Preface

In Vietnam, shrimp for export has become a booming industry, with farmers increasingly turning to shrimp cultivation in the hope of increasing their income. Without access to high technology, outbreaks of shrimp livestock disease are more likely to occur. While conducting fieldwork in a remote area in Giang Province in southern Vietnam—about seven hours by car from Ho Chi Minh City—I asked one of the local farmers how he disposed of the many shrimp that had died of disease. Sanitation is an important issue when farming sea life. Without hesitation, he explained, “I just dump them in the river.“ I was not sure whether I intended to respond or was just thinking aloud, “But doesn’t that pollute the water?“ The farmer replied with conviction: “That‘s not my responsibility. It‘s the government‘s!“ What captured both my concern and my interest was not his lack of knowledge about the consequences of his actions but the attribution of responsibility. The answer was shocking—at least, it was to me at that time. But it also demands a deeper examination.

Vietnam is considered top of the class in terms of environmental policy. In the face of tremendous deforestation all across Asia, Vietnam and China are the only two countries in the region to have successfully increased their acreage of forests by planting trees (Cochard 2020). Judging by the rhetoric and actions of its government, Vietnam is serious about protecting the environment to meet the Sustainable Development Goals set forth by the United Nations. We might assume that because the government’s environmental fervor has been embraced by the people, pollution such as that caused by shrimp farming would be addressed fairly quickly. My encounter with the shrimper in Vietnam, however, raises questions about the optimism of this assumption. A huge divide separates the policy approaches being promoted to the UN by developed countries from those offered by developing nations, where people continually struggle to improve their daily lives. Superficial measures are unlikely to bridge this gap. This begs the question of what I mean when I refer to “superficial measures.”

Until now, there have generally been two types of environmental policy. One approach relies on economic incentives. This involves nudging society in more environmentally friendly directions using market mechanisms to encourage the development of new technologies through subsidies and to reduce pollution through taxation. This approach has proved fairly successful in developed countries when measured domestically, as some sectors have improved their environmental practices. However, others have moved offshore, retaining ownership even as they continue polluting in different jurisdictions across the developing world. Capitalizing on indigenous knowledge of tropic forest resources for medicinal purposes is another area were “pricing” of resources often end of depriving such resources from the local (Dove 1993).

In the second approach, a powerful centralized state enforces regulations. Developing countries often adopt this type of environmental policy. According to the OECD Policy Instruments for the Environment database, non-OECD countries tend to adopt more regulatory policy instruments such as taxes and fees (OECD 2023). To control water pollution, for example, a country might issue tight regulations on the use of certain chemicals and deploy police authority to strictly monitor the release of substances into the environment, with offenders punished. However, such a top-down approach does not inspire people to change their own behaviors, and the subsequent change, if achieved, may not be sustainable. Such policies cannot work if the public does not trust the authority of the government or if incentives are created for official bribery. Corruption in the environmental and resource management sectors is systemic, which means it is driven by the existing power distribution (Tacconi and Williams 2020). Many developing countries in Asia have prospered under government-led economic development, increasing the already considerable power concentrated on the state. Thus, it should not come as a surprise that these same bureaucratic systems have had some success in implementing environmental policies.

Setting aside for now the rift between the contexts of developed and developing regions and the myriad of technologies available to both, human actors may confound the operation of either approach to environmental issues. Any policy that hopes to change the quality of the natural environment, whether by cleaning up the water and the air or by reducing carbon dioxide emissions, will inevitably impact the societies that live in that habitat. However, attention has generally been focused on the extent to which these policies lead to physical changes in the natural environment. Countless books have evaluated one policy or another, or sought general rules in the development of so-called “effective policy”: what is the most rational policy for getting from A to B. We have invested far less energy examining how the implementation of environmental policies impacts the people. What is the effect on society of rational solutions to the environmental issues that affect our water, our forests, our atmosphere, and our climate? Ultimately, once humans are considered, what do such policies do?

On the surface, it appears that Asian countries have redoubled their environmental policies, in terms of budgets, personnel, and legal frameworks, to meet the challenges at hand, and have received support from international organizations for their efforts to do so. However, it may well be that as states have bolstered their environmental policies, they have also extended the reach of these policies. Environmental policies in Asian countries are no longer used just to manage the environment—they have come to manage entire societies *through* the environment.

Previous studies have not given sufficient thought to the implications of this development. When countless aspects of local life are micromanaged by different layers of state apparatus in their pursuit of the moral imperative of protecting the environment, people’s relationship with nature can quickly sour.

Despite being the late-comers in environmental policy, Southeast Asian countries are equipped with some of the most advanced institutions for addressing their environmental challenges. These include legal arrangements and technical capacity imported from Western nations ranging from monitoring techniques to pricing and assessment mechanisms. Despite such institutional and technical preparedness, their natural environment is deteriorating at rates that are both alarming and common to all developing nations. The 2023 *ASEAN State of the Environment Report* acknowledges that "some longstanding environmental problems are becoming increasingly serious" while new priority environmental issues are emerging (ASEAN Secretariat 2023, p. xxix).

Technical research examining the rate of natural resource decline has grown and is fundamental to addressing global and existential questions on the future of humanity. It has provided evidence and impetus for centralizing planning toward optimal efficiency. However, such policymaking has immediate effects on local populations while simultaneously affecting their livelihoods and their relationships with nature and with the state. The lived experience of local people is important in its own right and has both manifest and latent potential to shape the future course of policy. The livelihoods of the populations in the world’s least developed countries are among the most dependent on the natural resources around them.

People’s lives are inextricably entwined with the power and politics of environmental regulation, which seeks to better manage the nature on which they depend. When evaluating environmental policy, it is necessary not only to ask simply “Has the water and air become cleaner?“ or “Has the forest expanded?“ but also “What effect does this environmental policy (and the science behind it) have on people?“ This book begins by asking such questions, revealing why such considerations are important. This leads to new insights and theories that could be used to develop a range of solutions.

Hints of “inversion“ germinated in my mind during my fieldwork in the 1990s. I witnessed how groups of ethnic minorities in rural Thailand were forcibly relocated from their rich forests in the name of protecting biodiversity (Sato 2000). I wanted to seek out additional examples to identify the mechanisms at work and consider the extent to which my earlier observations in forest conservation in Thailand could be generalized to other resources and places. This led to studies in state-engineered water irrigation in Indonesia, the distribution of fishery resources in Cambodia, and communal lands in Thailand after the great tsunami of 2004. These are the cases that would eventually provide the data to ground the theory developed in the following pages.

The more I looked into these examples, the more patterns seemed to emerge. They forced my attention away from the objective or intent of the policy—now my focus is on its processes. At times, the *process* of implementing a policy aiming to control resources has the effect of disrupting local peoples’ ownership of those resources, thus disincentivizing their crucial participation in their conservation. This is what I mean by inversion. Inversion is a process where potential local collaborators turn into adversaries, the relationships that damage the very objective of the policy to begin with.

Despite such risk, the expansion of state power is accepted and inversions get neglected because of urban residents’ rightful endorsement to protect the earth, whilst scrutiny of the process, and often the failure of such interventions, has been missing. This book compares the experiences of multiple countries in Asia now undergoing top-down environmental policies and examines the perspectives of local people on the effects of such policies. It seeks to develop new perspectives on why environmental policy often fails and discusses how such inversion can be tamed.

It is true that many stories of conservation projects accompanied by local sacrifices have been told on a case basis, particularly in the context of Southeast Asia (Pye 2023). In the forest sector, a focal topic has been the conflict between indigenous people and protected areas (Milne & Mahanty 2015; Daly and Winter 2012). The Cambodian government’s policy to restore the ecological balance of Tonle Sap Lake, for example, included involuntary resettlement of the water-dependent communities (Miller et al. 2021). The literature on green extractivism is now discussed more globally including African and Latin American continents (Bruna 2023; Dorn FM, et al, 2022).

 Global evidence suggests that some climate adaptation projects unintentionally reinforce, redistribute or even create new sources of vulnerability due to existing inequitable socio-political relations (Eriksen et al. 2021). Policies for sustainability transition may create new injustices and vulnerabilities. An increasing number of scholars are calling for "just transition" (Wang and Lo 2021). But current studies focus more on the transition away from the incumbent fossil fuel energy paradigm (Wang and Lo 2021), and less on the transition towards wider and deeper environmental governance.

This book tells a different story in a way that focuses more on time-sensitive general patterns connecting more explicitly the desires for economic development and environmental needs in the context of Asia. Because the process of development is most rapid in the least developed countries, ideas and ways of thinking embedded in the institutional infrastructure of state-led development are carried over unchanged even as their status and stated priorities shift away from economic growth toward conserving the material basis of their growth.

The book also attempts to go beyond what governments and civil societies can do individually but rather to propose the *relational* solution by focusing on intermediary organizations that stand in between individuals and the state. Intermediary groups (such as local groups or ethnic groups) have been weakened through the processes of economic development, which emphasize individual and corporate rights.

This book argues that environmental policies—parallel to stated aims—tend to generate an accumulation of power in the centralized state that goes unchallenged in the most important “consensus-based” areas of policy, such as environmental policies in populous urban centers, where it engenders little resistance. Environmental policies are necessary, even existential, but we must also question how such policies have changed the relationship between the state and human society, especially given the current entrenchment of centralization and state power. Questioning the prevalent policy direction requires a nuanced and theoretically-mature approach, partly because of the importance of having environmental policies in place. It requires a shift in thinking away from rationalistic faith in efficient policy toward an appreciation of the experience of local people and policies which empower them to maintain long-term relationships with the local environment to promote stewardship and, in turn, sustainable practices. What would empower the shrimp farmer to develop the willingness to build his own standards of compliance or entrust them to the government? Inevitably some aspects are idiosyncratic. However, the examples discussed throughout this book reveal patterns in the processes of inversion, providing essential clues toward solutions.

The book concludes by re-appreciating the virtue of “dependency” through the analysis of intermediary organizations that have been downplayed by—and are virtually seen as a threat to—modernization and the development discourse of the past century. The key to addressing inversion lies in re-balancing the disturbed relations of interdependence, empowering individuals and organizations closer to the ground. Herein lies a more sustainable policy direction, but one which requires precisely the kinds of wisdom that the rationality of prevalent policymaking appears to have discarded.

The theoretical framework developed opens a new avenue for analyzing the parallel processes of resource management and the experiences of local people to problematize modern environmental policy. It explains (a) why the environmental policy is appealing, prompting urban residents to accept centralized state power; (b) the process by which it often fails in local contexts; (c) how this perpetuated the concentration of centralized state power and top-down policy specifically in the context of developing countries; and (d) policy directions to escape this vicious cycle. In doing so, it provides a theoretical tool to find hidden politics of environmental policy, with potential application to other areas of policy that lead to the concentration of state power.

Increasingly frequent natural disasters and subsequent global focus on climate change have created a sense of urgency. In these circumstances, it is easy to become convinced that there can be only one realistic solution to this or that environmental problem and that we have no choice but to let the state take the lead in finding solutions. The role of social scientists is to create opportunities for local communities to have their voices heard on appropriate solutions. The states’ power to control the natural environment differs from its power to shape military matters or the economy. It is both more latent and less visible. Thus, before we launch into policy discussions, it is vitally important to go out into the field and listen to what people have to say. This approach has led to the generation of the ideas presented in this book.