## Kathmandu Valley Development Authority Anamnagar, Kathmandu, Nepal



# Urban Ecosystem-based Adaptation for Climate-resilience Development in the Kathmandu Valley, Nepal Project (in short: Urban-EbA Project)

#### Terms of Reference (ToR)

ORGANISATIONAL LOCATION:	Kathmandu Valley Development Authority
DUTY STATION:	Urban EbA Project Management Unit (frequent field visits to project areas in Kathmandu Valley)
FUNCTIONAL TITLE:	Environment and Climate Change Adaptation Safeguard (ECCAS) Expert
DURATION:	February to December 2025
CONTRACT MODALITY:	Individual Contract (part time consultant)
OPEN TO:	Nepalese Citizen Only
SUPERVISED BY:	Deputy National Project Director, Urban EbA Project/KVDA with support from National Project Manager, Urban EbA Project
DIRECT REPORTING LINE	Development Commissioner and National Project Director
MATRIX REPORTING LINE	Deputy National Project Director and National Project Manager
DIRECTED & APPROVED BY	Approved by Development Commissioner (KVDA) and directed by National Project Director, Urban EbA Project

#### **Organizational Context:**

KVDA has the responsibility to prepare and implement land use plans for the entire Kathmandu Valley following the Kathmandu Valley Development Act, 1988. According to the KVDA Act 1988, the Kathmandu Valley Development Authority has the power to:

- a) Impose by public notice a ban on any type of physical change in any property within the area prescribed for a period not exceeding three years;
- b) Stop any action taken without prior approval or in violation of the given terms and conditions;
- c) Undertake land development programs for planned and organized urban development;
- d) Mobilize financial resources, upon approval of the Government of Nepal to meet necessary expenses.



#### **Background of the Project:**

Nepal is globally ranked the 20<sup>th</sup> most multi-hazard-prone country<sup>1</sup> and one of the high-risk countries in terms of vulnerability to climate change impacts<sup>2</sup>. From 1971 through 2014, Nepal experienced an average annual temperature increase of 0.06°C. Studies confirm that Nepal is highly likely to experience an increasing trend of frequent extreme climatic events, such as cloud bursts leading to severe floods, increased incidences of drought phenomena, high temperatures, and rapid glacial retreats. Climate change impacts contribute significantly to Nepal's Economic Vulnerability Index; at the same time, it is one of the least ready countries to adapt to these impacts. The direct costs of current climate variability are estimated to be 1.5% to 2% of the current annual GDP in Nepal,<sup>3</sup> with a high probability to spike to 2.2% by 2050 and 9.9% by 2100. If adaptation and mitigation actions are put in place, the loss can be reduced to around 2.4% of GDP by 2100.

Nepal has been undergoing rapid urbanization. However, urbanization has been unplanned and haphazard at the cost of the natural environment; impacting ecosystems integrity and their services, including water, clean air, temperature regulation, and food security. Unplanned and haphazard urbanization lacks risk-sensitive and pro-poor urban planning, resulting in new exposure to weather and climate-induced hazards (for people and infrastructure). For example, the National Adaptation Plan (NAP), 2021-2050 identifies that the major climate-induced disasters in the Kathmandu Valley are landslides, floods, and droughts, and the number of people and units of infrastructures affected by landslides and floods has increased significantly over the last four decades. Increased incidences of flooding and landslides induced by rainfall intensity; recurring dry spells and reduced water availability actuated by the rise of temperature have been the new normal in the Kathmandu Valley. Additionally, Kathmandu Valley is experiencing an urban heat island (UHI) effect, and it has been a growing concern for city planners as it impacts human comfort, productivity, urban economy, and ecology<sup>4</sup>.

Hence, there is a need for durable solutions to cope with and adapt to climate change impacts in the urban context of Kathmandu Valley. Ecosystem-based Adaptation (EbA)<sup>5</sup> is evolving as one of the impactful adaptation strategies for climate risk resilience building in Nepal. EbA measures can help ecosystems recover, sustain, and thrive, thereby helping the people depending on their services to be resilient in the face of rising risks of climate change. The climate policies of the Government of Nepal underscore the EbA as an approach to fight climate change. However, the EbA in the Kathmandu urban setting is a new phenomenon that lacks the adequate scale of evidence consisting of new EbA knowledge and good practices instrumental to formulating or refreshing urban planning strategies, frameworks, guidelines, and programming in the backdrop of rising impacts of climate change in Kathmandu valley. Further, institutional capacity, including limited technical expertise, knowledge, and awareness of urban EbA among all tiers of government, private sector, and communities, are slowing the adoption of the EbA approach in the valley.

The project "Urban Ecosystem-based Adaptation for Climate-resilient Development in the Kathmandu Valley, Nepal" (Urban EbA) was approved by the Global Environment Facility (GEF) in 2019. The project is planned to be implemented covering five municipalities in the Kathmandu Valley. The Kathmandu Valley Development Authority (KVDA) executes the project, with the United Nations Environment Programme's (UNEP) oversight, and the project end date as December 2025.

The overarching objective of this project is to build the resilience of the local communities in the Kathmandu Valley to increasing impacts of climate change, such as flooding, landslides, and drought. The project interventions aim to mainstreaming EbA into planning frameworks, budgeting and implementation mechanisms of the KVDA and five target municipalities, as a demonstration to decrease the climate-induced impacts, particularly urban flood, pollution, drought, heat. Project interventions directly benefit 82,400 people in the selected six wards in the target five municipalities, namely

2

 $<sup>^1\</sup> Country\ Profile:\ Nepal,\ Disaster\ Risk\ Management:\ Policies\ and\ Practices\ in\ Nepal\ Rameshwor\ Dangal\ 2011$ 

<sup>&</sup>lt;sup>2</sup> Ministry of Population and Environment 2016. Nepal Earthquake 2015: A Socio-Demographic Impact Study.

<sup>&</sup>lt;sup>3</sup> MoSTE, 2014. Economic Impact Assessment of Climate Change in Key Sectors in Nepal. Kathmandu: Government of Nepal, Ministry of Science, Technology and Environment (MoSTE), Kathmandu.

<sup>&</sup>lt;sup>4</sup> Assessment of Urban Heat Island of Kathmandu Valley. The Geographical Journal of Nepal. Vol. 14, 120. 2021

<sup>&</sup>lt;sup>5</sup> EbA is defined as the use of biodiversity and ecosystem services for climate adaptation.



Kathmandu Metropolitan City, Madhyapur Thimi, Tokha Municipality, Tarkeshwor and Budhanilkantha Municipalities, where EbA interventions will be demonstrated, while the entire municipal population will be the indirect beneficiaries of the project, through institutionalization and mainstreaming of the EbA in the municipal and KVDA's annual planning process.

Moreover, the project adopts a proof-of-concept approach to i) enhance groundwater recharge; ii) improve soil stability; iii) check urban flooding surge; iv) reduce urban heat effect, and v) build the resilience capacity of urban households. At the same time, the entire Kathmandu population will benefit indirectly through institutionalization and mainstreaming of the EbA in the municipalities and KVDA's decision-making and annual planning process.

Additionally, the project will produce socio-economic and environmental co-benefits to the city dwellers; there will be research-based evidence for the efficacy, reliability, and cost-effectiveness of urban EbA measures leading to the policy, planning and programming integration EbA as an adaptation approach into future urban planning in Kathmandu Valley.

Urban EbA Project is hiring Environment and Climate Change Adaptation Safeguard Expert (ECCAS) to assist the Urban EbA Project Management Unit with the following scope of work and responsibilities.

#### **Scope of Works & Working Relationship:**

The Environment and Climate Change Adaptation Safeguard Expert (ECCAS) expert will be responsible for assisting in developing environment and climate change annual safeguard plans, their implementation and prepare documentation of processes, outcomes and learning.

The ECCAS Expert will work under direction of National Project Director (NPD). Deputy National Project Director (DNPD) will provide technical guidance and directly supervise him/her while National Project Manager (NPM) will assist as needed. S/he will work collaboratively with the Technical Advisor, other staff and consultants of the project to ensure the availability of information on progress and performance in project implementation.

### **Duties and Responsibilities:**

- Prepare environment and climate change adaptation annual safeguard plan for the project.
- Prepare different safeguard plans for different programs within the project
- Coordinate with concerned staff, consultants/service providers, and local governments, local communities related to different activities of the project during implementation of safeguard plans.
- Ensure environment and climate change adaptation measures in the contracts with service providers and contractors in the course of the implementation of project activities.
- Prepare environment and climate change adaptation annual safeguard reports.
- Prepare environment and climate change adaptation training content, organize and facilitate events of training on environment and climate change adaptation annual safeguard.
- Support National Project Director, Deputy National Project Director and National Project Manager in project related matters.

#### **Academic Qualifications and Experience**

• A master's degree in environmental science, sociology or other relevant subject ( natural



resources management, social work, anthropology, environmental management, environmental engineering, ecology, or climate change )

- Minimum of five years' experience in climate change, environmental, or social safeguards.
- Experience in conducting training and in developing training materials for safeguard related capacity building initiatives.
- Ability to communicate fluently in Nepali and English both verbally and in writing
- Skill of information management.
- Computer skill and experience.

<<End of the ToR>>