

Knowledge Transfer of Nature-based Solutions through education to Enhance Climate Change Adaptation and Resilience in Uganda (**NbS-4-Climate**) 101178503

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Author(s)	Valasia Iakovoglou, Georgios Gkiatas and George N. Zaimes		
Organization Name(s)	Dimokritio Panepistimio Thrakis (Democritus University of Thrace)		
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1. Climate Change and Africa

Climate change is having and will continue to have serious impacts on all continents globally. This is particularly true for Africa that despite contributing negligibly to the changing climate, ~2-3% of the global emissions, it is considered as one of the most vulnerable regions. Unfortunately, the poor and rural areas are disproportionately vulnerable to its effects. The reason is the lack of resources to afford goods and services that does not allow them to buffer themselves from the impacts of the changing climate effects. Further, the remaining glaciers in Africa are expected to melt. This will have an immediate negative effect on the water supply that is essential for the agricultural production of the region. This decrease in water, along with the changing precipitation patterns and more extreme weather will threaten human health and safety, the security of food and water, the socio-economic development and the increase of poverty, and population displacement in Africa. Global poverty is one of the world's worst problems without the deleterious impact of climate change. The gross domestic product in the Sub-Saharan Africa could be reduced by 3 %. Also, already one in three of its inhabitants, or over 400 million people, live below the global poverty line, that is less than \$1.90 per day.

Ovais Sarmad, Deputy Executive Secretary, UN Climate Change states that the changes due to global warming that are happening in Africa, require accurate and current data for adaptation planning to mitigate the impacts. The UN Climate Change secretariat is supporting countries to develop National Adaptation Plans that identify and manage climate risks. The UN Environmental Program Africa is focusing on supporting countries to establish a structure for implementing their climate action commitments – well known as Nationally Determined Contributions (NDCs). These commitments need to meet leading socioeconomic priorities such as food security, creation of income and enterprise opportunities for the youth and economic expansion.

Climatic alterations have seriously affected rainfall throughout the continent of Africa. Agriculture, that is one of the critical pillars for economic growth of African is heavily dependent on rainfall, and vulnerable to the impacts of climate change. For example, the Sahel, that is primarily rain-fed agriculture, is experiencing regularly droughts and floods, that both destroy crops and reduce yields. African countries are expected to have shorter wet spells (leading to droughts) or heavier rains (causing floods), leading to reduced food production because they lack the infrastructure and support systems that exist in wealthier nations. By 2030, crop yields across the continent are projected to decrease significantly. This indicates that more sustainable agriculture practices need to be adopted in order to mitigate the potential reduction of agricultural products, while at the same time reinforcing job opportunities at those rural sites (e.g., nature-based solutions). If new, innovative and environmentally friendly approaches are not adopted the impacts of climate change in Africa will be deleterious to the natural and human-made ecosystems and the people's well-fare.





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2. Climate Change and Uganda

Focusing on climate change on the partner country that is Uganda, based on its greenhouse emissions it contributes < 0.1% based on the global scale. Nonetheless, the increased agricultural and deforestation practices in accordance with the increased adverse climatic effects have resulted in a 50% increase from 2000-2012. Rural areas are suffering because of greater variability and extreme weather events, and increased temperatures. Furthermore, the decline of rainfall is a serious issue since 85 % of its farmers have rain-fed agriculture. Increasing heat and recurrent droughts due to climate change contribute to severe crop and livestock losses, leading to famine, displacement, and other threats to human health and wellbeing. Many of the natural ecosystems (main attraction of tourism) are also impacted by climate change with many worried that irreversible changes might occur. Agriculture is the leading source of greenhouse gas emissions in the country, largely driven by livestock operations. Thus, it is clear that strategies need to be implemented to promote sustainable agriculture and conserve natural ecosystems.

Uganda is a landlocked country that has several natural and unique areas. Specifically, it has 60 protected areas and 10 National parks with two being characterized as UNESCO World Heritage Sites. It has a wide variety of unique ecosystems and habitats that range from savannahs to rainforests. Proper measurements need to be taken to sustainably manage those ecosystems for the short and long-term multi-level benefits. Nature-based solutions (NbS) have the potential to enhance the conservation of, not only the natural, but also the historical and cultural resources, improve the livelihoods of local communities and enhance the development of Uganda.

Uganda also has one of the highest populations increase rates worldwide. That means new jobs every year must be increased, to keep up with population growth. Further, according to the World Bank (2020), large portion of Uganda’s population lives below the poverty line (~ 21.4%). Climate change and deforestation are major issues Uganda, will further hinder sustainable development. Deforestation practices, particularly of “protected” areas, has also led to benefits reduction received by forest ecosystem services, while increased ecological and environmental problems, including loss of biodiversity and land degradation that further triggers poverty levels. Also, due to climate change, the frequently and intensity of extreme droughts and floods have escalated the risk of disasters such as landslides that seriously negatively affecting the agriculture-dominated economy of Uganda. The country of Uganda has realized the importance in sustaining healthy ecosystem and started taken various measures, initiatives, and policies to address climate change mitigation, such as the National Climate Change Policy and the National Adaptation Plans.

To resolve the issues mentioned above measures such as NbS should be adopted that will also generate additional income generation and diversify economic activities in rural communities. Therefore, the promotion NbS could generate new job opportunities, for women and youth of rural areas, while conserving natural environments. For this to happen, well trained graduates specialized on NbS are required. Educational opportunities for people in rural areas should be developed (e.g., workshop, training, distance learning) along with a of local communities, education institutions and green enterprises.

Overall education is a key factor that can help alleviate such problems and should be a priority in Uganda

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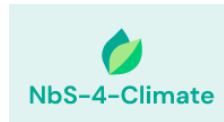
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and other countries of the Sub Sahara region. Specifically, trained professionals on the impacts of climate change, as well as professionals to implement plans and actions to effectively mitigate climate change impacts are in great demand. This can be done efficiently through proper education and training through MSc level courses that will provide those students with the necessary means, knowledge and skillset to mitigate those problems. Specifically, this skillset will educate students with the basic knowledge on climate change and its impacts on the African ecosystems. Also, it will increase their knowledge of new and innovative management methods that are environmentally friendly, effective and sustain long-term benefits. Such methods include NbS that have been successfully implemented in more advanced countries

The analysis conducted on educational programs in different Uganda universities, showed that there has been very limited almost non-exist graduate-level training in the field of NbS. The number and qualifications of the professional staff in Uganda is far below the minimum level required to protect its natural resources. There is a critical shortage of trained technical personnel who can manage the environmental resources including those who can provide policy advice and technical support. In this scientific field there is a clear need for new innovative and modern courses well suited for Uganda. These courses will help improve the current curriculum in environmental management that are outdated and will include EU latest methods and models. Such courses will increase attractiveness, integration, internalization and help contribute to the policy objectives of the European Higher Education Area.

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3. Nature-based Solutions

Based on the European Commission, NbS is defined as “Solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions.” This definition was amended as: “NbS must therefore benefit biodiversity and support the delivery of a range of ecosystem services.”

NbS are being heavily adopted and can create new, green jobs and enhance existing nature dependent sectors. Furthermore, greening cities can make areas more attractive to investors, creating new business opportunities. It has been indicated that NbS can decrease public health costs through their health co-benefits. Green infrastructure and vegetation not only contribute to decreasing pollution thereby reducing associated health risks but also promote healthier lifestyles and improve mental health. By ensuring a fair distribution of these benefits, NbS can also help achieve social and environmental justice goals that are particularly relevant to post-COVID-19 and increased fuel prices. Nature also has a crucial role in providing sustainable solutions to adapt to the new climatic reality and minimizing its potentially devastating impacts. NbS are achieving the conservation and restoration of ecosystems in accordance with their overall sustainable management in order to help people adapt to the impacts of climate change. So, they contribute to disaster risk reduction, build resilient cities, improve water management and contribute to long-term food security. The scientific field has grown increasingly in recent years and has clearly showcased that NbS can deliver a quadruple benefit when deployed properly, supporting agricultural production and resilience, mitigating climate change, enhancing nature and biodiversity and providing new job opportunities. They also provide multiple services and benefits, including food and water production as well as buffering capacities against extreme events (e.g., drought and floods). It encompasses a range of practices that in many cases have been honed by indigenous stewards or known to advocates of “conservation agriculture,” but remain underutilized in mainstream agriculture; for example, integrating native flora into cattle pastures or restoring habitats crucial to watershed health.



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4. Nature-based Solutions Education and Uganda

Based on the impending climate change impacts (previous section), it is imperative not only for Uganda but also all the sub-Saharan countries to adopt and implement NbS. Well trained professionals are a key component in order to fully understand and implement environmentally friendly practices at a large-scale in order to sustainably manage those ecosystems and alleviate the negative climate change impacts. This can be accomplished effectively with the development of new or updated master’s courses in universities of Uganda and should be based on the latest information and methods applied in other more developed countries (e.g., EU). The adoption of these actions contributes to one of the overarching priorities of the European Commission, specifically the Green Deal (including climate change and environment) thus promoting EU internal policies through the field of education. In addition, training professionals in these study field will help at the sustainable economic “green” growth and job opportunities in these countries. This will also promote the economic recovery in the third countries based on the Paris Agreement but also trying to meet Sustainable Development Goals (SDGs), such as the “8- Decent work and economic growth”, “13- Climate action”, “14-Life on land” and “15- Life below water”.

The courses should be updated state-of-the-art, based on new technologies and online methods, thus promoting the overarching goal of digital transformation and data technologies. The Information and Communication Technology (ICT) capacities of the partner countries will also be increased. The quality of higher education of Uganda will be improved; the teaching and courses will be modernized and its relevance for the labor market and society will be enhanced. This should help, primarily rural areas that experience declines in development and increase social, economic and environmental inequalities exacerbated by the COVID-19 pandemic. The new courses should also help meet SDG 4-Quality education. This will be accomplished since the new, innovative and modernize educational program will improve the level of competences, skills and employability potential of students. The Higher Education Institutions (HEIs) capacities will increase with the improved training of teachers and continuous professional development that will help provide long term quality to the education system.

The scientific fields taught are most likely to draw students from groups from the poorest regions that have fewer opportunities. There will also be an effort to attract these groups from rural areas, especially young people. In addition, because females seem to be an underrepresented group in environmental science they will also be targeted. So, the targeted students will be from these less favored groups. NbS-4-Climate, will also provide international cooperation between two continents, fostering cooperation across different regions of the world through joint initiatives and based on multilateral partnerships between organizations active in the field of higher education. Cooperation, capacity building and exchange of good practice among institutions will be accomplished. These activities promote SDG 17-Partnerships for goals. The above also showcase that the NbS-4-Climate will promote the specific overarching priorities for Region 9 Sub-Sahara Africa that are the Green Deal (primarily), but also digital transformation and sustainable growth and jobs. Overall, the activities and outcomes of NbS-4-Climate project will benefit Uganda initially and in the long-term neighboring and other sub-Sahara African countries and their higher education institutions and systems.

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5. NbS-4-Climate Objectives

The **overarching general objectives (GO)** of NbS-4-Climate are (in brackets the related EC overarching priorities):

GO1) Assist newcomers or less experienced HEIs and faculties from Uganda on establishing courses on NbS for climate change adaptation.

GO2) Focus on students (females & young people rural areas) and staff (females) with fewer opportunities to follow opportunities in the NbS sector [*equality-Governance, peace, security and human development*].

GO3) Enhance the knowledge triangle and innovation on NbS for Climate Change Adaptation in Uganda and sub-Sahara Africa [*environmental-climate-sustainability awareness-Green Deal*] through their integration in HEI programs with new/modified courses that introduce innovative elements and include activities with and within businesses.

GO4) Offer high quality, and modern education [*Digital pedagogy- Digital transformation*] to foster excellence by adopting new learning methods and innovative pedagogical approaches (e.g., learner-centered and real problem-based teaching, multidisciplinary courses).

GO5) Provide graduates and professionals with a cultural, environmental and social identity that use NbS competitively and sustainability assuring their future, while also promoting climate change adaptation in Uganda and sub-Sahara Africa [*Climate neutral society-Green Deal*].

GO6) Course integration with businesses, so graduates develop skillsets necessary to be competitive in the labor market [*Stimulate green jobs-Green Deal & Support employability- Sustainable growth and jobs*]; a uniqueness and innovation in the region for MSc courses.

GO7) Develop a new culture of working relationships among HEIs, business and rural communities that will allow HEIs better integration within the wider economic and social environment [*Tackle mismatch between education and labor market demands-Sustainable growth and jobs*].

GO8) Strengthen the knowledge and innovation to promote entrepreneurship on NbS for Climate Change Adaptation in Uganda [*Stimulate green jobs- Green Deal*] and benefit rural communities and conserve ecosystems [*Green and circular economy-Green Deal*].

The **specific objectives (SO)** are (in brackets the related priorities under Strand 1 for Region 9 Sub-Sahara Africa):

SO1) Establish collaboration and working relationships with HEIs that are newcomers or had minimal experiences from ERASMUS in Uganda to reap the benefits of the program and enhance their educational programs or develop new ones on NbS [*Green Deal: contribute to a successful green and sustainable global economic recovery (climate change, environment)*].

SO2) Improve the capacities of students and faculty underrepresented in the NbS (and in environment in general) sector that is male dominated (e.g., females) and have fewer opportunities in education (young

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people rural areas) [*Green Deal: green jobs*] [*Sustainable growth and jobs: skills, employability, job opportunities, rural areas*].

SO3) Design new or updated modern courses that introduce innovative elements of NbS, with the true integration of business [*Green Deal: Contribute to a successful green and sustainable global economic recovery (climate change, environment), awareness raising, green jobs*] [*Sustainable growth and jobs: links to the labour market and jobs creation, private sector involvement*].

SO4) Innovative courses tailored to utilize new technologies to train on NbS to promote Climate Change Adaptation and develop sustainable solutions, utilizing product and process innovation (students, professors and practitioners together) emphasizing the benefits for rural communities. These courses will be taught at the state-of-the-art laboratories established by the NbS-4-Climate [*Digital transformation: Performing digital education eco-systems, teacher training*].

SO5) Development, testing and adaptation of blended courses with clear learning outcomes and key competences, utilizing innovative learning methods such as transversal skills, entrepreneurship, problem solving, green jobs, open and flexible learning, virtual mobility, open educational resources [*Green Deal: contribute to a successful green and sustainable global economic recovery (climate change, environment), green jobs*].

SO6) Develop a virtual learning platform with learning materials in digital format that facilitates learning and assessment [*Green Deal: contribute to a successful green and sustainable global economic recovery (climate change, environment), green jobs*] [*Digital transformation: Performing digital education eco-systems*].

SO7) Running of the pilot courses in Uganda [*Green Deal: awareness raising, green jobs*] [*Digital transformation: teacher training*].

SO8) Courses, jointly taught and delivered between EU and Africa HEIs [*Internalization*].

SO9) Submit for accreditation of modified and/or new courses for both Uganda HEIs [*Green Deal: contribute to a successful green and sustainable global economic recovery (climate change, environment), green jobs*].

S10) Increase the number of specialists or enhance the current specialists' knowledge of the region on NbS to improve Climate Change Adaptation and its potential benefits to rural communities [*Green Deal: contribute to a successful green and sustainable global economic recovery (climate change, environment), stimulate green jobs, climate neutral society, environmental-climate-sustainability awareness, green and circular economy*] [*Sustainable growth and jobs: Skills, entrepreneurship, employability, job opportunities, rural areas*].

SO11) Reinforce the links among education, research, business and communities by actively engaging HEIs with the business and research world through the NbS Network with institutions of the region. Emphasis will be given to also engage rural communities that will most likely benefit and implement NbS [*Green Deal: contribute to a successful green and sustainable global economic recovery (climate change, environment), climate neutral society, environmental-climate-sustainability awareness*] [*Sustainable growth*].

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and jobs: links to the labor market and jobs creation, rural areas, private sector involvement].

SO12) Enhance the awareness on sustainable management with NbS to enhance rural communities and Climate Change Adaptation [*Green Deal: awareness raising, green jobs*].

SO13) Disseminate the results to a wider audience to be adopted by HEIs from other countries of the region [*Green Deal: awareness raising*].

SO14) Exploit the results by organizing knowledge transfer events to other practitioners such as environmental experts of the region [*Green Deal: awareness raising, stimulate green jobs, successful green and sustainable global economic recovery (climate change, environment)*].

SO15) Collaboration between EU HEIs and Ugandan HEIs to develop strategies and tools to further their internationalization (e.g., international openness of curricula, interinstitutional mobility schemes), and enhance their capacity to network effectively in research, scientific and technological innovation (e.g., scientific cooperation & knowledge transfer) [*Internalization*] [*Green Deal: contribute to a successful green and sustainable global economic recovery (climate change, environment)*].

The **measurable activities (indicators)** will include (the number ID number corresponds to SO number):

ID1) HEIs benefiting from the ERASMUS Capacity Building Program. The indicators will be the number of HEIs (target 2) and faculty and staff participating (target 20).

ID2) Participants from underrepresented groups in the project team, dissemination and exploitation events. Number of females (target 20) and rural people (target 20).

ID3) New or updated courses on NbS, climate change adaptation, and entrepreneurship in green jobs. Indicators will be the number of courses (target 6) and the quality of the course material.

ID4) All courses will include new technologies to improve monitoring and identifying the best NbS and its optimal location. The number of new technologies (target 4) taught in the new or modified courses. Establishment of the state-of-the-art laboratories (target 2) in each Ugandan HEI.

ID5) a) One tuning workshop organized and conducted by a well-equipped EU partner with all partners participating. The purpose being on how to develop the courses material based on innovative teaching and pedagogical techniques primarily for the Ugandan partners. Indicators will be the number of personnel trained (target 10). b) All courses will adopt modern and innovative teaching and pedagogical techniques. Indicators will be the number of new pedagogical and teaching methods utilized (target 5). c) Capacity Building session for Uganda staff (target 20)

ID6) Establish an operational virtual learning platform (target 1) with all the six-courses placed on it. Indicators will be the user-friendliness and visitors (target 100) of the new VLP.

ID7) Piloting of different courses in each HEI from Uganda. Indicators will be the number of courses piloted (target 6) and the number of students participating (target 30).

ID8) The courses will be in a blended leaning style so that they can be jointly taught (EU and Africa professors). Indicators will be the number of courses jointly taught (target 6) and the number of weeks



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ID9) Submission for accreditation of the courses (target 6) by partners HEIs. The indicator will be the number of courses submitted in each HEI (target 12).

ID10) Participants in dissemination and exploitation activities (target 170) and Network meetings (target 150). The indicator will be their number.

ID11) Establishment of a network with professionals that work on or are interested in NbS. Once established this network will meet regularly (every six months) and provide feedback on the courses (total of 5 meetings). Indicators will be the number of participants (target 150) and the diversity of the participants in regard to country origin.

ID12) Participants in dissemination activities. The number of people from rural areas will be the indicator (target 140).

ID13) Environmental practitioners (number) attending in exploitation events and the number of companies and organizations (target 20).

ID14) Participants (number) in dissemination and exploitation activities (target 170) and Network meetings (target 150). Number of cooperation's between partner countries (target 5).

ID15) Participants in dissemination and exploitation activities (target 170) and Network (target 150) meetings from EU and partner countries. Number of collaborations between EU Ugandan partners (target 5).

Baselines are expected to be zero on all since NbS is almost non-existent in Ugandan.

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6. NbS Network Next Steps and Objectives

To establish a Network that will have representatives from the environmental public and private sector along with stakeholder groups vested in environmental management, the first step was to compile a List of Research Centers, Businesses and Communities (Deliverable 2.1). Specifically, each partner from Uganda has compiled a list of enterprises, companies, NGOs, authorities and organizations of their countries and neighboring countries that are involved or interested in Environmental Management. These will be the basic members of the NbS-Network.

An official invitation will be sent to the potential members of the NbS-Network based on the list of D2.1. In addition, policymakers will be invited. Those that accept will be part of the Network that should be operational in December 2025 and function until the end of the project. At the same time an official document in regard to the network's purpose, responsibilities and obligations was written. The network will meet online every 6 months through ZOOM to discuss the project's issues and results providing valuable feedback on WPs 3 and 4 Deliverables. In addition, a web portal will be developed for the NbS-Network on the project's website. The members will have access to documents of the project before they are placed on the website so they can provide feedback to improve them.

The goal of the creation of the Network is to strengthen and expand cooperation between existing institutions in regard to sustainable environmental management with an emphasis on nature-based solution and climate change mitigation and adaptation. This will allow the communication among authorities managing natural resources and authorities responsible for natural resources protection and conservation in order to exchange expertise, best management practices and innovation in technical and scientific methodologies. The exchange of experience and best management practices to promote the utilization of nature-based solutions for climate change mitigation and adaptation will improve the sustainable management of natural resources and promote economic and social development. This will also provide support for the monitoring, protection and conservation of natural resources along with the mitigation of climate change impacts and potentially provide a regional framework for its monitoring and protection. The network should also provide visible assistance. This will be done by trying to establish new collaborations but also by collaborating with existing environmental and water initiatives.

The specific goals are:

Goal 1: Establish a Sharing Network among peers of Uganda region that will:

Objective A: Promote true collaboration among the environmental institutions of the Uganda

Objective B: Develop more efficient and effective management plans for natural resources

Objective C: Lead to nature-based solutions adaptation to mitigate climate change impacts

Objective D: Enhance the sustainable management of natural resources in Uganda

Objective E: Substantially mitigate climate change impact in Uganda

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Objective F: Support peer learning – improving their knowledge on sustainable natural resources management and best practices particularly nature-based solutions.

Objective G: Create tools and resources on sustainable environmental management for Uganda

Objective H: Facilitate formal and informal communication between environmental institutions of Uganda

Goal 2: Create mechanisms for informing the general public to:

Objective A: Enhance the general public knowledge on new innovative best practices such as nature-based solutions and their importance

Objective B: Enhance the general public knowledge on how to mitigate climate change impacts and adept to new climate conditions sustainably

Objective C: Develop written (brochures) and online material (website) for the general public

Objective D: Host events (e.g., workshops, awareness events) to inform the general public.

Goal 3: Expand the Sharing Network among peers of the Sub-Sahara region that will:

Objective A: Promote true collaboration among the environmental institutions of the Sub-Sahara region

Objective B: Develop more efficient and effective management plans for natural resources.

Objective C: Lead to nature-based solutions adaptation to mitigate climate change impacts

Objective D: Enhance the sustainable management of natural resources in the Sub-Sahara region

Objective E: Substantially mitigate climate change impact in the Sub-Sahara region

Objective F: Support peer learning – improving their knowledge on sustainable natural resources management and best practices particularly nature-based solutions.

Objective G: Create tools and resources on sustainable environmental management for the Sub-Sahara region

Objective H: Facilitate formal and informal communication between environmental institutions of the Sub-Sahara region

Objective I: Allow countries of the Sub-Sahara region to assist each other in the planning of management plans for implementing nature-based solutions.

Objective J: Allow countries of the Sub-Sahara region to assist each other in regard to climate change mitigation and adaptation.

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7. Potential Participants

Based on the goals and objectives of the NbS-Network all institutions and organizations that deal with environmental management and especially with eco-friendly approaches and nature-based solutions but also those stakeholders interested in environmental management are potential participants. Ideally you would want all the organizations involved or as many as possible.

The target groups of the NbS-Network will be the key actors dealing with the management of the environmental and climate change mitigation and adaptation in Uganda and potentially the Sub-Sahara region. These key actors include: ministries, regional and local governmental public national services, civil protection agencies, water supply services, environmental agencies or similar organizations, NGOs, environmental management professionals in the private sector, local development agencies, decision makers, planners, community and environmental associations, economic operators and management bodies for protected areas (including parks) individual local experts, and stakeholders.

Initially the institutions and organizations that will be invited include:

- Ministries involved with protection, conservation and/or management of natural resources and/or of the environment (e.g., Ministry of Agriculture, Ministry of Environment).
- Regional authorities (e.g. Water Authority, Forest Service)
- Government agencies (e.g., Environmental Management Authorities, Forest Service, Water Authorities)
- International Organizations (e.g., UNESCO Chair Con-E-Ect Conservation and Ecotourism of Riparian and Deltaic Ecosystems)
- Professional Associations
- Prefectures, Governates, Districts (e.g., Kampala, Wakiso, Buikwe)
- Municipalities (e.g., Kampala, Entebbe)
- Municipality Water Supply Companies
- Rural Communities (e.g., Gamba Village)
- Environmental Management Companies and Enterprises
- Ecotourism Companies and Enterprises
- Institution managing protected areas
- Environmental Agencies
- Non-governmental Organizations
- Environmental Volunteer Groups



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- Universities
- Research Institutions

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8. Operational Context

Once the members of the NbS-Network are finalized the Network will start functioning. The network will be organized and directed by the Advisory Board that will be determined by the Steering and Scientific Committee of the “NbS-4-Climate” project. There will be five main activities of the NbS-Network that include: a) regular meetings, b) informal meetings, and c) outreach activities. Initially, the NbS-Network will function primarily through regular and informal meetings but will move toward the remaining activity once meaningful relationships are established. After one full year of functioning of the NbS-Network, the Advisory board (president, vice-president and secretary) will be elected from its members.

a. Regular Meetings

1. Online Meetings. The NbS-Network members of all partner countries will interact formally with each other every six months with online meetings that will be organized by the Advisory Board.

b. Informal Meetings

1. Among the Advisory Board and members(s). These meetings can be either online through email or phone calls.
2. Among the members of the NbS-Network. These meetings can be either online through email or phone calls.

c. Outreach Activities

1. The NbS-Network members can set-up and host Workshops.
2. The NbS-Network members can set-up and host Awareness Events.
3. The NbS-Network members can present the nbS-4-Climate project in other conferences, workshops, seminars, awareness events etc.

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9. Communication Strategy

The communication strategy of the NbS-Network members will rely on both formal and informal communications mechanisms. The method of communication will depend on the goal and purpose of communication. Initially the following tools are expected to be utilized:

- Online meetings with ZOOM, Webex or MS Teams
- Project website
- Project web-portal
- Emails
- Conference calls
- In person meeting
- Workshops
- Informal meeting among the members of the Advisory board

Communication will also be established between the NbS-Network and the stakeholders and general public to share some resources and information. In these situations, the communications mechanisms used will be the following:

- Project website
- Project web-portal
- Facebook, twitter, Linked in
- Discussion forums organized by questions
- Compiling best management practices and guidelines

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10. Timeline

a. Phase 1 – July to December 2025

1. Compile a list of the potential members of the NbS-Network
2. Write the first draft of the draft of the NbS-Network profile
3. Invite potential members
4. Have an online meeting with the members that have accepted to be part of the Neighborhood Network
5. Test pilot communications mechanisms

b. Phase 2 – January 2026 – December 2026

1. Finalize NbS-Network members
2. Finalize the NbS-Network profile
3. Establish communications mechanisms
4. Operational NbS-Network portal
5. Have online meetings with NbS-Network members every 6 months
6. Build relationships among members
7. Establish the NbS-Network Advisory Board

c. Phase 3 – January 2027 - December 2027

1. Continue online meetings with NbS-Network members every 6 months
2. Create a resource guide
3. Identify potential toolkit components
4. Participate in national project workshops
5. Identify scientific gaps (questionnaire in workshops)
6. Elect the New NbS-Network Advisory Board



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d. Phase 4 – January 2028 - future

1. Consider potential expansion; invite additional members
2. Identify potential sources for additional funding
3. Identify potential pilot projects (best management practices, recovery, training, etc.) and seek funding.
4. Work on finalizing toolkit



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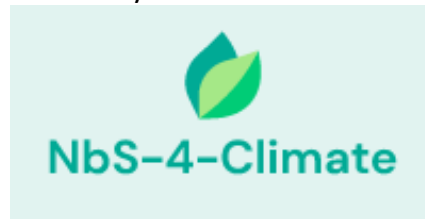


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ERASMUS-EDU-2024-CBHE-STRAND-
Capacity building in the field of higher education Strand 1

“Knowledge Transfer of Nature-based Solutions through Education to Enhance Climate Change Adaptation and Resilience in Uganda”

Acronym “NbS-4-Climate”



NbS-4-Climate Protect Management Team

Partners

- Democritus University of Thrace, GREECE
- Kyambogo University, UGANDA
- University of Kisubi, UGANDA
- Universidad Politécnica de Madrid, SPAIN
- GrassRoots Ministry, UGANDA

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