

## **Honors Thesis**

## Master of Science Programme in Territorial, Urban, Environmental And Landscape Planning

## **Abstract**

Nature-based solutions: An analysis of approaches and case studies from the countries in the East and the West

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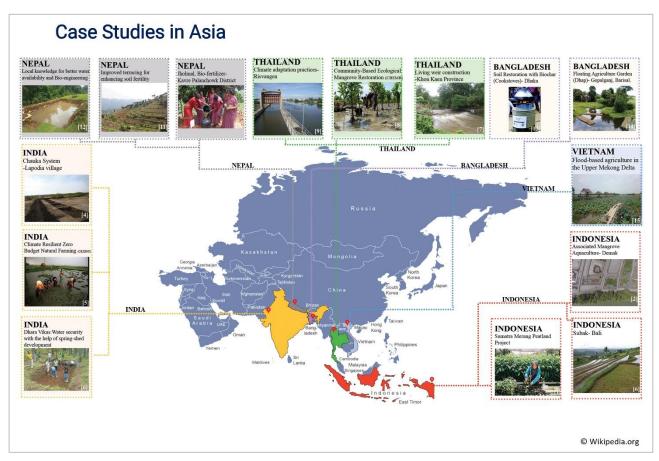
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Climate is changing rapidly, and the earth is getting warmer. Until now, there has been no planet B. We need urgent actions and need to come up with steps to prevent the disastrous effects of climate change. Climate change mitigation and adaptation measures are a few ways. Nature-based solutions (NBS) are one of those measures we can put in the category of mitigation as well as adaptation. IUCN defines NBS as actions to conserve, sustainably manage, and restore natural and modified ecosystems that handle societal concerns effectively, benefiting both people and the environment simultaneously. More research on NBS is conducted in developed countries, while the research is comparatively less in other countries. Developing countries use many innovative techniques that are not considered NBS due to limited research.

This thesis discusses Nature-Based Solutions and studies from Asian and European countries. By analysing different case studies, it explores if the NBS in Asian countries are more or less effective than in European countries. It uses a mixed methodology approach adapted from the IUCN Global Standard for NBS and the Think Nature handbook (its development was funded by EU Horizon 2020).

An essential aspect of NBS is the participation of different stakeholders. To better understand public participation, with the help of the Start Park approach, a workshop was conducted with the students of Politecnico di Torino. As a result, students devised different solutions for the given problems and the role of power in decision-making was understood.

There is no precise answer to the research question, but many informative results came up. Developed countries can invest more money in climate change-related practices than others. However, some countries use innovative NBS, which are cost-effective, and which will significantly benefit other places if used. In different continents, solutions perform differently to fulfil the Sustainable Development Goals (SDGs) and solve societal problems compared to the solutions when observed in the same continent. This difference depends on the country's primary goal - to prevent climate change or poverty.





## For info: