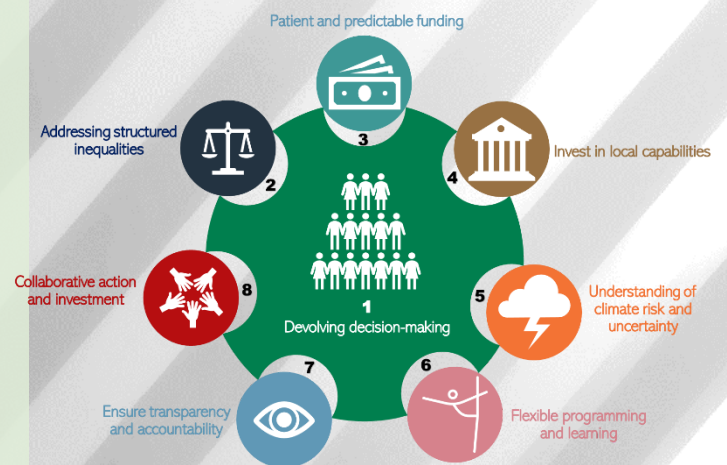




Regional partnership for localization of NDC through community-led 'local adaptation innovation hubs' in the Asia-Pacific Region

AOA2022-01MY-SHIVAKOTI

EIGHT PRINCIPLES OF



LOCALLY LED ADAPTATION (LLA)

2026

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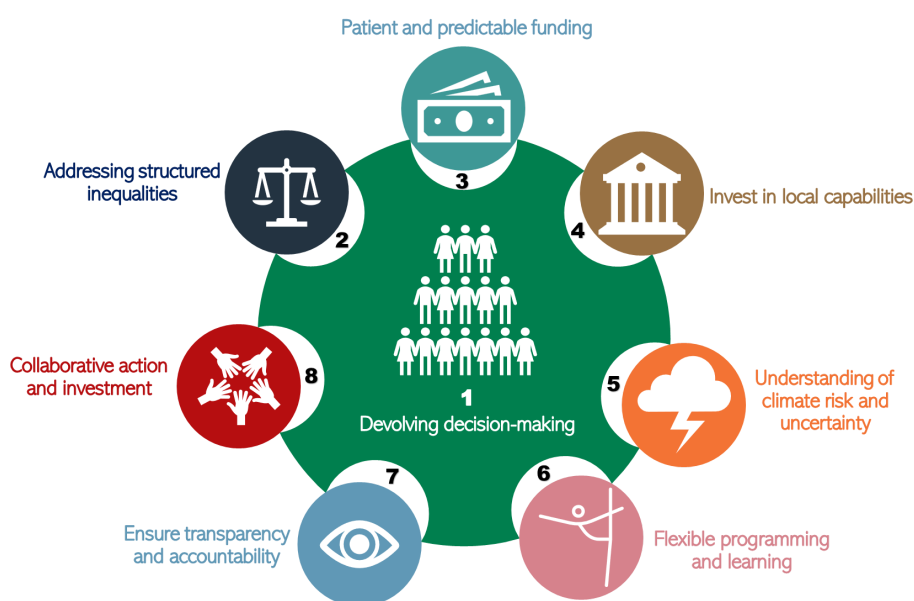
The use of geographic names, boundaries and related data on maps, and in lists and tables within this publication are not warranted to be error-free, nor do they imply any endorsement by APN

¹ At the beginning of the project, Dr. Chi Huyen Truong led the project in Nepal as the coordinator of HUC Secretariat at ICIMOD, Kathmandu

1. Summary

Nationally Determined Contributions (NDCs) define countries' commitments under the Paris Agreement, including planned adaptation strategies and actions. Although NDCs represent national-level commitments, their execution, especially those related to adaptation, is highly localised in practice. Effective adaptation, therefore, requires institutional mechanisms that systematically recognise and integrate local adaptation efforts into national policy and planning frameworks. Consequently, localising NDC commitments is essential to raise awareness regarding the distinct roles and responsibilities of grassroots actors and to enhance engagement across subnational stakeholders.

EIGHT PRINCIPLES OF



LOCALLY LED ADAPTATION (LLA)

To address this need, locally led adaptation (LLA) has emerged as a new paradigm that aims to transfer decision-making authority to local stakeholders for the design, planning, implementation, and monitoring of localised adaptation actions. The eight principles of LLA, introduced by the Global Centre on Adaptation and endorsed by over 150 organisations—including governments, development agencies, non-governmental organisations (NGOs), and community-based organisations (CBOs)—provide a structured framework for shifting decision-making power to local actors to strengthen grassroots resilience. LLA demands an equitable, inclusive, and just approach to adaptation by positioning local stakeholders—particularly vulnerable groups such as women, older persons, children, Indigenous Peoples, and youth—as active leaders rather than passive beneficiaries. Ultimately, this framework recognises local communities as pioneers capable of innovating adaptation solutions driven by situational needs and supported by inherent indigenous, traditional, and local knowledge (ITLK) systems.

Despite growing recognition and advocacy for LLA, significant gaps persist in how to put these principles into practice as a part of planned local adaptation and subsequently linking them to national priorities articulated in NDCs and National Adaptation Plans (NAPs). The inherent potential of local stakeholders remains highly fragmented, with existing locally led responses occurring largely as reactive and autonomous coping measures. Consequently, these locally driven actions are difficult to identify, document, and integrate into macro-level frameworks. Furthermore, persistent localised capacity constraints—specifically regarding finance, technology, scientific information, and decision-support tools—hamper the effectiveness and scalability of grassroots efforts, preventing them from emerging as self-sustaining hubs of local adaptation innovation. Addressing these systemic gaps requires comprehensive, multi-level capacity building to enable communities to mitigate internal institutional weaknesses, identify and leverage their adaptive potential, and improve alignment with national commitments.

As a contribution to the capacity-building pillar of the Asia-Pacific Climate Change Adaptation Information Platform (AP-PLAT), this project investigates local capacity needs for putting LLA into practice and connecting local adaptation priorities with NDCs and NAPs. The project uses a "Model Case Site (MCS)" approach to evaluate LLA principles and formulate an "LLA Blueprint" that can assist local stakeholders in prioritising and autonomously implementing adaptation actions. Crucially, ITLK systems are central to this methodology, serving as the foundation for all subsequent adaptation planning and action.

2. Objectives

The overarching objective of the project is to catalyse adaptation innovations by addressing capacity gaps at the local level. To this end, the project will identify and respond to capacity constraints through the following four specific objectives:

1. Enhancing the understanding of climate risks and vulnerabilities at the local level;
2. Foster locally led adaptation innovations, stressing on the application of indigenous, traditional and local knowledge (ITLK) systems;
3. Co-developing a blueprint of LLA to support bankable ideas aimed at establishing a 'local adaptation innovation hubs'; and
4. Strengthening local adaptation planning, implementation and governance systems to ensure inclusiveness, participation, transparency and better localisation of NDCs.

3. Outputs, Outcomes and Impacts

Outputs	Outcomes	Impacts
LLA assessments in three model case sites (MCSs) in Fiji, Nepal, and Vietnam	Enhanced understanding of the state of LLA in three MCSs: • <i>Understanding of climate change impacts by local communities based on ILTK and own experiences over time.</i> • <i>Identification of key responses (ITLK, modern, hybrid) used by local communities autonomously, i.e., locally led, including their strengths and limits</i> • <i>Co-design of LLA solution packages to address climate risks and enhancing resilience</i>	• <i>The project was effective in raising the awareness about local led adaptation (LLA) action and innovations to address climate change impacts to local communities in three MCSs</i> • <i>Verified the importance of ITLK systems for LLA action with local communities as well as further need to integrated them with modern science to address future climate impacts effectively</i> • <i>Enhanced the local capacity of the community through co-design workshops and discussions</i> •
Regional engagements to promote LLA	• <i>Extensively shared the concept of LLA to diverse audience from government, regional knowledge institutes, donors, NGOs, INGOs.</i> • <i>Introduced the project initiatives in three MCSs to operationalise the LLA principles by capitalising existing resources and capacity</i> • <i>Shared cases and experiences on the ground about locally led initiatives to highlight potentials and challenges for replicating LLA actions</i> • <i>Took initiative to link the initiative with regional forums and processes such as Gobeshona Global Conference, APAN Forum, LLA Community-of-Practice, CRPP Forum led by ADB, etc.</i>	• <i>Better understanding about the joint initiatives by APN and IGES to promote LLA in the Asia-Pacific as a contribution to the AP-PLAT</i> • <i>Attracted a large number of audience and partners seeking collaboration and ideas on LLA</i> • <i>Formed cross-cutting Workgroup on Indigenous Local Knowledge and Locally-Led Adaptation (ILK-LLA) under Asian Mountain Academic Alliance (AMAA)</i>

Formulated LLA blueprint	Conceptualised LLA blueprint as a practical as an intermediary framework to translate abstract LLA principles into real-world practice. The blueprint assists local community to prioritise actions to be implemented (what), resources, means and capacity required (how), and actors and processes (who) The LLA blueprint consists of six operational elements as follows: • <i>Build local capacity to understand climate change risks, vulnerabilities, and the impacts</i> • <i>Profile ITLK-based, modern, hybrid responses highlighting their strengths and limits</i> • <i>Prioritise ideas and solutions for adaptation and resilience-building</i> • <i>Map resources, means of implementation, and capabilities</i> • <i>Ensure meaningful participation and institutionalize the process</i> • <i>Devise locally appropriate monitoring, evaluation and learning (MEL) systems for a robust bottom-up adaptation communication</i> The blueprint is anticipated to be useful for local community improve existing autonomous response mechanisms into self-sustaining climate actions, act as a diagnostic tool to amplify the awareness and visibility of grassroots climate actions, and emerge as “LLA innovation hubs”	• <i>The need for LLA blueprint was validated with consulted stakeholders in all MCS</i> • <i>The concept was further shared during the 9th APAN Forum and received extensive feedback from participants representing different organisations</i>
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4. Key facts/figures

- Co-organised, contributed or attended over 10 regional events (two APAN Forums, three Global Gobeshona Conference, ISAP 2024, 2026 Indigenous Arts Festival & International Forum at JinFong, organized by Taitung County and ICLEI Kaohsiung Capacity Center, Taiwan, Second International Conference on Indigenous-Led Research and Education from 29-30 September 2024, International Conference on Advancing Solutions for Climate Change Challenges in Rural Viet Nam on 4-7 November 2024, CCRP Forum 2025, Working group meeting of “Cross-cutting Workgroup on Indigenous Local Knowledge and Locally-Led Adaptation (ILK-LLA)” and hybrid webinar “Many Ways of Knowing: Indigenous Local Knowledge and Locally-Led Adaptation in Asian Mountain Contexts attended by participants from Nepal, India, Bangladesh, Pakistan, Bhutan and New Zealand)”
- Organized capacity building events in three MCSs directly benefitting over 50 participants in each, mainly targeting youths and women.
- IGES and APN co-organized the session “Challenges and opportunities for promoting locally led adaptation: Cross learning from Nepal, Fiji, Vietnam” at the Global Gobeshona Conference (GGC3) in March 2023 was one of the top 10 most attended events out of the 64 sessions
- Published/submitted four articles (conference papers, journal article, APN science bulletin, a regional report)
- Seminar on LLA and ITLK provided to graduates students and faculty (about 100) of University of Faisalabad, Pakistan.

5. Publications

- Nunn, P. D., King, T., Kumar, R., Shivakoti, B. R., Zavar, E., Geraghty, P., Korovulavula, I., Kotra, K. K., Ram, A., & Sekinini, S. T. (2026). Contextualizing future climate-forced community relocations on islands: The long history of water-related settlement mobility in Ra Province, Fiji. *Human Ecology*, 54(2), 26. <https://doi.org/10.1007/s10745-026-00685-2>
- [Submitted Draft] Shivakoti, B. R., Truong, C. H., Son, H. N., Nunn, P., Kumar Nunn, R., Kharel, M., & Stevenson, L. A. (2026). Locally Led Adaptation (LLA) Built on Indigenous, Traditional and Local Knowledge (ITLK) Systems: Lessons from Fiji, Nepal and Vietnam. *APN Science Bulletin*, xx(##). <https://doi.org/xx.xx/xx>
- Son, H. N., & Huyen, D. T. (2026). Agritage Viet Nam: Reviving Agricultural Heritage and Ecotourism for Locally Led Adaptation in the Uplands of Son La Province (Asia-Pacific Synergies Report: Advancing Synergistic Solutions to the Triple Planetary Crisis and the SDGs) [Supplementary Appendix: Compendium of Case Studies on Synergies in Asia and the Pacific]. ESCAP, UNEP, ADB.
- Son, H. N., Tuan, B. T., Cuong, N. D., Nunn, P., & Shivakoti, B. R. (2024). Role of local place-based knowledges in sustaining locally-led adaptation to climate change in Northern Vietnam. International Conference on “Advancing solutions for climate change challenges in rural Vietnam”, 4-7 November, 2024. <https://doi.org/10.15625/vap.2025.0117>

6. Media reports, videos and other digital content

Not significant

7. Pull quotes

“By co-creating adaptation solutions that blend traditional, indigenous, and local knowledge (ITLK) systems with science and modern technology, the project transforms capacity gaps into actionable, locally led innovations—delivering ready-to-apply blueprints that strengthen resilience to both current and future climate risks” - Prof. Ho Ngoc Son, (ADC), Thai Nguyen University of Agriculture and Forestry, Vietnam. (Project collaborator from MCS-Vietnam)

“Through the Project, researchers and practitioners from four HKH countries had valuable opportunities to interact, share knowledge, innovative applied research methodologies, and co-create new knowledge and solutions that are meaningful for local stakeholders. The efficient regional coordination mechanism helped facilitate equitable participation in the project across institutions, disciplines, and career stages (cohorts)” - Dr. Chi Huyen Truong, Coordinator, Asian Mountain Academic Alliance (AMAA), Kathmandu, Nepal (project collaborator from MCS-Nepal)

The project raised awareness among young people on how important it is to conserve and disseminate local knowledge to others in order to preserve traditional and cultural subsistence livelihood practices of the past to ensure food security in light of changing climate impacting coastal communities in Fiji- Dr. Roselyn Kumar Nunn (project collaborator from MCS-Fiji)

8. Acknowledgments

We are grateful to large number of institutes, students and youths, community members, media, local government, and partner institutes for their active engagement and support to this project, especially, three model case sites (MCSs) from Fiji, Nepal and Vietnam. AGRITAGE Vietnam for sharing their model. Special acknowledgements are due to APAN Forum Secretariat, ISAP2024, Gobeshona Global Conference (GGC), CIPRED Nepal the organizer of the Second International Conference on Indigenous-Led Research and Education, 2024, Taitung County and ICLEI Kaohsiung Capacity Center the organizers of 2026 Indigenous Arts Festival & International Forum at JinFong, Taiwan for providing the platform to share the project activities and findings.

We appreciate following for providing cross-learning opportunities and knowledge exchanges on LLA:

- Louie Robinson M. Bacomo, Jesuit Refugee Service and Rowena Soriaga, Environmental Science for Social Change for introducing LLA activities in Bohol Philippines
- Takeshi Takama, su-re.co Sustainability and Resilience for introducing LLA actions based on agroforestry and organic waste recycling in Bali Indonesia
- Debora D. Utami, YAKKUM Emergency Unit for sharing disaster preparedness training, community livelihood initiatives to recover from disasters and community facing mental trauma in Yogyakarta, Indonesia
- AAMA for co-organizing workshop to exchange LLA experiences from MCSs to knowledge partners from India, Pakistan, Bhutan, Nepal, Bangladesh and Fiji.
- ADB for the invitation to attend CRPP Partnership Forum 2026, which is an annual event under the Community Resilience Partnership Program (CRPP) that brings together community leaders, government officials, development partners, think tanks, the private sector, financial

institutions, and global climate funds to discuss investments in climate adaptation that explicitly target the nexus of climate change, poverty, and gender.



Prof. Saleemul Huq speaking during APN-IGES session “Enhancing Community Resilience: Promoting Effective Governance for Locally Led Adaptation in the Asia-Pacific Region” at the 8th APAN Forum, Incheon, Korea, August 2023

Deep condolences!!

We are saddened by passing of Prof. Saleemul Huq, Director of the International Centre for Climate Change and Development (ICCCAD). As one of the leading pioneers of locally led adaptation (LLA), he inspired us, since the inception of this project, to pursue and explore ground evidences on LLA. He provided wonderful platform Gobeshona Global Conference to share the project finding. Our deep condolences!!

9. Appendices

- 1) Draft of APN Science Bulletin
- 2) Project related publications
- 3) Regional workshop, forums, and events organised or contributed as a part of this project
- 4) Summary of findings from three MCSs
- 5) Outline of LLA blueprint