

Negotiation under Authoritarian Environmentalism: A Case Study of Mangrove Shrimp Farming in Vietnam

Watanabe Hiroki* and Ubukata Fumikazu**

Authoritarian environmentalism has come under the spotlight. It has often been criticized as accompanying social oppression. However, as some studies have reported an ambiguity in its governance on the ground, which is neither democratic nor authoritarian, its governance process needs further analysis. In particular, little is known about how the authoritarian state compromises with society. Therefore, by unraveling the historical background behind the development of shrimp farming in the mangroves of southern Vietnam, this paper examines the process of establishment of authoritarian environmentalism and considers how the authoritarian state exerts its power in interactions with society. To distinguish features of governance and understand various aspects of interactions among actors, we developed the concept of “ostensible” and “actual” authoritarianism. To this end, we conducted semi-structured interviews with provincial government officials, forest officers, and shrimp farmers in Ca Mau Province and also used secondary materials. The results revealed that mangroves that were previously the frontier until the 1970s had been enclosed by the state, applying modern governing technologies. However, the state failed to optimally utilize its governing power due to an accidental confluence of interests with society and to avoid political instability. Locals also tenaciously coped with top-down governance by adopting unique strategies. These interactions created an informal social order, which ironically created temporal social stability. We conclude that more research is needed to address how the political equilibrium is disturbed or maintained under authoritarian environmentalism.

Keywords: shrimp farming, southern Vietnam, mangroves, authoritarian environmentalism, negotiation

* 渡邊大樹, Graduate School of Environmental and Life Science, Okayama University, 3-1-1, Tsushima-naka, Kita-ku, Okayama 700-8530, Japan
Corresponding author's e-mail: pt0e5qtc@s.okayama-u.ac.jp

 <https://orcid.org/0000-0001-7817-4543>

** 生方史数, Faculty of Environmental, Life, Natural Science and Technology, Okayama University, 3-1-1, Tsushima-naka, Kita-ku, Okayama 700-8530, Japan
e-mail: ubukat-f@okayama-u.ac.jp

 <https://orcid.org/0000-0001-7164-3634>

I Introduction

I-1 *The Rise of Authoritarian Environmentalism*

There are various debates over how to solve pressing environmental problems. In particular, many researchers have argued for the importance of environmental governance as a way to steer sustainable development. Because of criticism of the “command-and-control” approach and appeals for bottom-up development, environmental governance has changed to a participatory and market-oriented model (Balooni and Inoue 2007; Agrawal *et al.* 2008).

However, the extent to which residents and markets are involved in governance is an issue that is open to question. Institutional implementation of decentralization depends on local adaptability and engagement by local governments, administrative organizations, and other actors (Capistrano 2008, 221). Without empowerment of the local community, there can be no improvement in power relations and no change in traditional top-down governance (Larson and Soto 2008, 221). Furthermore, some researchers are skeptical of the present governance system for global environmental issues in the first place. These researchers assert the transnationalization of democracy, or a “green state” that is beyond territorial governance (Eckersley 2004).

While there are calls for democratization and greater environmental governance, the transition sometimes seems to regress to a command-and-control approach combined with market-based mechanisms, as manifested in China and Vietnam. These countries have attained significant environmental conservation results through the use of authoritarian methods. For example, compared with other Southeast Asian countries, Vietnam has continuously increased its forest area (Imai *et al.* 2018) while China has become one of the world’s leading countries in the introduction of electric vehicles (Rong *et al.* 2017).

Authoritarianism is not completely absent in democratic countries. Even the governments of the United States and European countries dictatorially implemented strict measures to prevent the spread of Covid-19. Some researchers argue that such behavior on the part of democratic governments shows the retreat of democracy and the dominance of authoritarianism during critical moments (Diamond 2015; Sato 2021).

In this context, authoritarian environmentalism has come under the spotlight as a new way of state governance (Brain and Pál 2018). Authoritarian environmentalism is defined as a public policy model that concentrates authority in a few administrative agencies to improve environmental outcomes. In contrast, democratic environmentalism is defined as a public policy model that spreads authority across several levels or administrative agencies and encourages direct public participation (Gilley 2012, 288–289).

The differences between authoritarian environmentalism and democratic environmentalism include the degree of citizen participation and the speed and efficiency with which the two forms of governance can respond to environmental crises (Sutherlin and Willson 2012, 188). However, as Han Heejin (2015, 812) argues, even though democratic countries such as South Korea have adopted authoritarian environmentalism as an approach to environmental governance, the political regime of a given country is not necessarily a direct determinant of the adoption of authoritarian or democratic environmentalism.

Although authoritarian environmentalism is often criticized for leading to social oppression and justifying its authoritarian measures for environmental protection (Beeson 2010; Gilley 2012; Li and Shapiro 2020; Lo 2021), research shows an ambiguous relationship between the state, particularly local authorities, and local society (Gilley 2012; Lo 2015; Shahar 2015). These findings suggest that the functioning of authoritarian environmentalism on the ground depends on the specific social political context and environmental issues. Therefore, authoritarian environmentalism is likely to have more diversified than repressive governance features.

I-2 Study Purpose

Against the above background, this study examines how authoritarian environmentalism works on the ground by addressing the following research questions: How does a political system based on authoritarian environmentalism demonstrate power, and how does authoritarian environmentalism seek to compromise with society to resolve social and political instability? It is easy to imagine that if the state tried to control society by force, it would lead to social and political instability. Consequently, states might adjust their forces depending on the situation.

To achieve the research objectives, this study investigates the development process of authoritarian environmentalism in the mangroves of southern Vietnam as a case study. First, this study seeks to understand the policies and institutions related to shrimp aquaculture development and mangrove conservation that have been set up by policy makers. Second, it examines the interaction between local state authorities and local shrimp farmers in the implementation process. It also considers the characteristics of state–society interactions that can be identified. In doing so, this study uses our own developed concepts of “ostensible” and “actual” authoritarianism. The details of these concepts will be described in the later section on the conceptual framework.

Through this case study, this research will depict a nuanced relationship between the state and society that constitutes neither confrontation nor collaboration. It will also show how such an accidentally established relationship contributed to each party

realizing its own purposes. In addition to earlier research findings on how the state involved locals in order to achieve policy implementation (Ahlers and Shen 2018) and how locals evaded state governance (Scott 2009), this study shows how the state compromised with local society rather than unilaterally taking authoritarian measures, due to an accidental conformity of interests. Drawing on James Scott's (1985; 2009) perspective to explain this unique state–society relationship under authoritarian environmentalism, this study argues that it was the tenacity of the local people that led to the development of this relationship.

We see Vietnam as a state practicing authoritarian environmentalism. Although Vietnam is considered an authoritarian state with tightly restricted political rights and liberties (Freedom House 2022), it has also been reported that the dynamics of state–society relations in Vietnam are changing because of emerging citizen-led activism (Vu 2017). Thus, it cannot be said that there is no public participation in dealing with environmental problems. However, considering their relative power relationship, the Vietnamese state is much stronger than society because the top-down principle is inherent in the Communist Party regime (Ortmann 2017, 93). From this perspective, at least, environmental governance in Vietnam can be seen as being based on authoritarian environmentalism. It is also worth noting that unlike in China, global actors such as international organizations and international NGOs intervene in environmental governance in Vietnam. This global intervention has affected the development of authoritarian environmentalism in Vietnam.

The remainder of this paper is organized as follows. Section 2 reviews previous studies and explains the conceptual framework. This study has adopted the concepts of “ostensible” and “actual” authoritarianism to analyze social and political interactions between the state and society. Section 3 discusses the methodology and describes the research site. Section 4 presents the results. It describes the governing technologies of the state in expanding its power to the periphery and how local residents coped with government control. Section 5 is the discussion section. In this section, the way authoritarian environmentalism works on the ground is interpreted using the concepts of “ostensible” and “actual” authoritarianism. Finally, section 6 is the conclusion section.

II The Conceptual Framework

Research on environmental governance based on authoritarianism has tended to criticize centralized governance without public participation. Under authoritarian environ-

mentalism, individual freedoms are restricted as governments seek to change environmentally destructive behavior (Beeson 2010, 276), and participation in the policy process is limited to the scientific and technological elites (Gilley 2012, 288). In the governance process, the state has been found to benefit from environmental crises by projecting itself as the sole legitimate steward of the environment (Li and Shapiro 2020, 23). It is also perceived that any radical change through top-down governance without public participation may increase inequality and push socially deprived groups into more disadvantaged situations because of the lack of flexibility and autonomy (Lo 2021, 7).

Alongside these concerns, the merits of authoritarian environmentalism have been revealed. Governments following this approach can exert a rapid, centralized response to severe environmental threats and mobilize state and social actors (Gilley 2012, 300). This characteristic is visible in state governance. In particular, China has reformed its bureaucracy—through the creation of environmental police and the establishment of the Ministry of Ecology and Environment—and improved the framework of environmental law. Furthermore, digital technologies such as GIS, GPS, remote sensing technologies, and big data approaches have been adopted for governance (Kostka and Zhang 2018). In Vietnam there have been attempts to collect information on violators of the forest laws and to create a database in order to strengthen the management of national parks (Nguyen *et al.* 2022).

It also appears that society does not necessarily disagree with centralized governance. For example, amid the unrest caused by the Covid-19 pandemic, people around the world found help, guidance, and hope in a higher power. In this situation, it is argued that citizens are more tolerant of governments (Popat 2021, 279). It has also been reported that more socially advantaged citizens, such as wealthier, better-educated, and urban residents, approve of a centralized monitoring system (Kostka 2019, 1569). These results suggest that a state based on authoritarian environmentalism is not always subject to criticism simply because authoritarian measures of governance are adopted to solve environmental problems.

On the other hand, it has been shown that the situation on the ground is ambiguous, displaying a mixture of authoritarian and liberal features. One case study in China showed that local governments and businesses enjoyed a surprisingly high degree of freedom and flexibility despite authoritarian rules (Lo 2015, 158). Bruce Gilley notes that not all environmental policy models are biased toward either democracy or authoritarianism; they can display a mix of both (Gilley 2012, 289). Coby Shahar describes these as hybrid regimes that are neither democratic nor authoritarian (Shahar 2015, 361). These findings imply that authoritarian environmental governance does not necessarily involve coercive measures.

From these studies, it is evident that regardless of the extent to which states based on authoritarian environmentalism strengthen their political power, the central government by itself either cannot or intentionally does not fully govern society, and that even authoritarian states, to varying degrees, can display democratic features. Erica Frantz, who studied the survival strategies of authoritarian leaders, found differences in behavior by viewing authoritarian regimes in different countries as lying along a continuum rather than lumped into one category (Frantz 2018, 68). Han has also noted that there is no simple, predisposed relationship between mode of environmental policy making—democratic or authoritarian—and political variables such as regime type (Han 2015, 824). This indicates that environmental governance under authoritarianism is diverse, and further research is needed.

Therefore, this study will view authoritarian environmentalism as a hybrid of “ostensible” and “actual” authoritarianism, rather than simply authoritarianism. In this study, “ostensible” authoritarianism refers to political systems that are apparently rigid in terms of political ideology and policy, while “actual” authoritarianism refers to governance that differs from the original aims of a rigid political system. This study describes how a hybrid of “ostensible” and “actual” authoritarianism is applied to environmental governance through analyzing state–society interactions.

Accordingly, this study borrows ideas from studies on authoritarian environmentalism that highlight the importance of path dependence (Han 2015, 824) and policy implementation at the local level (Ahlers and Shen 2018, 315). Furthermore, because there are fewer studies on authoritarian environmentalism combined with Scott’s perspective (1985; 2009), this study draws on his ideas to discuss how the ambiguous state–society relationship exists on the ground. Although Kevin Lo (2015, 158) mentioned a relationship among actors on the ground that was neither democratic nor authoritarian, aside from operating under authoritarian rules, his study was about collusion between local authorities and local businesses. In contrast, this study deals with ways in which the state compromises with local society over forest management due to an accidental coincidence of interests. To understand this relationship, Scott’s (1985; 2009) perspectives are highly suggestive. Scott sheds light on the tenacity of local people and shows how they cleverly reject state control. He has contributed to dispelling the common belief that those who lack political power suffer from oppression. From his perspective, the ambiguous state–society relationship in this study can be interpreted as arising from the tenacity of local people. This study argues that such tenacious local people can also play an important role in diversifying features of environmental governance based on authoritarianism.

Han argues that there is a need for attention on the impact of history via path

dependency to generate more nuanced, context-rich analyses and explanations of politics and policy making in various settings (Han 2015, 824). Anna Ahlers and Shen Yongdong (2018) also point out that authoritarian environmentalism cannot be assessed by employing a macroscopic approach but requires a more detailed analysis where ultimate policy implementation takes place, i.e., at the local level. Through their case study of China's authoritarian environmentalism, they call for attention to downstream adaptability and flexibility in the policy implementation process. They indicate that a "mixture of authoritarian and democratic features" was observable solely at the implementation stage, and only when it helped smooth or accelerate the process (Ahlers and Shen 2018, 316). Therefore, in order to understand the development of authoritarian environmentalism, this study investigates chronological interactions between the state and society, with particular attention to policy implementation at the local level.

Because of the Mekong Delta's historical and geographical specificity, its mangroves are selected as an interesting case to present governance based on "ostensible" and "actual" authoritarian environmentalism. The state and society were not simply in conflict. This was because while mangroves became a national and international target for conservation, shrimp farming became not only a means of livelihood for local residents but also an important industry for the state to earn foreign exchange. In addition, although shrimp farming was often criticized as a cause of mangrove destruction, local residents needed mangroves for shrimp farming, since their aquaculture practice was reliant on the mangrove ecosystem. This historical and geographical specificity created a complexity of interests among central and local governing actors, leading to the formation of a hybrid political system.

The study site is a peripheral area at the tip of southern Vietnam, which was a frontier until the 1970s. This area has been transformed into shrimp farming sites, which contribute to the domestic shrimp aquaculture industry. Residents of the mangroves, who migrated from neighboring areas in search of natural resources and became pioneers, now practice shrimp aquaculture while conserving mangrove forests in their shrimp ponds. The background to the formation of the production areas is the expansion of the governing authority by the state to the peripheral areas after reunification in 1975 and the resulting interactions between the state and local residents.

The study site was previously a place of refuge from the struggle for supremacy and a place where resources could be freely utilized. In this sense, this area may be considered as a non-state space like "Zomia" (Scott 2009, 14). Scott considered Zomia as an area distant from state governance. Zomia was a periphery with geographical features such as forests, wilderness, deserts, grasslands, swamps, and mangroves that were attractive to those who wished to avoid state governance. The study site with

mangroves on the periphery can be considered to have similarities in historical background and geographical features with non-state spaces.

Therefore, this study considers the development of shrimp farming in mangroves as the transformation of non-state space into state space. In this context, the governing technology that the state adopted to enclose mangroves was examined. How this technology was introduced and how it enhanced state governance will be examined from the viewpoints of the central state and local forest officers.

Conversely, we will also examine how local residents who freely utilized natural resources coped with the government's measures. Scott describes how peasants survived under oppressive control through everyday resistance to minimize disadvantages as much as possible (Scott 1985, 29). By following his idea of "everyday resistance" (Scott 1985), we will pay attention to aspects of the "everyday negotiation" conducted by peasants. In particular, we will depict the various acts of negotiation by local people with forest officers under the establishment of modern governance.

After that, the kinds of order and political system that have been established as a result of interactions will be examined. This study considers the political system as a combination of governance at the central and local levels (Matsushita and Ono 2007, 4). To understand how authoritarian environmentalism works on the ground, this paper will describe the characteristics of both central and local governance and how they affect mangrove landscapes. In interpreting the meaning of the current arrangement for each actor, this paper will refer to "ostensible" authoritarianism and "actual" authoritarianism.

III The Methodology and the Research Site

III-1 Methodology

First, to understand the viewpoints of the state and local residents, semi-structured interviews were conducted with the Department of Agriculture and Rural Development Ca Mau (DARD), Forest Management Board (FMB), forest officers, and 37 local residents who immigrated from neighboring areas and were practicing shrimp farming. The interviews were conducted in September 2015, July 2016, and November 2016.

The main questions for each actor were as follows: The question on the DARD concerned the role of the organization and its policies regarding forestry and aquaculture. The question on the FMB concerned the process of enclosure movement in the field, how to strengthen the FMB's administrative ability, and how to monitor local people. Local residents were also asked about the background of their immigration, natural resource utilization after settlement, and measures to cope with institutions

and monitoring by the FMB. Additional semi-structured interviews were conducted in August and September 2019 with 22 local people, in an effort to gauge their consciousness of mangrove conservation as shrimp farmers.

Although the respondents were small in number, they were from various parts of the village, from north to south. Each interview lasted between one and 1.5 hours. Interviews with DARD and FMB officials were conducted in their offices, while interviews with local residents were conducted in their houses. The interviews were conducted in both English and Vietnamese with the help of a translator. Although we were strangers to the locals, we tried to develop a rapport with them by visiting them many times, obtaining informed consent, interviewing them in their homes to make them feel comfortable, and having coffee or beer with them. In particular, Vietnamese research assistants—university students with fieldwork experience—helped us connect with the locals.

Secondary materials, such as existing studies and statistical data, were used to understand the history of mangroves in southern Vietnam.

We compiled the viewpoints of the state, forest officers, and local people based on the results of interviews and data from secondary materials, the kind of interrelationships among them, and how such interrelationships created the current landscape.

III-2 *Research Site*

The research site was Ca Mau Province, Ngoc Hien District, and Village V.¹⁾ Ca Mau Province is located in the southernmost part of Vietnam. Its land area measures 5,221.2 km², and it has a population of 1.19 million (Socialist Republic of Vietnam, General Statistics Office 2019). Ngoc Hien District is located at the tip of Ca Mau, which is 70 km from the central city of Ca Mau. The main industries in Village V are shrimp farming and forestry. In Ngoc Hien District, a new road has been paved leading to Dat Mui, the southernmost tip of Vietnam. Some roads are passable by motorbike and car. However, most of the houses are accessible only by boat or on foot. This geographical condition of the periphery made it difficult for the FMB to control the land use of residents until modern monitoring technology was introduced.

IV **Transfiguration of Mangroves into State Spaces**

IV-1 *Overview of the History of Ca Mau*

Currently, the mangrove area in Ca Mau Province is a shrimp production site. However,

1) The study site is anonymized.

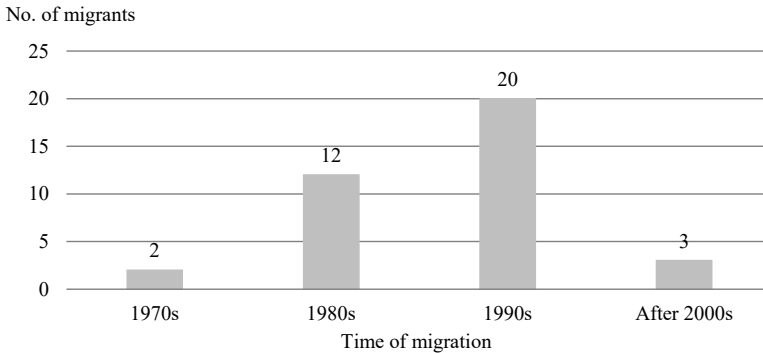


Fig. 1 Number of Migrants to Village V

Source: Prepared by Watanabe Hiroki based on the results of an interview survey in November 2016

according to analysis of aerial photographs, construction of villages began in the 1970s, and shrimp ponds began to be built in the area in the 1980s (Nguyen *et al.* 2015, 506; Van *et al.* 2015, 77).

During the Second Indochina War, the mangroves of Ca Mau became a military base camp and an evacuation area (Phan and Hoang 1993, 77). A few local residents who immigrated to Village V in the 1970s responded that they had done so to escape the war. Since reunification, the population in the wetlands has increased. After the disbandment, military personnel came to live in the mangroves, and the area was designated as an economic development zone, which led to the population growth there (Phan and Hoang 1993, 102).

According to an FMB officer, immigration to Village V increased sharply from the 1990s. Fig. 1 shows the number of migrants to Village V by period based on the results of interviews with local residents. Consistent with the FMB officer's testimony, the number of migrants to Village V increased in the 1980s and 1990s. Based on interviews with local residents who had immigrated by the 1990s, the reason for immigration was the availability of large plots of land and rich aquatic resources, and the ability to earn money through shrimp farming. Some of the interviewees freely claimed land and utilized natural resources, disregarding government regulations.

IV-2 *Appearance of Current Shrimp Ponds*

Fig. 2 shows a shrimp pond in Village V. Mangroves are grown in these shrimp ponds. This landscape, consisting of forest and water surface, is a result of the introduction of land use zoning by the Vietnamese state. Land use regulations require local people to reserve at least 60 percent of their shrimp ponds for mangroves; thus, as local people



Fig. 2 A Shrimp Pond in Village V (photo by Watanabe Hiroki, 2016)

have been assigned the duty of mangrove conservation, they practice shrimp farming while maintaining mangroves in their shrimp ponds.

This description may create the impression that the success of mangrove conservation is due to policy implementation by the state. However, it is not true that local people have been engaged in forest conservation only because they have been assigned the responsibility. Originally, shrimp farming required the presence of mangroves. This can be explained by the shrimp farming method that has been locally developed since the 1980s.

The shrimp farming method practiced in Village V is extensive farming, which can be interpreted as “organic aquaculture.” Extensive shrimp farming is different from intensive shrimp farming and does not require investments in water quality improvement or the use of chemicals, aerator pumps, and feed. For example, tides are utilized to replace the water in shrimp ponds. Each shrimp pond is connected to the canal, and water is replaced through a small gate. Additional feeding of shrimp is not needed, because brackish water from the canal provides plankton as a natural feed. Furthermore, mangroves in the pond can be used for water purification. In summary, local people practice shrimp farming that relies on mangrove ecosystems, which is why they need mangroves for shrimp aquaculture.

This extensive method has been implemented since the early pioneer days as the local environment originally provided a habitat for wild shrimp. Locals caught wild shrimp until the 1980s. After that, an increase in the number of migrants resulted in a decline in the wild shrimp population. In addition, because of the higher market price of black tiger prawns, shrimp farmers began to release black tiger shrimp seeds into

Table 1 Local People's Perception of Impacts of Forest Conservation on Shrimp Farming*

Positive Effects	Negative Effects
<ul style="list-style-type: none"> • Roots provide habitat for shrimp and crabs • Functions as sunshade to prevent water temperature from rising • Leaves function as a source of food • Wild fish and crabs can also be farmed • Timber provides an additional income source 	<ul style="list-style-type: none"> • Lower water temperature because of less sunlight • Decreasing water quality because of accumulation of leaves • Less space for shrimp growing • As trees grow bigger, productivity decreases • Profit from timber takes a long time to generate

Source: Prepared by Watanabe Hiroki from interviews conducted in August and September 2019

Note: * This is local people's perception, which does not question correctness based on natural science.

their ponds. Although they began to use shrimp seeds reared in hatcheries, they continued to practice extensive shrimp farming relying on mangrove ecosystems.

Because such a local environment has become the foundation of extensive shrimp farming, local people have maintained mangroves in their shrimp ponds. Therefore, the landscape shown in Fig. 2 is not only the result of policy implementation but the result of spontaneous efforts by local people.

Nonetheless, for local shrimp farmers who depend on shrimp farming for their livelihood, mangroves have less importance. Hence, while conserving mangroves in shrimp ponds, they strive to expand the water surface as much as possible. This is accompanied by a consciousness of mangrove conservation. Table 1 shows local people's perceptions of the impacts of forest conservation on shrimp farming. They recognized both the advantages and the disadvantages of keeping mangroves. Among its advantages, they mentioned that mangrove roots may provide a habitat for shrimp and crab, and mangroves function as shade to prevent the temperature of the pond from rising. Mangrove leaves are a source of food for shrimp. Besides shrimp, the pond environment may provide a suitable habitat for wild fish and crabs. Finally, timber from the mangroves can provide an additional income source.

Among the disadvantages, large trees cause lower water temperatures because they reduce sunlight. They also result in the accumulation of leaves in the pond, which worsens water quality. There is a reduction in the surface area of water as mangroves grow, which results in reduced shrimp productivity. In addition, it takes a long time to generate profit from mangrove timber.

Overall, mangroves serve contradictory functions. For example, although they provide shade to keep the water temperature down, this can cause excessively low water temperatures. Although the leaves can be a source of food for shrimp, the accumulation of leaves can worsen water quality. All interviewees stated that having too

much forest is not good, while having no forest at all is also not good. They noted the importance of maintaining a balanced mangrove-to-water ratio.

Therefore, this study asked residents' opinions on the ideal percentage of forest area, assuming there were no land use regulations. The most popular ratio was 20 percent to 40 percent, which is lower than the stipulated 60 percent. One interviewee stated that the forest was not necessary; they had the idea that a larger water surface correlates with higher shrimp productivity.

There has been no room for local people's preferences to be reflected in the state's land use policy; people just have to follow the rules. This top-down approach by the state has led to confrontations between the state and local people. On the other hand, the state does have one of the same ideas as local people: that too much forest area is not good but having no forest at all is also not good. This is because the shrimp aquaculture industry is important for the state to earn foreign exchange. This accidental confluence of interests has affected the construction process of the mangrove shrimp landscape. The landscape shown in Fig. 2 presents both confrontation and cooperation.

How has this confrontation and cooperation progressed and influenced the development of authoritarian environmentalism? The next section deals with the viewpoint of the state, which has tried to enclose mangroves, and local people, who have coped with state governance.

IV-3 *Domination by the State*

In 1986 the People's Committee of Minh Hai Province, now bifurcated into Ca Mau Province and Bac Lieu Province, issued Instruction No. 21/CTUB to increase forest conservation. At the same time, Instruction No. 359/UBA empowered the committee to exercise strict control over those who cut mangroves illegally for shrimp pond construction (Phan and Hoang 1993, 126). In addition, state fishery-forestry enterprises (SFFE) were established to address land use problems in the field (Clough *et al.* 2002, 2).

On the other hand, the People's Committee of Minh Hai Province passed Instruction No. 33/CTUB to regulate the development of natural resources. This instruction designated coastal areas into sites for forestry, forestry-fishery, and fishery. However, due to the rapid increase in migrants, this plan did not work effectively (Phan and Hoang 1993, 127). Thus, although the state tried to control activities in these regions through land use zoning, its goal was not achieved.

In 1990, Instruction No. 53/CT was enacted by the prime minister for afforestation to protect the environment in coastal areas and estuaries. In addition, the Ministry of Forestry passed Decision No. 413/QD to carry out 60 km² of reforestation along the coastline (Phan and Hoang 1993, 125).

In 1991, the Minh Hai provincial government issued Decision No. 64-QD/UB to divide the forest area into “production forest,” “protection forest,” and “special use forest” (Phan and Hoang 1993, 127). Instead of being allowed to practice shrimp farming officially in production forests and protection forests, local people were assigned to manage forests. This required them to reserve 75 percent of the area of shrimp ponds as forest (Clough *et al.* 2002, 37).

From 1993 to 1998, Reforestation Program 327 was conducted. In 1994, Decision No. 202 was issued to supplement Decision No. 64-QD/UB. This led to the creation of a land contract between SFFEs and local people. The specifications of rights and duties related to land utilization were decided by the People’s Committee. In 1998, after the completion of Reforestation Program 327, a new reforestation program was launched (Truong 2000, 74).

It is clear that the state put efforts into forest conservation by involving local people in forest management and reforestation. At the same time, the state planned to alleviate poverty through the development of shrimp aquaculture. This illustrates the potential for conflicting policy priorities among state bureaucracies. In 1987, the shrimp aquaculture export program was introduced in line with Vietnamese Government Decision 347-CT. The most important and influential policy within this program was supporting the conversion of land to shrimp ponds (Tran and Bush 2010, 1106). In 1999, a zoning plan for mangrove forest reforestation in Ca Mau, Bac Lieu, Soc Trang, and Tra Vinh was approved by the prime minister. This called for a reduction in the percentage of forest area in shrimp ponds from 75 percent to 60 percent (Truong *et al.* 2001, 9). This decision reflected the state’s desire to increase shrimp production. The state planned to increase exports from US\$145 million in 1999 to US\$500 million by 2005 (Clough *et al.* 2002, 3). At the same time, the Vietnamese prime minister approved Decision 224/1999/QD-TTg. This was a program for aquaculture development that aimed to increase exports to US\$2.5 billion (Tran and Bush 2010, 1106). In this program, local people were allowed to convert coastal saline rice fields into shrimp ponds (Tran *et al.* 2002, 14). However, they had already converted them on their own (Luttrell 2001, 535).

Based on the above measures, it is evident that the state wanted to change the direction of shrimp aquaculture development while conserving mangroves. However, this development plan resulted in further loss of mangroves. Hence, from the late 1990s the Rehabilitation of Mangrove Forest Project (RMFP) was carried out in shrimp farming areas of the Mekong Delta, with the aid of the Dutch government. RMFP was aimed at the development of a silvofishery model for shrimp farming in mangroves. RMFP also collaborated with the Coastal Wetlands Protection and Development Project funded by the World Bank and carried out the Coastal Belt Zoning Plan to establish a

Table 2 Land Use Regulations of Each Type of Forest Area in Village V

	Residence	Forest Coverage Ratio of Shrimp Ponds	Logging
Production forest areas	Allowed	At least 60%	All trees of harvestable age can be logged at once
Protection forest areas	Allowed	At least 60%	A maximum of 2 ha can be logged at one time
Special use forest areas	Prohibited		Prohibited

Source: Prepared by Watanabe Hiroki based on interviews with FMB in July 2016

buffer zone along the coast (Clough *et al.* 2002, 35). Furthermore, Ca Mau Province joined the Swiss Import Promotion Program to access the market in Switzerland and the EU in 2001. Accordingly, an international environmental certification scheme for shrimp farming was introduced in mangrove areas (Tran and Bush 2010, 1109; Omoto 2012, 73).

Table 2 shows the land use regulations for each forest area in Village V. Forestland is divided into production forest areas, protection forest areas, and special use forest areas from north to south. Each area has different land use regulations. In production forest areas and protection forest areas, local people are allowed to live and practice shrimp farming, but they are obliged to preserve the forest. Local people must maintain shrimp ponds in accordance with the specified forest-to-water surface area ratio. Currently, the forest cover of shrimp ponds is required to be at least 60 percent. With regard to logging regulations, in production forest areas all trees of harvestable age can be logged at once, while in protection forest areas a maximum of 0.02 km² can be logged at one time. On the other hand, housing and utilization of natural resources are prohibited in special use forests, where the FMB exercises direct control.

IV-4 *Monitoring by the FMB*

The FMB is a local agency of the DARD. It is responsible for managing forests through afforestation and reforestation, and monitoring local residents living in mangroves. The NM²-FMB, which was the subject of this study, has jurisdiction over Village V and its adjacent village. The NM-FMB is a restructured organization from SFFE–NM, which was originally established in 1989. Funding for carrying out the organization's activities is met through an independent budget, a subsidy from the government, and financial support from a local seafood trading company that buys internationally certified shrimp.

In August 2019, the FMB had 38 staff members. The organization is divided into

2) Branch names are anonymized.



Fig. 3 A Small FMB Branch Office (photo by Watanabe Hiroki, July 2016)

executive, administrative, technical, and patrol divisions. There are eight small branch offices, each of which has its own areas of jurisdiction. Fig. 3 shows one of the branch offices of the FMB. About four officers belong to each office, and they monitor local land use every day.

The FMB is tasked with three main responsibilities. The first is daily patrolling. Staff patrol production forest areas once every two days, and both protection forest areas and special use forest areas every day.

The second responsibility is investigating and recording the forest ratio. The NM-FMB investigates the land condition of all households in Village V once every five years to obtain statistical data. Based on these data, the NM-FMB checks the forest ratio a few times each year.

The third responsibility is permission for logging. Local residents are allowed to log mangroves and sell timber once trees reach harvestable age. Profits from timber are to be shared between the FMB and local people, with the latter receiving 90 percent of the profits. After logging, the residents or the contractor plant trees.

According to the NM-FMB, the number of migrants to Village V increased dramatically from 1990 to 1995. At this time, the NM-FMB could not control the influx of migrants and their development of mangroves into shrimp ponds. From 1995 to 2000, the NM-FMB started to allocate land to each household by permitting their existing land use under government support. A land lease contract for twenty years, named a “green book,” was made between the NM-FMB and local people. Locals were tasked

with the responsibility of conserving mangroves instead of officially obtaining a twenty-year land use guarantee.

On the other hand, to ensure that local people fulfilled their duty of mangrove conservation, the NM-FMB took the following measures. The first was to encourage local residents to replant. The second was to improve their environmental consciousness through education on the mangrove ecosystem. The third was to enhance its own monitoring capability in local forest management by increasing the amount of fines for illegal logging, establishing more branches, increasing the staff, and applying modern technology.

The NM-FMB continued to raise awareness of the importance of mangroves and carried out 3 km² of replantation programs every year in the entire village until 2012. In 2007, the NM-FMB evicted 127 households that had migrated to the southernmost area, a special use forest area under the support of the government and the World Bank. Of the 127 households, 105 were shrimp farmers and 22 were fishermen. Reforestation activities continued after 2012, but the scale of the activities was reduced to 0.6 km² of plantation every year. This was because the NM-FMB took farming conditions into account, giving some security to farmers regarding their water surface.

In 2013 an international environmental certification for shrimp farming was introduced, led by an international NGO. The NM-FMB received technical assistance from NGOs to implement GIS for forest management. Earlier, the NM-FMB had measured forest areas in shrimp ponds using a tape measure and compass. After the implementation of GIS, however, the work efficiency and measurement precision improved. However, the NM-FMB stated that they had already solved the problem of illegal logging, and they provided two reasons for this. First, local residents understood the importance of mangrove conservation for shrimp farming. Shrimp diseases spread in the village when illegal logging occurred, especially from 1995 to 2000. This was an opportunity for residents to learn about the importance of forest conservation. The second reason was that local people came to realize the economic value of timber. The price of timber had increased since 2005, and this became an incentive to manage forests.

The NM-FMB continues to monitor local land use by enhancing its own administrative capacity. As mentioned earlier, shrimp farmers are required to ensure that their shrimp ponds comply with the required forest-to-pond area ratio. However, according to the NM-FMB, only a fraction of farmers followed the specifications at the time of this study, and the ratio of forest cover in shrimp ponds was mostly around 40 percent or 50 percent. Those who adhered to the regulations tended to have more than 0.05 km² of shrimp ponds, which was larger than the average pond size.

Although the NM-FMB strengthened its administrative power by applying tech-

nology, why did only a marginal proportion of farmers adhere to the land use regulations? The NM-FMB mentioned that it was especially difficult to urge local people who had smaller shrimp ponds to engage in reforestation until they had met the standards. This was because the NM-FMB understood that too much forest cover made shrimp production difficult. In short, the NM-FMB intentionally overlooked people who did not comply with regulations while considering their livelihoods. One of the authors asked an NM-FMB official whether there were any criteria on land size that they took into account when overlooking transgressions. The NM-FMB official replied with a smile, saying that there were no particularly clear criteria.

Therefore, the NM-FMB overlooked local farmers' transgressions based on arbitrary decisions. However, the NM-FMB official stated that the forest area had continuously increased through encouraging people to use relatively large ponds to plant trees on a priority basis. This indicates that the FMB followed a carrot-and-stick approach.

IV-5 *Everyday Negotiation by Local People*

What political decisions have local people made as state governance penetrated the mangroves? This section examines everyday negotiation, which refers to various political strategies used by local people against forest officers under the establishment of modern governance. In particular, we depict four coping strategies³⁾ used by local people to deal with the rules in the interest of maintaining their livelihoods.

The first strategy is "going along with the state": local people try to maintain their livelihoods by conforming to the imposed rules. As the NM-FMB official stated, locals engaged in reforestation and forest conservation. Interviewees stated that the reasons for this were that they were mandatory, they were rules, and the people would be fined if they did not follow them.

If a forest was large enough, local people expanded their water surface after obtaining permission from the FMB. For example, resident A stated that when there was a large forest, the FMB gave him permission to expand the water surface. Resident B also stated that to expand the water surface, it was necessary to obtain permission from the FMB. These testimonies indicate that state governance infiltrated into the space where previously open resource use was possible.

However, there were those who successfully dodged governance and maintained their livelihoods by adopting other strategies while going along with the state. This approach may be viewed as the "cheap trick" of refraining from replanting the required number of trees in order to expand the water surface. The following examples illustrate

3) We categorize their strategies in the authors' own terms.

this behavior. When agricultural land was converted into shrimp ponds in the early 1990s, resident C was required by the FMB to replant until the forest cover reached 70 percent. When resident C dug his agricultural land to create a water channel, the FMB asked him to replant the rest of the land. However, since the land was only 0.02 km², while working on afforestation the resident also voluntarily expanded the waterways.

Resident D planted the required number of trees to reach the mandated forest cover of 70 percent; however, on reaching 70 percent cover, he felled the trees he had planted such that his water surface ratio was reached. Before he began planting the trees, resident D had made the forest cover of his land larger than the water surface cover. He said this was because he would be fined if he expanded the water surface to the extent that the water surface ratio exceeded the forest surface ratio.

Resident E voluntarily expanded the water surface by cutting trees himself after settling in the late 1990s. According to him, a reduction in tree cover goes unnoticed by the FMB if the trees are felled gradually.

Resident F used a pond with a water surface ratio of 50 percent. Therefore, resident F was requested by the FMB to plant trees so that the forest cover would be 60 percent. However, he maintained the pond in the same condition as before planting by cutting the trees he had just replanted. This action was noticed by the FMB when they visited his house, and he was required to replant the required number of trees—but he still carried out the same strategy. In this way, resident F played a cat-and-mouse game with the FMB.

Although these people planted trees once, they took action to maintain the water surface as much as possible. However, as resident E mentioned, such cheap tricks were done in moderation and should not be fined. Such an approach was carried out until the 1990s, when open resource use was still possible. It was less evident from the 2000s, perhaps due to the FMB's increased vigilance and oversight. According to some local people, the FMB has recently been able to draw and map shrimp ponds very accurately using new measuring instruments. These instruments include technologies such as GIS and GPS. One of the locals was surprised that although the FMB did not visit his house, they had a precise image of his shrimp ponds. It is clear that the application of modern technology has enhanced the administrative capacity of the FMB, which has led to a reduction in cheap tricks.

The third approach is a "temporary expedient." A temporary expedient refers to behavior in which the FMB demands reforestation but then the shrimp farmer evades the requirement by smoothing over the moment in some way. A temporary expedient is regarded as an alternative strategy of cheap tricks. As the FMB stated, they urged people with large shrimp ponds to plant trees—and even today, local people are still

asked by the FMB to engage in reforestation. There are some people who avoid the requirement through a temporary expedient. For example, resident G was repeatedly criticized by the FMB for his inadequate ratio of forest cover, although his ponds measured 0.15 km². However, he replied with a smile that he had no place to plant trees and ignored the demand. Resident H was also asked to implement reforestation to increase his ratio of forest cover to 60 percent: his pond measured 0.06 km², with 50 percent forest cover. However, resident H temporarily ignored the demand by telling the FMB there were no places to plant trees and requesting them to give him more time. After repeated exchanges, the FMB finally gave up. In this way, some local people avoid the requirement of reforestation by temporarily smoothing over the moment when cheap tricks prove difficult.

The fourth way of dodging governance is through “bargaining.” In this approach, the farmer attempts to bargain with the FMB over the implementation of regulations. Following are examples of this approach. The first is the case of people who were allowed to not plant the amount of trees initially required by the FMB, because of their small landholding. For example, resident I sometimes talked to the FMB about the ratio of forest cover. Although his land had only 40 percent forest cover, his land use condition was accepted because his land area was small: 0.02 km². On the other hand, resident J was fined and his shrimp ponds’ gate was destroyed by the FMB after he was caught freely cutting trees on the land that he obtained in the 1990s. However, he was allowed to stay on in exchange for reforesting the land. In addition, he was allowed to use land with less than 50 percent forest cover since his landholding was small.

The second is the case of a person who was allowed to stay on in consideration of his circumstances. Resident K immigrated to Village V in the early 1990s and freely obtained some forest area. Resident K was allowed to stay there without any fines or destruction by the FMB, as he had been a soldier in the Cambodian war.

The third is the case of a person who was allowed to remain on his land on the condition that he engaged in reforestation and maintained the ratio of forest cover. In the early 1990s Resident L freely acquired newly replanted land, where he cut down young trees to make a shrimp pond. However, he was not made to feel welcome, and in fact his house was burned. He endured the violence and stayed put, and the FMB stopped visiting him. Finally, in 2009, he and the FMB agreed that the FMB would give him a green book on the condition that he reforested the land. Resident L did not remember the exact year—but he did remember the events of the early 1990s.

From the above cases, it is clear that there have been instances in which people negotiated their way to being allowed to live in mangrove forest areas and utilize natural resources, though some of them were subjected to violence. From this fact, it can be

concluded that management by the FMB is not completely rigid. This is supported also by the testimonies of residents who were “overlooked” by the FMB.

Resident M migrated and bought land in 2008, and he cut trees freely to expand the water surface. Though his actions initially went unnoticed by the FMB, they finally drew attention when he used wood from the trees to create a water gate. Since resident M did not have enough money to pay a fine, he forfeited his boat instead. His shrimp pond measured 0.01 km². The forest area was 0.005 km², and the area of the water surface was 0.007 km². He stated that the FMB was aware of the condition of his land; however, he was not urged to replant trees given his small land size. This case supports the notion that forest management by the FMB is not completely rigid. It is understood that the FMB exercises both strictness and flexibility.

The last approach used by villagers to dodge governance is “treating.” This refers to attempts to establish a good relationship with the FMB. According to land use regulations, local people need to replant trees immediately after logging. However, some interviewees mentioned that if people maintained a good relationship with the FMB, they could postpone replantation and meanwhile produce more shrimp thanks to the lower density of mangroves. To create a good relationship, they invited FMB personnel over for coffee or beer. It was easy for them to contact FMB officials because they also lived in Village V. Although this study did not investigate the veracity of these claims, it is widely believed that maintaining a good relationship with the FMB is one way for villagers to secure their livelihoods.

V How Does Authoritarian Environmentalism Work on the Ground?

V-1 Combination of Central and Local Governance

As a result of such interactions, what are the kinds of orders and political system that have been established? In order to understand the features of authoritarian environmentalism, this section examines how the political system is organized through a combination of central and local governance. Characteristics of governance at both the central and local levels are described as follows.

First, the results show that there are two main features of governance by the central government. The first is based on gradualism. With regard to mangroves, the Vietnamese government first tried to manage local areas by deploying SFFE in the 1980s. However, following the high influx of migrants to mangroves, the government could not control the resource utilization by migrants and instead involved them in forest management. On the other hand, although the ratio of forest cover in shrimp ponds was set at 75

percent, it decreased to 60 percent in the 1990s. From this, it is understood that the government gradually changed its approach. The reduction of prescribed forest cover reflects the Vietnamese state's desire to increase shrimp production and the potentially conflicting policy priorities among state bureaucracies.

The second feature is that the government strengthened its governing power by using a program for mangrove rehabilitation and the development of environment-friendly shrimp aquaculture. With support from international organizations, the government demarcated areas where shrimp farming was allowed and where it was prohibited. It was able to involve local people and apply modern technology such as GIS for monitoring, which increased forest protection and also increased foreign exchange earnings. The government was not able to apply GIS earlier due to budget constraints. This highlights the government's strategy to enhance governance under the guise of sustainable development.

At the local level, it was evident that discretion by forest officers based on the local social context helped residents to survive with top-down governance, though this was dependent on arbitrary decisions by the FMB. As explained previously, the requirement to maintain a forest ratio of 60 percent is a significant burden for local residents. Groups of villagers even visited the FMB office to try to negotiate for a revision of land use regulations. However, the FMB replied that it was a rule and there was no room for negotiation. Therefore, it was not realistic to implement bottom-up governance that reflected residents' ideas in the decision-making process. Instead, local people survived top-down governance by carrying out negotiations to maintain their livelihoods. The FMB also played an important role in helping local residents by exercising discretion based on the local context; however, this was dependent on arbitrary judgments by FMB officials, and not everyone received equal treatment.

How is the combination of central and local governance reflected in landscape construction? Fig. 4 shows the pond area and ratio of forest cover of each population in Village V. Different points show the different coping strategies of local people. Fig. 4 demonstrates the gap between institutions and reality. This gap has resulted from the interaction between the FMB and local residents. There were more people who maintained 50 percent forest cover than those who met the stipulated 60 percent. There were those who maintained 60 percent forest cover in spite of trying various strategies to avoid it, and there were those who maintained 50 percent forest cover by going along with the state. People whose ponds had 50 percent forest cover after they went along with the state gave various explanations for the shortfall. For example, some stated that the water surface expanded naturally due to erosion of embankments, without the cutting of forest. Others said the FMB accepted forest cover of at least 50 percent.

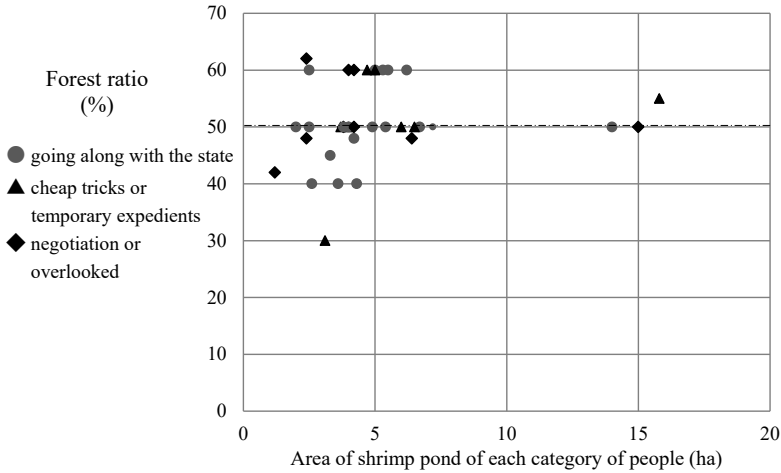


Fig. 4 Ratio of Forest to Shrimp Pond Area

Source: Prepared by Watanabe Hiroki based on the results of interviews conducted in November 2016

Hence, discrepancies in the ratio of forest cover resulted from interactions between the FMB and local residents.

Although there was no change in top-down governance by the state and strong monitoring systems were established, authoritarianism in Vietnam was actually different from what we usually imagine when we hear the word “authoritarianism.” Alternative governance was unintentionally developed based on social context in the field site. The FMB played an important role as coordinator between the central government and local people. Although the FMB is a governmental agency, it arbitrarily took into consideration the local context when functioning as a street-level bureaucracy (Lipsky 2010). This feature of the political system shows a mixture of “ostensible” and “actual” authoritarianism. When considering the institutions and monitoring measures, one might gain the impression of a rigid political system, but in reality there was flexibility in governance on the ground. As Ahlers and Shen (2018) discovered in the case of China, authoritarian environmentalism in Vietnam also had significant nuances at the local level. However, our case shows a different aspect of interaction than existing studies. This point is discussed in the next section.

V-2 *What Does the Hybrid System Mean to Each Actor?*

What does the current combination of “ostensible” and “actual” authoritarianism mean to the state and local people?

First, from the viewpoint of the state, the fact that most villagers have shrimp

ponds with at least 50 percent forest cover means that the government has succeeded in enforcing the rules. In other words, the state has been able to enclose non-state spaces. And from the viewpoint of local people, the fact that the ratio of forest cover is between 50 percent and 60 percent means that they have been controlled by the state.

Conversely, it is also clear that many people use their land with a forest cover of less than 50 percent instead of the stipulated 60 percent. This means there is a gap between the state's objectives and the actual conditions on the ground.

Considering the recent measures taken by the Vietnam government against the spread of Covid-19, it should be possible for the government to increase the forest cover of shrimp ponds to 60 percent if it is serious. In the case of the Covid-19 pandemic, the government imposed a strict lockdown to limit the flow of people. Particularly in Ho Chi Minh City, the state tried to control the behavior of the population by any means possible: enacting numerous regulations, blocking major roads, and deploying troops. Thus, when the state is intent on something, it leaves no stone unturned.

Why does the state not go all out to increase forest cover? There are two possible reasons for this. The first is the existence of conflicting policy priorities between mangrove conservation and shrimp farming, as well as the fact that shrimp aquaculture is an important export industry that earns the state foreign exchange. The FMB exercised discretion and overlooked shrimp farmers who did not follow land use regulations. It stated that the upper levels of bureaucracy knew about this. In addition, a staff member of DARD Ca Mau understood the opinion of local people that increasing forest cover caused a reduction in shrimp production. It is easy to imagine that a decrease in shrimp production will be disadvantageous for the state in light of tax revenue and foreign exchange earnings. Therefore, because of an accidental coincidence of interests, the state and local people are complicit in creating the landscape.

The second reason for the state's non-enforcement of rules is that current political and social conditions are stable. In the past, there was a confrontation between the state and local people when the state enclosed mangroves. If the state tries to force reforestation, it will incur the antipathy of local people and society will be destabilized. For a state that desires a well-ordered society, such a situation is best avoided. People surviving under strict top-down governance also expect local governance to be flexible though arbitrary.

Thus, it may be concluded that for the state, the current situation is the second-best arrangement for preventing social instability and a decrease in shrimp production, even though policies have not been implemented exactly according to land use regulations. For local residents, too, the current situation may be considered as the second-best arrangement, because it allows for a certain degree of informal land use though it is

a top-down governance that does not reflect the opinions of local people. Therefore, the current arrangement is far from the best one for both, but it is still accepted as the second-best solution. This is because the relationship between the state and local people is not merely one of rivalry or one of conformity. This equivocal relationship has led to the creation of “ostensible” and “actual” authoritarianism.

While other case studies have revealed aspects of interaction between the state and local people—such as the state enacting coercive measures (Ahlers and Shen 2018), the state and firms colluding (Han 2015), and local people circumventing state governance (Scott 2009)—our research shows that the state and society coincidentally share common interests and have thus developed a somewhat cooperative relationship, albeit one marked by tensions. Our findings at this local level can contribute to a more diverse view of authoritarian environmentalism.

VI Conclusion

This study aims to clarify how authoritarian environmentalism works on the ground for political stability, and in particular how the authoritarian state reaches a compromise with society. Through a case study of wetlands in southern Vietnam, by conducting a field survey in Ca Mau Province, we examined chronological interactions between the state and locals over shrimp farming and mangrove conservation. Our analysis demonstrates that the Vietnamese state strengthened its governing ability and succeeded in building a sophisticated monitoring system for mangroves. However, there was a gap between the functioning of forest management institutions and actual conditions on the ground. Not all shrimp farmers followed land use regulations. This gap can be explained by aspects of the interactions between the state and local people. Rather than making optimum use of its capacity, the state reached a compromise with villagers by arbitrarily overlooking and more or less cooperating with locals because of an accidental confluence of interests and to avoid political instability. On the other hand, local residents also adopted unique coping strategies as they lived under top-down governance. Although their choices of coping strategies decreased with the establishment of modern governance, they were still resilient against state governance. These interactions between the state and locals created an informal social order through everyday negotiation under authoritarianism. In particular, local forest officers played an important role in connecting the central state and local governance. As in the case of dam watershed management in central Vietnam, this eventually led to some sort of temporal political equilibrium (Ubukata and Hoang 2020, 91).

Vietnam is considered an authoritarian country. However, this study revealed that the image we usually have of an “authoritarian state” can be different from the actual situation on the ground, and previous studies include mention of hybrid regimes. Our study clarified that the Vietnamese political system includes aspects of both “ostensible” and “actual” authoritarianism, and that authoritarian environmentalism does not necessarily mean the suppression of society. This hybrid political system is based on an equivocal state–society relationship. It results from potentially conflicting policy priorities, the scale of state bureaucracies’ operations at both the central and local levels, and the interactions between local authorities and local residents. Although the authoritarian state has strong powers, the state may not have strict control over society. As a future challenge, the dynamics of temporal political equilibrium should be approached. As this equilibrium is temporary, there is no denying the possibility that it may be disturbed in the future depending on changes in power relations. Will the equilibrium be maintained in the future or will it collapse? To track this issue, more research is needed to study interactions between the people and the authorities under authoritarian environmentalism and to take into consideration power relations.

Accepted: June 27, 2023

Acknowledgments

The authors would like to thank Dr. Chau at the University of Social Sciences and Humanities, Vietnam National University of Ho Chi Minh City, Faculty of Geography, for carefully supporting our research in Vietnam. We are grateful to Ms. Duyen and Mr. Kiem for their assistance with field trips. We would also like to take this opportunity to thank all who helped with our survey in Ca Mau.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Funding

This research was supported by the Japan Society for the Promotion of Science (JSPS KAKENHI grant numbers JP15H05125 and JP21K12428), Tobitate! (Leap for Tomorrow) Study Abroad Initiative, and K. Matsushita Foundation Award and Grant Programs.

References

- Agrawal, Arun; Chhatre, Ashwini; and Hardin, Rebecca. 2008. Changing Governance of the World's Forests. *Science* 320(5882): 1460–1462. <https://doi.org/10.1126/science.1155369>.
- Ahlers, Anna L. and Shen Yongdong. 2018. Breathe Easy? Local Nuances of Authoritarian Environmentalism in China's Battle against Air Pollution. *China Quarterly* 234: 299–319. <https://doi.org/10.1017/S0305741017001370>.
- Balooni, Kulbhushan and Inoue Makoto. 2007. Decentralized Forest Management in South and Southeast Asia. *Journal of Forestry* 105(8): 414–420. <https://doi.org/10.1093/jof/105.8.414>.
- Beeson, Mark. 2010. The Coming of Environmental Authoritarianism. *Environmental Politics* 19(2): 276–294. <https://doi.org/10.1080/09644010903576918>.
- Brain, Stephen and Pál, Viktor. 2018. *Environmentalism under Authoritarian Regimes: Myth, Propaganda, Reality*. London: Routledge. <https://doi.org/10.4324/9781351007061>.
- Capistrano, Doris. 2008. Decentralization and Forest Governance in Asia and the Pacific: Trends, Lessons and Continuing Challenges. In *Lessons from Forest Decentralization: Money, Justice and the Quest for Good Governance in Asia-Pacific*, edited by Carol J. Pierce Colfer, Ganga Ram Dahal, and Doris Capistrano, pp. 211–232. London and Stirling: Earthscan.
- Clough, Barry; Johnston, Danielle; Tran Thanh Xuan ; Phillips, Michael J.; Pednekar, Sunil S.; Nguyen Huu Thien ; Truong Hoang Dan ; and Pham Le Thong. 2002. Silvofishery Farming Systems in Ca Mau Province, Vietnam. Report prepared under the World Bank, NACA, WWF, and FAO Consortium Program on Shrimp Farming and the Environment. Work in Progress for Public Discussion. Published by the Consortium. <http://library.enaca.org/Shrimp/Case/Vietnam/FinalSilvofishery.pdf>, accessed October 11, 2021.
- Diamond, Larry. 2015. Facing Up to the Democratic Recession. *Journal of Democracy* 26(1): 141–155. <https://doi.org/10.1353/jod.2015.0009>.
- Eckersley, Robyn. 2004. *The Green State: Rethinking Democracy and Sovereignty*. Cambridge: MIT Press. <https://doi.org/10.7551/mitpress/3364.001.0001>.
- Frantz, Erica. 2018. *Authoritarianism: What Everyone Needs to Know*. New York: Oxford University Press. <https://doi.org/10.1093/wentk/9780190880194.001.0001>.
- Freedom House. 2022. Global Freedom Status of Vietnam. Freedom House. <https://freedomhouse.org/country/vietnam/freedom-world/2022>, accessed October 15, 2022.
- Gilley, Bruce. 2012. Authoritarian Environmentalism and China's Response to Climate Change. *Environmental Politics* 21(2): 287–307. <https://doi.org/10.1080/09644016.2012.651904>.
- Han Heejin. 2015. Authoritarian Environmentalism under Democracy: Korea's River Restoration Project. *Environmental Politics* 24(5): 810–829. <https://doi.org/10.1080/09644016.2015.1051324>.
- Imai Nobuo; Furukawa Takuya; Tsujino Riyou; Kitamura Shumpei; and Yumoto Takakazu. 2018. Factors Affecting Forest Area Change in Southeast Asia during 1980–2010. *PLoS ONE* 13(6): e0199908. <https://doi.org/10.1371/journal.pone.0199908>.
- Kostka, Genia. 2019. China's Social Credit Systems and Public Opinion: Explaining High Levels of Approval. *New Media & Society* 21(7): 1565–1593. <https://doi.org/10.1177/1461444819826402>.
- Kostka, Genia and Zhang Chunman. 2018. Tightening the Grip: Environmental Governance under Xi Jinping. *Environmental Politics* 27(5): 769–781. <https://doi.org/10.1080/09644016.2018.1491116>.
- Larson, Anne M. and Soto, Fernanda. 2008. Decentralization of Natural Resource Governance Regimes. *Annual Review of Environment and Resources* 33(1): 213–239. <https://doi.org/10.1146/annurev.enviro.33.020607.095522>.
- Li Yifei and Shapiro, Judith. 2020. *China Goes Green: Coercive Environmentalism for a Troubled Planet*. Cambridge and Medford: Polity.

- Lipsky, Michael. 2010. *Street-Level Democracy: Dilemmas of the Individual in Public Services*. New York: Russell Sage Foundation.
- Lo, Kevin. 2021. Authoritarian Environmentalism, Just Transition, and the Tension between Environmental Protection and Social Justice in China's Forestry Reform. *Forest Policy and Economics* 131 (October): 102574. <https://doi.org/10.1016/j.forpol.2021.102574>.
- . 2015. How Authoritarian Is the Environmental Governance of China? *Environmental Science & Policy* 54 (December): 152–159. <https://doi.org/10.1016/j.envsci.2015.06.001>.
- Luttrell, Cecilia. 2001. Institutional Change and Natural Resource Use in Coastal Vietnam. *GeoJournal* 55(2): 529–540. <https://doi.org/10.1023/A:1021788811304>.
- Matsushita Kazuo 松下和夫 and Ono Tomohiko 大野智彦. 2007. Kankyo gabanansu ron no shin tenkai 環境ガバナンス論の新展開 [New development of environmental governance theory]. In *Kankyo gabanansu ron 環境ガバナンス論* [Environmental governance theory], edited by Matsushita Kazuo 松下和夫, pp. 3–31. Kyoto: Kyoto University Press.
- Nguyen Thanh Son; Chen Farn Chi; Chang Bin Ni; Chen Ru Cheng; Chang Yu Ly; and Bui Xuan Thanh. 2015. Mangrove Mapping and Change Detection in Ca Mau Peninsula, Vietnam, Using Landsat Data and Object-Based Image Analysis. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* 8(2): 503–510. <https://doi.org/10.1109/JSTARS.2014.2360691>.
- Nguyen Toai; Lawler, Susan; Hoa Vuong ; and Da Huynh. 2022. Violations of Forest Laws in the Bu Gia Map National Park, Vietnam. *Society & Natural Resources* 35(2): 204–219. <https://doi.org/10.1080/08941920.2021.2011513>.
- Omoto Reiko. 2012. Small-Scale Producers and the Governance of Certified Organic Seafood Production in Vietnam's Mekong Delta. PhD dissertation, University of Waterloo. <http://hdl.handle.net/10012/7078>, accessed December 13, 2021.
- Ortmann, Stephan. 2017. *Environmental Governance in Vietnam: Institutional Reforms and Failures*. Cham: Palgrave Macmillan.
- Phan Nguyen Hong and Hoang Thi San. 1993. *Mangroves of Vietnam*. Bangkok: IUCN. <https://portals.iucn.org/library/node/7084>, accessed December 17, 2017.
- Popat, Swara. 2021. Rising Authoritarianism: The Crippling Effects of Covid-19 Pandemic. *International Journal of Law Management & Humanities* 4(2): 273–280. <http://doi.org/10.1732/IJLMH.26051>.
- Rong Ke; Shi Yongjiang; Shang Tianjiao; Chen Yantai; and Hao Han. 2017. Organizing Business Ecosystems in Emerging Electric Vehicle Industry: Structure, Mechanism, and Integrated Configuration. *Energy Policy* 107 (August): 234–247. <https://doi.org/10.1016/j.enpol.2017.04.042>.
- Sato Jin 佐藤仁. 2021. Ajia no kankyo keni shugi: Izon kankei kara mita kankyo seisaku to hanten アジアの環境権威主義——依存関係からみた環境政策と反転 [Environmental authoritarianism in Asia: “Inversion” of environmental policies from the perspective of dependent relations]. In “*Shoki shigen kankyo seisaku no keisei katei: “Kohatsu no kokyo seisaku” toshite no shido* 「初期」資源環境政策の形成過程——「後発の公共政策」としての始動 [Formation process of resource and environmental policy in its “early stage”: The beginning as a “latecomer public policy”], edited by Terao Tadayoshi 寺尾忠能, pp. 75–96. Chiba: IDE-JETRO.
- Scott, James C. 2009. *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia*. New Haven: Yale University Press.
- . 1985. *Weapons of the Weak: Everyday Forms of Peasant Resistance*. New Haven and London: Yale University Press.
- Shahar, Coby Dan. 2015. Rejecting Eco-Authoritarianism, Again. *Environmental Values* 24(3): 345–366. <https://doi.org/10.3197/096327114X13947900181996>.
- Socialist Republic of Vietnam, General Statistics Office. 2019. *The Statistical Yearbook of Viet Nam*. Statistical Publishing House. <https://www.gso.gov.vn/en/data-and-statistics/2020/09/statistical->

- yearbook-2019/, accessed January 15, 2021.
- Sutherland, John W. and Willson, Dale K. 2012. Better Environmental Governance: A Function of Democracy or Authoritarianism? *International Journal of Business, Humanities and Technology* 2(2): 173–189. <https://www.ijbhtnet.com/journal/index/133>, accessed November 18, 2021.
- Tran Thi Tu Ha and Bush, Simon R. 2010. Transformations of Vietnamese Shrimp Aquaculture Policy: Empirical Evidence from the Mekong Delta. *Environment and Planning C: Government and Policy* 28(6): 1101–1119. <https://doi.org/10.1068/c09194>.
- Tran Van Nhung; Le Thanh Luu; Trinh Quang Tu; Pham Minh Tam; and Tran Thi Anh Nguyet. 2002. Vietnam Shrimp Farming Review—Individual Partner Report for the Project: Policy Research for Sustainable Shrimp Farming in Asia. European Commission INCO-DEV Project PORESSFA No.IC4-2001-10042, CEMARE University of Portsmouth UK and RIA1, Bac Ninh, Vietnam. http://www.silvofishery.com/dropbox/EC_-_Policy_Research_for_Sustainable_Shrimps_Farming_in_Asia.pdf, accessed October 10, 2021.
- Truong Hoang Minh; Yakupitiyage, Amararatne; and Macintosh, Donald J. 2001. Management of the Integrated Mangrove-Aquaculture Farming Systems in the Mekong Delta of Vietnam. ITCZM Monograph No. 1. https://www.researchgate.net/publication/265670597_Management_of_the_Integrated_Mangrove-Aquaculture_Farming_Systems_in_the_Mekong_Delta_of_Vietnam, accessed October 10, 2021.
- Truong Tran Luu. 2000. Viet Nam: Mangrove-Friendly Aquaculture. In *Mangrove-Friendly Aquaculture: Proceedings of the Workshop on Mangrove-Friendly Aquaculture Organized by the SEAFDEC Aquaculture Department, January 11–15, 1999, Iloilo City, Philippines*, edited by Jurgenne H. Primavera, Luis Ma B. Garcia, Milagros T. Castaños, and Marilyn B. Surtida, pp. 67–80. Tigbauan: Southeast Asian Fisheries Development Center, Aquaculture Department. <https://repository.seafdec.org.ph/handle/10862/1947>, accessed October 11, 2021.
- Ubukata Fumikazu and Hoang Quang Truong. 2020. Local Struggles for the Coproduction of Natural Capital: Payment for Forest Environmental Services in Central Vietnam. In *Social Movements Contesting Natural Resource Development*, edited by John F. Devlin, pp. 83–97. Abingdon and New York: Routledge.
- Van, T.; Wilson, Nick; Thanh Tung Hoang; Quisthoudt, Katrien; Vo Quang Minh; Le Xuan Tuan; Guebas, Dahdouh Farid; and Koedam, Nico. 2015. Changes in Mangrove Vegetation Area and Character in a War and Land Use Change Affected Region of Vietnam (Mui Ca Mau) over Six Decades. *Acta Oecologica* 63 (February): 71–81. <https://doi.org/10.1016/j.actao.2014.11.007>.
- Vu Ngoc Anh. 2017. Grassroot Environmental Activism in an Authoritarian Context: The Trees Movement in Vietnam. *Voluntas* 28: 1180–1208. <https://doi.org/10.1007/s11266-017-9829-1>.