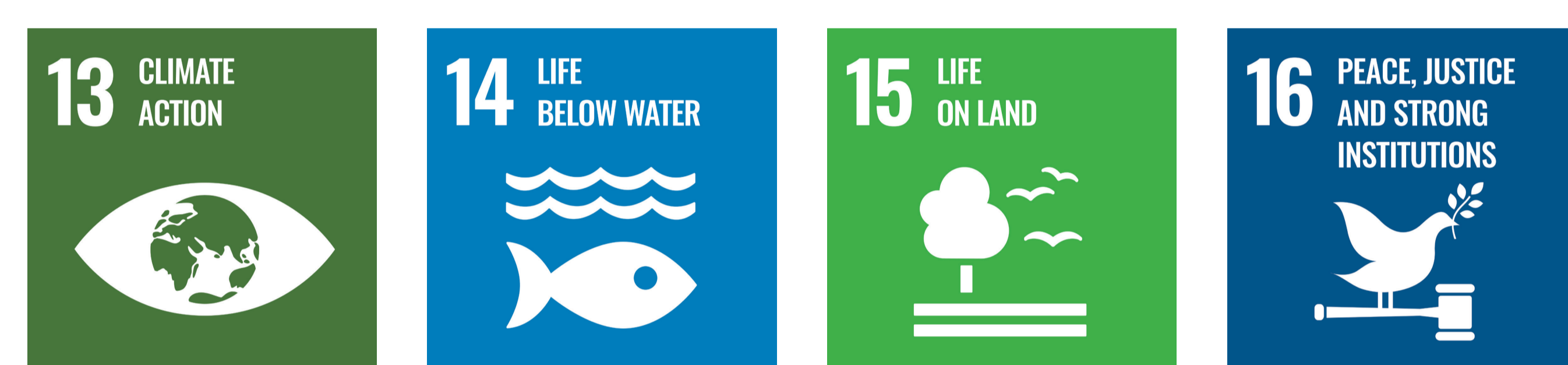


Can combining Political and Natural Science create Sustainable Environmental Policies?

A Master's thesis by Majken Ravnkilde
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Which SDG does your project relate to?

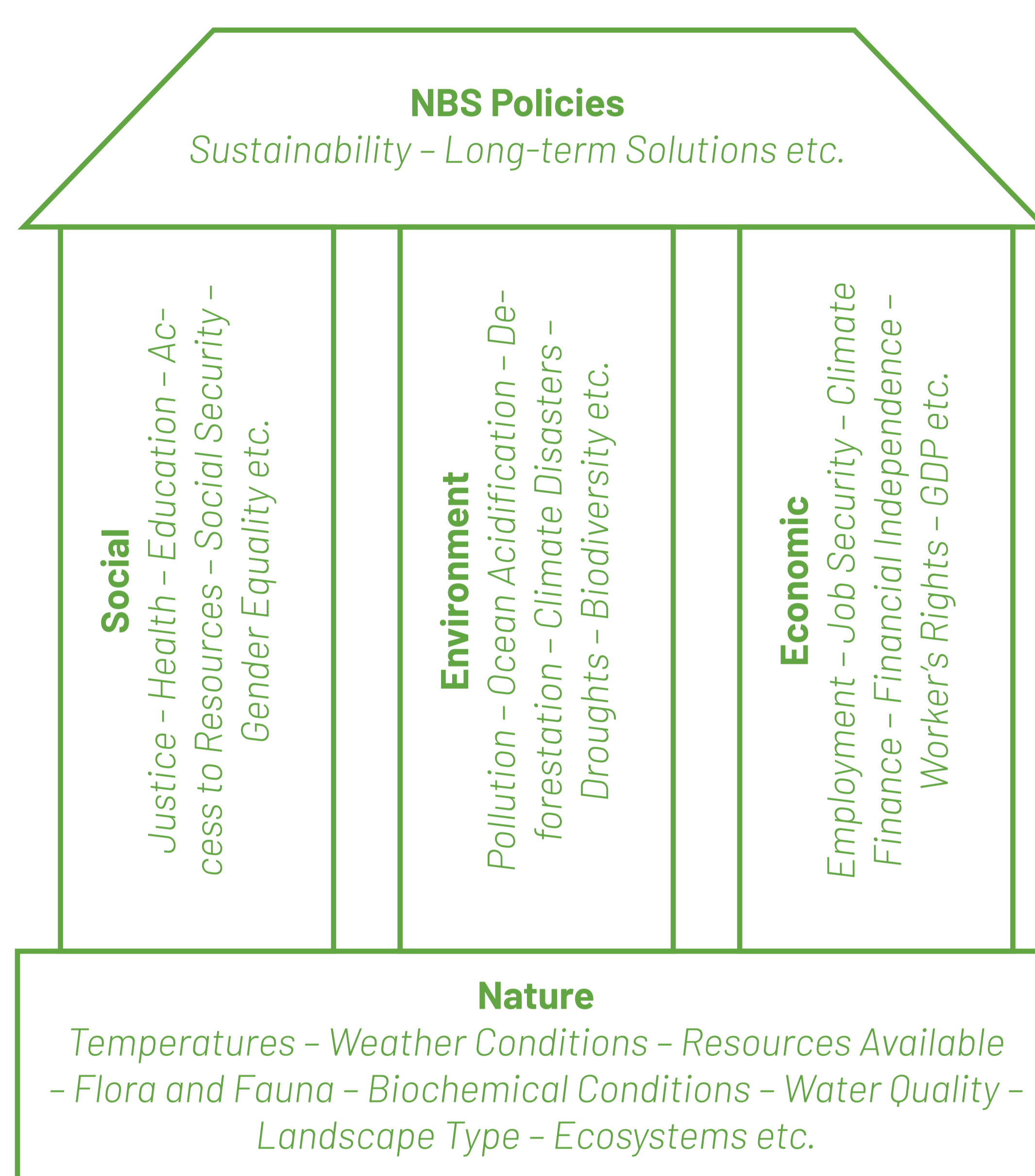


This thesis specifically targets UN Sustainable Development Goal (SDG) 16 by creating sustainable policies but also contributes to SDGs 13, 14, and 15 by focusing on policies that target Nature-Based Solutions.

What is the concrete problem you have worked with?

Many environmental policies today fail on a global scale because the social structures are not appropriately considered. This is also the case for policies regarding Nature-Based Solutions like conservation of natural environments, reestablishment of ecosystems, like forests and mangroves, and increasing biodiversity. Often, cases show that the cultural and social needs of local communities and their economic stability are overlooked. Likewise, the overlapping issues between social, environmental, and economic sustainability, such as how climate change affects poverty, are also often overlooked. Finally, the natural characteristics of a given setting where policies are expected to be implemented, such as the species of plants and animals present, the type of landscape and weather conditions, are often not considered either. These shortcomings result in a low degree of sustainability in the policies. Instead, this research suggests using a holistic approach where the natural setting, the social needs, the environmental changes, and the economic stability are included.

In order to do so, policymakers need a tool for evaluating how sustainable environmental policies are prior to their implementation. This will ensure social and economic benefits for local communities, prevent further damage to ecosystems, and make sure that environmental policies work.



What is your conclusion and/or solution that can be applied in the 'real' world?

The Nature-Based Solutions Policy Evaluation Model is a model to aid policymakers evaluate the sustainability of policies. The model is structured like a house to illustrate how the pillars depend on the foundation and the roof depends on both the foundation and the pillars. All structures must be constructed properly for the house to stand. The model places nature as the foundation since all human activity requires natural resources. The three pillars are social, environment, and economic sustainability and include issues and challenges which often overlap, such as the local need for natural resources, food, water, and shelter.

In my investigation, I have analyzed the Nationally Determined Contributions reports from Belize and Papua New Guinea. These reports are made under the Paris Agreement and describe how the countries intend to create sustainable development through environmental policy. By using the Nature-Based Solutions Policy Evaluation Model, I have found that the model can help policymakers include all elements of the model (the foundation and pillars) to increase the level of sustainability in their policies (the roof). Specifically, the model could help avoid discrepancies between policies and the natural setting or prevent policies from only working on paper and ultimately damaging local communities and environments. Finally, the model could be applied to policymakers all over the world and help root policymaking in local communities.