA priorities and strategies requires operationalization of policies, which, in turn, depends, in part, on available financial resources. The following presents some key lessons from the Programme’s efforts on how best to make the case for increased, long-term financing for EbA from public and private sources, including through engagement in national budgeting processes, Payments for Ecosystem Services (PES) and incentive schemes.

Public financing for EbA can be allocated through national budgets across sectors and at multiple scales, ranging from local to regional and national level budgets. EbA-relevant sector budgets have traditionally included those of the water, agriculture and environment sectors. However, making the case for EbA financing in other sectors, such as infrastructure (moving from grey to green) or social protection, is also relevant, especially given that the environmental sector is often underfunded.

Engaging with regional and district governments on budgeting for EbA from public finance sources can be particularly relevant, given how important these levels are for implementing EbA at a landscape or ecosystem scale. Integrating EbA into, for example, cross-sectoral district development planning and budgeting, provides an opportunity for EbA financing.

The Programme’s engagement in the development of Peru’s policy guidelines for public investment in biodiversity and ecosystems showed that providing technical guidance to the policy process while showcasing benefits of EbA on the ground were both important in making the case for EbA finance (Box 4). Whereas communities were interested in seeing tangible and mainly livelihood-related EbA results on the ground, hard data on economic benefits and cost-effectiveness provided by cost-benefit analysis was particularly important in making the case for EbA to government decision-makers.4

As shown by the Peru PIP (Proyectos de Inversion Publica) proposal process (Box 4), mainstreaming EbA into government policies and budgeting processes at national level can have a far-reaching impact on EbA finance in the long run. It can also enable the integration of EbA into national, regional and local planning and implementation processes.

Payments for Ecosystem Services (PES) provide a relevant model for EbA financing. Where a state or private “buyer” of services is available, such payments can provide additional financing for verified EbA interventions undertaken by farm households as "sellers" of such services. Establishing such schemes can also increase understanding of the value of

Box 4 | Public Investment in Ecosystem-based Adaptation in Peru

The Mountain EbA project collaborated with the Ministry of Economy and Finance and the Ministry of the Environment (MEF) and Natural Resources (MINAM) on development of policy guidelines for public investment in biodiversity and ecosystems. The guidelines provided an opportunity for making the case to both ministries for increasing public investment in EbA. The project played a key role in incorporating EbA in the guidelines through participating in ad hoc working group meetings, and providing technical guidance and text suggestions on ecosystem-based adaptation measures.

The Policy Guidelines for Public Investment in Biodiversity and Ecosystem Services 2015-2021 were approved by Ministerial Resolution of MINAM in August, 2015. They provide a guiding framework for formulating and implementing public investment projects at local, regional and national level. EbA is identified as a policy guideline under the specific objective of conserving and restoring biodiversity. EbA actions are further identified as an expected result of the guidelines.

These guidelines enable the sustained mainstreaming of EbA into government planning and investment in Peru through Proposals for Public Investment Projects (PIP). As a result, EbA has become relevant for public investments across sectors and at multiple scales from municipal to regional and national level. It also enables public investment to shift from traditional, grey infrastructure to EbA-type measures. It is therefore hoped that this successful integration of EbA into the guideline will have a far-reaching impact on increasing the number of EbA actions on the ground.

Sources: J Leslie & E Fernandez-Baca 2015, pers. comm.; MINAM (2015)
ecosystem services and act as an incentive for implementing EbA at, for example, a catchment scale. EbA measures can help secure ecosystem services such as water provision, carbon storage and biodiversity conservation, which can be applicable for PES payments.

The ECOTRUST PES facility in Uganda provided learning on how EbA measures can be used to bundle watershed and carbon services into credits for sale (Box 5). Climate Change Adaptation Plans including EbA measures were developed at Parish level with local government. This contributed to the sustainability of the EbA measures supported by the incentive scheme, and integrated these into broader adaptation strategies. The government of Uganda has already expressed its support for the PES facility and possible upscaling. The facility has the potential to become self-sustaining through the continued generation of credits by implementing catchment-scale EbA measures in line with local adaptation strategies.

Community economic incentive schemes were important in making the case for EbA at local level to communities and local government. This was especially the case before the long-term benefits of EbA measures could be shown, either due to the early stage of implementation or the time needed to achieve catchment-scale impact. Such schemes enhanced community commitment to implementing and maintaining mid- to long-term EbA measures.

Incentive schemes for EbA should form part of a broader approach to adaptation planning and implementation. Supported EbA measures need to form part of broader adaptation strategies, so as to contribute to longer-term benefits and ensure sustainability of adopted measures, with or without incentive schemes. Local government officials and staff can play an important role in providing, for example, technical support and oversight of compliance with EbA targets.

Identifying EbA measures that produce new or enhanced ecosystem goods and services, such as the provision of indigenous plant products in Nepal or vicuña wool in Peru, can provide an alternative source of financing through sale on markets, and enhance the sustainability of implemented measures.

There is significant potential to make the case for financing for EbA through public finance, incentive schemes, PES and the creation of new markets for products. However, additional piloting, testing and capturing of lessons learned is needed. This learning can build on relevant existing schemes such as PES, environmental incentive schemes, supply chain initiatives or national climate budgeting.

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**Box 5 | Payments for ecosystem services (PES) for EbA in Uganda**

In Uganda, the Programme is implementing a PES facility through the Environmental Conservation Trust of Uganda (ECOTRUST). The PES facility provides upfront funding to farmers to initiate adaptation activities and uses the market to increase cash flow and invest in the expanding number of participating farmers. Performance-based payments administered by ECOTRUST cover both watershed and carbon services generated by the adaptation measures. Bundled credits based on planting trees, soil and water conservation measures and riverbank management to protect watersheds and to store carbon, are sold on the international carbon market. The scheme aims to incentivize the adoption of EbA measures.

The model is innovative in that it provides payments to farmers directly based on credits, sold to buyers in other countries through voluntary markets, for the ecosystem services provided by the implemented ecosystem-based mitigation and adaptation measures (carbon sequestration and watershed services).

It is hoped that the continued sale of watershed and carbon credits will enable the number of farmers participating in the scheme to continue to grow, helping the scheme to become self-financing. Further, the goal is for initial pilots to be scaled up to a broader catchment level.

REFERENCES


END NOTES

1 For more information, please see Rossing (2015).

2 For more details, please see Rossing (2015).

3 Maladaptation, as defined by the IPCC: “Any changes in natural or human systems that inadvertently increase vulnerability to climatic stimuli; an adaptation that does not succeed in reducing vulnerability but increases it instead.” IPCC, 2001 (Third Assessment Report, Glossary).

4 For more information, please see Rossing et al. (2015).

INFORMATION ABOUT LEARNING BRIEF SERIES

This brief is part of a series of learning briefs produced by UNDP. These briefs draw together experiences and lessons learned from working on ecosystem-based adaptation (EbA) within the global Ecosystem-based Adaptation (EbA) in Mountain Ecosystems Programme from 2011 to 2015. The content also draws on lessons generated by the broader global EbA community of practice. The briefs are designed for practitioners, including local government representatives, civil society organizations and other actors working on climate change issues. They will also be useful for policy makers and donors engaged in planning and allocation of resources for adaptation action.

The Programme is a partnership between UNDP, UNEP and IUCN, with funding from the International Climate Initiative of the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB). This global partnership also involves national and regional government agencies, civil society and local communities in Uganda, Nepal and Peru. By promoting the use of sustainable management, conservation and restoration of ecosystems, as part of an overall adaptation strategy, the Programme aims to reduce the vulnerability and enhance the resilience of fragile mountain ecosystems and their local communities to climate change impacts.
LEARNING BRIEF SERIES
This learning brief is part of the following series:
1. Introduction to Ecosystem-based Adaptation: A nature-based response to climate change;
2. Generating multiple benefits from Ecosystem-based Adaptation in mountain ecosystems;
3. Making the case for Ecosystem-based Adaptation;
4. Making the case for policy change and financing for Ecosystem-based Adaptation.

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MAIN COUNTRY PARTNERS FOR THE MOUNTAIN EBA PROGRAMME

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<thead>
<tr>
<th>NEPAL</th>
<th>PERU</th>
<th>UGANDA</th>
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<tbody>
<tr>
<td>Ministry of Forest and Soil Conservation, Department of Forest</td>
<td>Ministry of Environment; National Service of Natural Protected Areas</td>
<td>Ministry of Water and Environment</td>
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<tr>
<td>Ministry of Science, Technology and Environment</td>
<td>Ministry of Economy and Finance; The Mountain Institute (IUCN’s implementing partner)</td>
<td>Ministry of Finance Planning and Economic Development</td>
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<td>Nor Yauyos Cochas Landscape Reserve</td>
<td>Ministry of Agriculture Animal Industry and Fisheries</td>
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<td>Machhapuchre Development Organization and Aapasi Sahayog Kendra (ASK) Nepal</td>
<td>Regional governments of Junín and Lima and the district municipalities and community authorities in the Reserve</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>Panchase Protected Forest Council</td>
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<td>National Planning Authority</td>
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Source: Mountain EbA Programme (2014)