

**Policy Brief**

## **Marine nature restoration needs understanding of social context and impact**

### **Introduction**

Marine nature restoration aims to rehabilitate marine biodiversity to restore ocean health. Climate change and biodiversity loss have made calls for marine restoration urgent. While in the past decades passive forms of restoration based on low levels of human intervention – such as spatial closures for species recovery – were dominant. We now see a rise in active forms of restoration with high levels of human interventions, such as species translocation and ‘building with nature’, to ‘repair’, ‘restore’ or ‘enhance’ marine nature.

The proliferation of restoration projects worldwide raises questions about uncertainty and risk, as well as about the fair distribution of benefits, burdens and responsibilities for communities. First, restoration may contribute to regional development, coastal safety, and serve new or existing ecosystem functions such as eco-tourism. However, restoration may also displace communities from fishing grounds, fuel conflicts or disadvantage already marginalized groups. Second, the technological and natural science focus of marine restoration programs tends to overlook the social and/or political causes of biodiversity loss. Third, active restoration projects raise questions about what kind of nature is good to restore, based on what principles.

This policy brief is based on the Policy Day held on June 26, 2023 in Amsterdam at the People and the Sea conference organized by the Centre for Maritime Research. The MARE conference biennially brings a global interdisciplinary network of marine social scientists together. This policy brief draws attention to the importance of social context and impact, and how this can be considered in policy.

### **Key advice from marine social scientists to policy is that the success of marine restoration projects can be enhanced by**

1. Careful consideration of social contexts to understand potential (positive and negative) restoration impacts;
2. Involving and listening to affected local communities and users of marine areas and their needs from the initiation phase onwards;
3. Explicit deliberation on underlying values and worldviews, of restoration goals and required knowledge(s);
4. Successful restoration projects can serve as examples for upscaling elsewhere, yet points 1-3 need to be revisited again in the new context.

### **1. Legitimacy and equity principles are foundational to the success of marine restoration projects**

Marine restoration projects impact how people can use marine areas for their livelihoods, business, leisure or cultural practices. Active marine restoration projects have both positive benefits and can come with costs, risks and burdens. To understand how people and communities are impacted one has to understand the social and institutional contexts of restoration. To increase social wellbeing and the legitimacy of restoration interventions it is important to include local communities and users of marine areas from the start in project design and formulating aspired outcomes. Marine restoration project partners need to reflect on social equity and justice considerations, such as the distribution of benefits and burdens of restoration. This can be anchored by the fair inclusion of affected and involved groups in procedures of decision making. Social science should play a central role by improving understanding of the social settings in which restoration is done, the kind of impacts restoration has on people involved, and the context-specific conditions for legitimate and fair decision making processes. Besides such site-specific focus, social science is needed to understand the more structural social and political causes to marine biodiversity loss required for a real transition.

### **2. Restore to what? Who decides and based on which knowledge, values and worldview?**

Restoration policies and programs commonly aim to bring back a natural ecological state that is assumed to be lost. However, there are different assumptions about what is a 'natural' or 'good' ecological state. Restoration also produces 'new natures' that are inherently unstable, malleable, and can serve different purposes. Involved restoration stakeholders, scientists and communities have different perspectives about what kind of knowledge is required to inform decisions and what kind of intervention is appropriate to reach restoration goals. These perspectives are based on different values and worldviews that shape how people think about marine nature and the role of human interventions. These values should be made explicit and acknowledge that support for restoration projects (the legitimacy) is influenced by these values and worldviews. In addition, successful restoration therefore requires not just more science, but better ways of bringing different kinds of knowledge in dialogue together.

### **3. Upscaling cannot be a copy-paste exercise**

As marine restoration requires testing out new methods, it often moves from experiments to implementation sites. Once proven successful the approach can be scaled up to reach more impact. Yet the question is whether the social-ecological context in which upscaling projects take place are considered well enough. There is no such thing as 'one size fits all' in marine restoration; the social and political contexts of restoration interventions matter and are dynamic. Therefore, implementing successful approaches in new places requires revisiting social equity and justice implications in the new context. Also, the process of considering who the actors are, involved in a specific site, and which knowledge, values and needs matter, needs to be re-assessed. This requires transdisciplinary approaches that involve stakeholders and rightsholders, and take into account existing knowledge and technological conditions in situ. A way to speed up making use of lessons learnt elsewhere can be strengthened by revising funding to support the building of alliances.

**Contact persons:** Dr. Annet Pauwelussen ([annet.pauwelussen@wur.nl](mailto:annet.pauwelussen@wur.nl)) & Dr. Marloes Kraan ([marloes.kraan@wur.nl](mailto:marloes.kraan@wur.nl))

**Website:** Centre for Maritime Research: [www.marecentre.nl](http://www.marecentre.nl)