Impact Objectives

- Develop a broad multi-stakeholder platform that supports the understanding and the promotion of Nature Based Solutions (NBS)
- Steer dialogue through forums and debates to identify, communicate and promote successful NBS
- Foster collaboration at multiple levels and develop synergy with other NBS projects

Solutions inspired by nature

Project Coordinator Professor Nikolaos Nikolaidis shares his knowledge of using nature to provide solutions for a secure and sustainable future for Europe with the ThinkNature project

I am a professional environmental engineer and have been involved in the study of environmental restoration of degraded ecosystems as well as assessing and addressing the impacts of climate change to water and soil resources. I am a Professor in the Department of Environmental Engineering, and I have served as the Deputy Rector for Financial Planning and Development of the Technical University of Crete (TUC) and the Director of H.E.R.S. Lab. From my perspective, an ‘holistic’ approach to solving environmental problems can be achieved by conducting field studies, laboratory experimentation and mathematical modelling, and through this work I have developed four environmental models. Being involved in many European and Greek funded watershed studies and having extensive experience on watershed monitoring and modelling in Greece, Europe and the US means I am able to bring practical experience to projects I work on. My colleague, Professor Dionyssia Kolokotsa, is an expert on sustainable urbanisation. Together, we cover the whole range of expertise on the NBS subject and thus came the decision to organise a consortium to submit the ThinkNature proposal.

Could you talk a little about the concept of NBS, what their purpose is and the importance of adaption to local conditions?

NBS are solutions inspired by nature, the ‘grand engineer’. By definition NBS are ‘Living solutions inspired and supported by nature that simultaneously provide environmental, social and economic benefits and help to build resilience. Solutions that bring more nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions’. These types of solutions not only solve the main problem (for instance urban flooding), but also provide many other co-benefits on environmental, social and economic aspects that typically are not quantified and not taken under consideration when choosing a solution to a problem. However, the uptake by cities, scientists, managers, etc., is lagging and that’s where ThinkNature, the project, and especially the ThinkNature platform attempt to close the gap in knowledge and delivering solutions.

Moving into the future, what do you see as being the next steps for the ThinkNature platform?

Our first objective is to make the platform an active place for professionals to discuss issues and problems as well as obtain information of NBS case studies, resources that can be used to enhance their NBS knowledge and be capable of designing NBS solutions as well as identify other practitioners and stakeholders to collaborate with. The final outcome of the project will be the development of an NBS handbook where we will synthesise all the knowledge obtained in the project, identify the barriers and ways to overcome them, showcase exemplary NBS demonstrations and show the science and business case of NBS.
Platform for nature based solutions

ThinkNature provides the platform for the creation of Nature Based Solutions that will allow Europe to live in harmony with nature for more resilient societies and a healthy and sustainable future.

In a changing world faced with a shift in climate, unsustainable cities and degraded ecosystems, new and innovative ideas are required to move forward to create sustainable and resilient societies. In order to tackle these issues the collaborative ThinkNature project is taking a different approach: it proposes to use solutions that work with nature, instead of against nature. These are designed to support not only sustainable and healthy cities and ecosystems, but also foster economic growth, create jobs and enhance well-being of the people living in urban areas.

ThinkNature is funded by the European Union’s Horizon 2020 (EU H2020) research and innovation programme. The three year project, led by Project Coordinator Professor Nikolaos Nikolaidis, based at the Technical University of Crete (TUC), aims to create an online platform with examples of Nature Based Solutions (NBS), where researchers can interact and exchange ideas and solutions with other people working on the same challenges. ‘The platform serves as an umbrella for all projects on NBS case studies and stimulate stakeholders from diverse backgrounds to understand, design and use NBS to solve major societal problems that include sustainable urbanisation, restoration of degraded ecosystems, addressing in a sustainable way the impacts of climate change and risk reduction to natural disasters,’ explains Nikolaidis.

BUILD WITH NATURE

Research has already shown that there are huge benefits in building with nature instead of building in nature. Buildings with nature can provide effective solutions, increased resilience, decreased urban heat stress, well-functioning ecosystems and improved air quality. Nature already provides us with the keys and tools for a sustainable future.

‘These are living solutions inspired and supported by nature that simultaneously provide environmental, social and economic benefits and help to build resilience. Solutions that bring more nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions,’ highlights Nikolaidis.

With more green spaces and natural areas within a city, the risk of climate change can be mitigated and reduced, degraded ecosystems can be restored and the city will become more resilient to natural variations and disasters. ‘These type of solutions not only solve the main problem, such as urban flooding, but also provides many other co-benefits on environmental, social and economic aspects that typically are not quantified and not taken under consideration when choosing a solution to a problem,’ describes Nikolaidis. The ThinkNature project will help cities, scientists and managers uptake new solutions to solve problems for a healthy and sustainable future.

A COLLABORATIVE EFFORT

The success of the ThinkNature project lies in the strong international consortium of 16 project partners spanning over eight countries across Europe. Partners from France, Belgium, Finland, Greece, Italy, Netherlands, Switzerland and United Kingdom link ideas and solutions from different disciplines and aspects of NBS to provide innovation and unique ideas from a number of areas of expertise. ‘Local, regional, EU and international stakeholders are integrated and support the formulation of an interactive platform. The ThinkNature platform’s coordination structure will allow the fast and direct connection of the various stakeholders without extra effort, while providing the necessary tools that will...’
allow fast deployment of NBS in various EU regions following the shining examples of front runners; WENP-Bristol, Helsinki, Crete, Paris, etc.,’ describes Nikolaidis. ‘In structuring the ThinkNature consortium, particular attention was paid in the multi-stakeholder representation of the partners ranging from local representatives to international key players.’

A broad multi-stakeholder platform enables collaboration at local, regional, national and EU-levels. Nikolaidis says that this is essential to impose synergy within NBS and overcome barriers which limit the development of meaningful solutions. ‘The barriers limiting the exploitation of NBS can be overcome through knowledge and using the experience of other successful cases where these problems have been solved.’ Challenges associated with a broad collaboration are solved through think-and-do tanks, forums and the ThinkNature platform. ‘We want to initiate a dialogue that will identify the barriers to implement NBS and showcase both the science case and the business case of such solutions,’ Nikolaidis notes.

SUCCESS AND FUTURE GOALS
In the first year of the project the online platform was successfully launched. This has opened up a dialogue with the stakeholders and relevant users. Other means of contact with public and researchers can be found on several forms of social media, such as, Facebook, Twitter and LinkedIn. ‘Our first objective is to make the platform an active place for professionals to discuss issues and problems as well as obtain information of NBS case studies, resources that can be used to enhance their NBS knowledge and be capable of designing NBS solutions as well as identify other practitioners and stakeholders to collaborate with,’ explains Nikolaidis. Upcoming forums are another way the ThinkNature project is sharing information. The first forum, on sustainable urbanisation and restoration of degraded ecosystems, was held 16-18 May in La Coruña, Spain.

On conclusion of the project the high quality final data product generated will be available for use by the research and policy communities, and the raw supporting data will be available for use by researchers. The final outcome of the project will be the development of an NBS handbook where the consortium will have synthesised all of the knowledge obtained in the project. This is an exciting step, says Nikolaidis, because this is the tool to identify the barriers and ways to overcome them, to showcase exemplary NBS demonstrations and to really highlight the science and business case of NBS and its true value.

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