Chapter 9
Green for Whom? Exploring Ecotourism as a Climate-Adaptation Strategy in Trang An, Vietnam

Thao Hoang and Gwenn Pulliat

Abstract This chapter adopts a contextual vulnerability approach to examine the urbanizing Truong Yen commune in Trang An scenic landscape complex, a natural and cultural UNESCO World Heritage site in the Red River Delta of Vietnam. Trang An exemplifies the rise of ecotourism in Vietnam as a solution to the country's need for both economic growth and environmental protection, while responding to climate change adaptation and mitigation challenges. Located in an area undergoing peri-urbanization, Trang An contributes to the fostering of a 'greener' urban development pattern while providing local communities with less climate-sensitive livelihoods. However, new vulnerabilities emerge from this transition as a result of redefined power relations and differential access to resources. Our critical approach provides a more nuanced picture of a project that is often represented as a success story. While pitfalls are inevitable in such a transformational project, the lived experience of local residents reveals the complex, elusive, and inefficient governance between the various stakeholders on the management level and begs troubling questions about environmental and social justice.

Keywords Ecotourism · Environmental protection · Green development · Vulnerability · Environmental justice · Vietnam

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In the context of rapid urbanization, peri-urban areas are places of paradoxical processes. They absorb burgeoning development pressures in the inner city while also holding the potential for solutions. Green spaces in peri-urban areas, in particular, are a prized necessity and part of the potential answer to the myriad challenges that cities face, including climate change, pollution, and public health (Adams 2018; Ahmad 2016; Kabisch et al. 2016; Munien et al. 2016).

Ninh Binh City in the Red River Delta of Vietnam, discussed in Chapter 5 of this book, is an expanding secondary city with a bold vision to become a green tourism city as well as a Level 1 urban centre of Vietnam by 2050.[1] But there is a gap between vision and reality. The city's plan to develop a clean high-tech industrial zone contrasts with the current reality of Khanh Phu industrial zone. Our colleagues found evidence of devastating environmental damage as well as debilitating effects to the climate resilience and well-being in the adjacent community of Phu Hao village, including spreading sewage water from the industrial zone and heavy pollution of surface water (see Chapter 5). Just 15 km west of Phu Hao is the cultural and natural UNESCO World Heritage Site of Trang An scenic landscape complex, one of the most sought-after ecotourism destinations in the country in recent years.

Trang An is a key component of the city's 'greening' process. Through the expansion of the urban boundaries to encompass all of the World Heritage sites within its urban Master Plan for 2030, Vision 2050, Ninh Binh City is 'greening' in terms of its physical space as well as in its approach to green-growth and economic development. Ecotourism has been promoted to facilitate linkages between environmental protection, a crucial challenge in Vietnam (Ortmann 2017), and community livelihood (Stone and Nyaupane 2016). From a broader perspective, Trang An speaks to the country's increasing interest in and investment into the tourism sector, which is considered a green or 'smokeless' industry that can contribute to a less-polluting pattern of economic growth.

Many other Southeast Asian nations beyond Vietnam have articulated a common desire to boost tourism growth and to form regional ecotourism clusters (Tourism Ministers and Heads of Delegation of the Association of Southeast Asian Nations 2017). For example, the *New York Times* and *Lonely Planet* featured Koh Kong city in Cambodia as an emerging destination where ecotourists can explore the Cardamom mountains and coastline. Likewise, Dawei in Myanmar, with its essentially unspoiled beaches, has enormous ecotourism potential, but local attempts to develop ecotourism have been competing with a Special Economic Zone, including a petrochemical industry and deep seaport (Simpson et al. 2017). Mukdahan and Khon Kaen, in Thailand, have access to national parks. In Vietnam, Lao Cai has long been a hot spot of ecotourism and cultural tourism thanks to beautiful natural and cultural landscapes that are home to different ethnic minorities living in northwestern Vietnam. Because the potential exists for local and regional ecotourism development, the experience

[1] In Vietnam, cities are classified into several categories depending on their population, economic significance, and political role. They receive a different amount of financial support from the national authorities depending on their level. However, there is no strict threshold to shift from a level to another, and promotion to Level 1 is a governmental decision. Level 1 cities are major regional hubs (while Hanoi and Ho Chi Minh City have a 'special class' status).

of one city may provide lessons for others who may also go through the *greening* process by developing ecotourism.

On one side of Ninh Binh City, the industrial zone of Khanh Phu indicates an exacerbation of the negative impacts that human-led developments and climate change have on urban residents' poverty and vulnerability. On the other side of the city, Trang An provides a case study of how a previously climate-sensitive agriculture-dominated region renewed itself to embrace ecotourism and facilitate diversified livelihoods, economic growth, and environmental protection. These antithetical trends lead to our core question: to what extent does the ecotourism project contribute to a more environment-oriented urban development and to communities' adaptation to climate change? Within local communities, how evenly or equitably are the outcomes (whether positive or negative) shared? Trang An is certainly a green project, but green for whom?

Our research in Trang An adopts a solution-oriented analysis of climate resilience. Within the development of ecotourism, how have communities adapted and transformed to meet the challenges of climate change? The case of Trang An is an example of positive practice and perhaps a potential answer to the flipside of the question 'how will climate change impact the poverty and vulnerability of urban residents in Southeast Asia?' But our fieldwork also revealed lesser-known struggles that local residents face starting in 2003. On the one hand, the local community generally welcomes tourism development along with the additional income and opportunities derived from tourism activities. On the other hand, residents described drawbacks, compromises, and new vulnerabilities emerging from the transition as serious concerns. During fieldwork conducted in the summer of 2016, we heard stories about dormant subprojects and confusion over land compensation. We also heard about experiences of unequal negotiating power of former farmers who are now employees at the Trang An ecological site. These stories and insights do not necessarily negate the claim that Trang An is a successful community-based tourism model, but they point to challenges in creating resilient governance that is both inclusive and equitable.

9.1 Ecotourism, Local Communities, and the Environment: Some History

'Green tourism' and 'ecotourism' are buzzwords currently embraced by numerous cities and travel companies. The definition of ecotourism has greatly expanded in the past decade (Honey 2008). From a rather restricted practice where tourists were affiliated with conservation organizations and looking for very specific nature-based experiences (such as birdwatching) (Fennell 2014), ecotourism has now become a term that encompasses a wide range of activities 'in which the main motivation of the tourists is the observation and appreciation of nature as well as the traditional cultures prevailing in natural areas' (UNESCO 2003). Ecotourism projects aim to preserve

the natural heritage and sociocultural environment. They support their protection by providing economic benefits for local communities, alternative income opportunities, and increased awareness about the conservation of natural assets (UNESCO 2003).

While ecotourism has become a popular tool for biodiversity conservation (Kiss 2004), the increasing number of visitors puts great pressure on local resources and may drive environmental side effects, such as pollution (Koens et al. 2009), a potential outcome that is rarely acknowledged (Place 1995). There are debates around the efficiency of ecotourism as a conservation strategy, as opposed to a strict protection (Kiss 2004; Stem et al. 2003; Stronza and Gordillo 2008)—ecotourism projects try to meet various objectives that may be difficult to hold together.

Whether the Trang An ecotourism site contributes to the preservation of biodiversity and environmental quality is beyond the scope of our study. Instead, we look at the economic and social side of the project by adopting a contextual vulnerability approach (McLaughlin and Dietz 2008; O'Brien et al. 2007). We focus on how communities evolve and benefit from this pattern of development. Kiss (2004) stresses that even success stories provide only a modest supplement to local livelihoods. If the benefits are high, they are likely to attract outsiders and, therefore, dilute the benefit for local communities. People experience different access to ecotourism development's gains. Southgate (2006) reiterates how communities are not a homogeneous group but stratified. Both the participation of local residents and therefore the benefits may not be equitably shared among the so-called community. Scheyvens (1999) concludes that the equitable sharing of benefits emerging from ecotourism among local communities should be the main criterion to consider such enterprises as 'successful', while Neto (2003) advocates for a 'pro-poor' pattern of ecotourism.

In our study, we examine the social trends underpinning the change in land use and access to resources in Trang An. Our fieldwork allowed local communities to report their own perception of the project—a perspective that is often lacking in the literature. We paid close attention to the social stratification and power relationships that derive from the project in Trang An. Trang An is located in a peri-urban area, whereas most ecotourism projects are located in rural, if not remote, areas. While the location in an urban environment reduces the adverse effects of tourism development (because the infrastructures already exist, at least partly) (Higham and Lück 2002), it increases the dilemma between conservation objectives and peri-urbanization dynamics.

9.2 Trang An: An Ecotourism Complex Within an Expanding Secondary City

Highly touted as an 'outdoor ecological museum' or a 'Ha Long Bay on land', Trang An boasts one of the most impressive karst landscapes in Southeast Asia, and a rich biodiversity profile of 500 plant species, 73 bird species, 41 animal species, and 31 reptile species (Ninh Binh's Provincial People's Committee 2015b). A UNESCO World Heritage site, Trang An benefits from a strong preservation policy. It receives

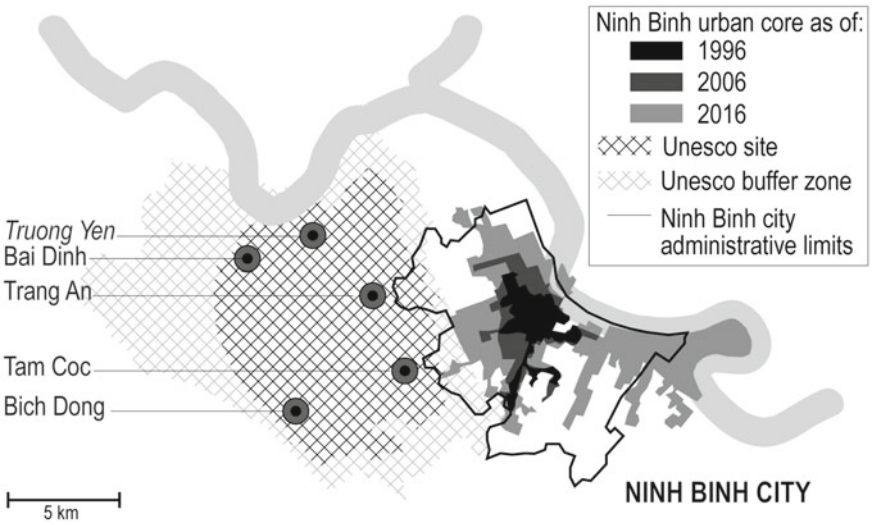

Fig. 9.1 Ninh Binh city and the ecotourism site (Map by G. Pulliat)

several million visitors each year (the Ninh Binh Department of Tourism reports that the province received 4.8 million tourists in the first half of 2017 alone) and is considered an example of best-practice community-based tourism (World Tourism Organization n.d.).

The property covers 6,226 ha with a buffer zone of 6,026 ha, and occupies a 250-million-year-old limestone massif. The Trang An scenic complex actually includes three major sites of attraction: the Trang An ecotourism site, Tam Coc-Bich Dong, and the record-breaking Bai Dinh Pagoda complex (see Fig. 9.1). It therefore combines ecological, spiritual, and community-based tourism. It is the only mixed (natural and cultural) UNESCO World Heritage site in Vietnam and the first of its kind in Southeast Asia. While the Tam Coc-Bich Dong site has been a tourist destination for decades, Trang An and Bai Dinh pagoda are new sites developed and constructed by Xuan Truong Construction Company under a public–private partnership with Ninh Binh Provincial Department of Culture and Tourism since 2003.

Although it is based on the preservation of a 'natural' site, the complex is actually settled in a peri-urban environment: only 12 km separate the urban core of Ninh Binh City and the Truong Yen commune where Trang An is located (Fig. 9.1). Ninh Binh is a secondary city. With a population of 160,000 inhabitants in 2014, it attracts people and economic investments from the Red River delta, but it remains a regional rather than a national hub (Fig. 9.2). Nonetheless, Ninh Binh benefits from its proximity to Hanoi and is expanding rapidly. About 100 km southeast of the capital city, the province is crossed by the main national highway and railway, and is located at the entry to the Red River delta, which is the second most important region of Vietnam after the Mekong Delta (Mottet and Roche 2009). Urban sprawl fuels a

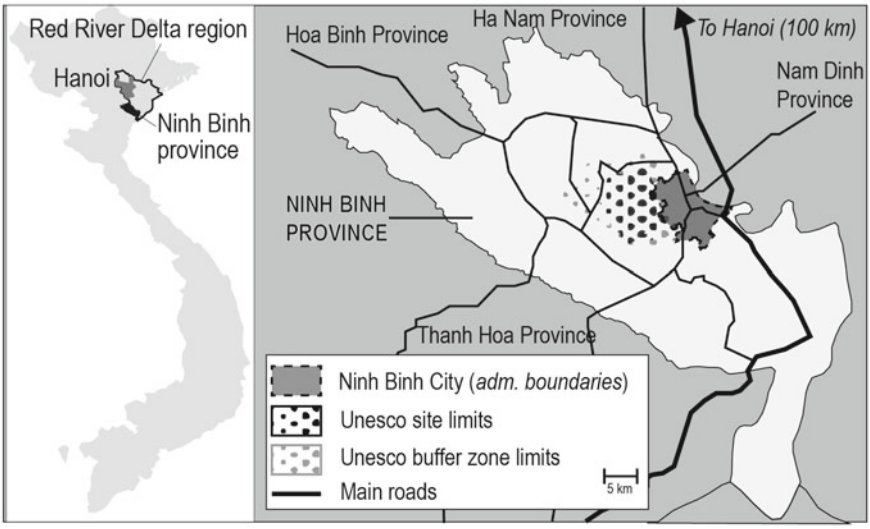

Fig. 9.2 Ninh Binh province: A regional hub in the Red River Delta (Map by G. Pulliat)

significant consumption of agricultural lands (Fig. 9.1) in the area and the national authorities intend to foster a much bigger city. According to the Master Plan for 2030, Vision 2050, by 2030 the Ninh Binh urban area is expected to be four times larger than its current size.[2] This is consistent with the national policy of urbanization and modernization as the government moves ahead with its aim of turning a poor agrarian society into an industrial, urban-based one (Vietnam Communist Party 2006).

Despite these plans for growth, the local government acknowledges the imperative of a more environmentally friendly path for urban development. At the national scale, national policy on climate change adaptation has become a high priority on the political agenda. The Vietnamese government has approved various strategic programs to frame the national climate policy, including the National Climate Change Strategy (NCCS) in 2011 and Vietnam National Green Growth Strategy (VGGS) in 2012. The NCCS also reflects the government's interest in searching for an alternative development model. Vietnam recognizes the unsustainable model of development the country has followed to this point, which includes exploiting natural resources, using cheap labour, and causing extensive environmental degradation. The National Climate Change Strategy (2011) states that 'climate change can bring about chances for us to change our thought of development and pursue a model and mode of low-carbon and sustainable development'.[3]

Urban planners have paid attention to greener urban models. To this end, Trang An is considered to be central to urban planning for Ninh Binh because it represents

[2]Decision no. 1266/QD-TTg, July 28, 2014.

[3]Republic of Vietnam, Government Portal, National Climate Change Strategy, http://chinhphu.vn/portal/page/portal/English/strategies/strategiesdetails?categoryId=30&articleId=10051283.

Table 9.1 Overview of interviews (*Source*: Thao Hoang, 2017)

Number of interviews	Interviewees' categories	Gender
1	A representative from Xuan Truong Company	Male
4	Commune and village officials	3 male, 1 female
4	Commune and village-level parastatal organization representatives (such as women's union)	3 female, 1 male
15	Local residents	10 female, 5 male

the plans' green core. The conservation of this green core together with the building of green belts and corridors are among the major guiding principles for urban development in Ninh Binh. Trang An plays an important role in various regional strategies and plans with respect to green urban development, economic development, and biodiversity conservation. But there is an increasing dilemma between the need for economic development and the urgency of environmental protection and climate change adaptation. These are the dynamics we examine in the case of Trang An Ecological Site.

9.3 Ecotourism as a Climate-Adaptation Strategy: Toward More Climate-Resilient Livelihoods

Our findings are based on 24 qualitative interviews (Table 9.1) with members of the local community in Truong Yen commune at the heart of Trang An ecological site. We interviewed residents from five villages across the commune. These interviews form the basis of a narrative about the changes in the area, with a specific focus on residents' livelihoods and their experience and perception of the spatial and economic change resulting from the ecotourism site's development.

9.3.1 Ecotourism as an Alternative Economic Development Path

The rise of ecotourism in Trang An comes with a conservation imperative that reconfigures the rights of access to local resources. The exploitation of natural resources is now much more controlled—an evolution that influences the economic landscape. The region has a long history of cement production, based on limestone quarrying across the province. This activity conflicts with the development of tourism. The UNESCO committee's impact assessment stressed the noise pollution, dust

production, contamination of waterways, and potential traffic disruption that this industry may induce (Ninh Binh's Provincial People's Committee 2015b). Limestone quarrying still occurs outside the buffer zone, but the licenses for mineral exploration that previously existed within the buffer zone have been restricted, and the government plans to close the quarries and relocate the cement factory. Planning for ecotourism has prompted the provincial people's committee to adapt its zoning to refuse building industrial projects to minimize the negative impact on tourism development (Duc 2012). These actions indicate that ecotourism has bred an alternative development model, whereas the previous economic trends were based on the exploitation of natural resources in the region.

With ecotourism and the designation of Trang An as a UNESCO World Heritage site, protection for the area is now a higher priority than development projects that could significantly harm the region's ecosystems (e.g., mineral extraction, industrial development). While our study does not assess conservation achievements, these shifts in economic trends suggest that Trang An has adopted a less-emissive pattern of development than what would likely have occurred without the designation. Compared to development that has occurred in other parts of Ninh Binh City, such as the Khanh Phu industrial zone already causing environmental devastation (see Chapter 5), Trang An is something of a model in terms of environmental protection and climate change adaptation and mitigation. At the city scale, ecotourism appears to contribute to the climate-adaptation and mitigation strategy.

9.3.2 Land Use and Livelihoods Transition

The designation of a UNESCO site has also brought about landscape transformation and land-use change in the area. Much of the Trang An ecotourism site, which now stands at the core of the natural World Heritage site, used to be paddy fields on land that was designated as agricultural land distributed to local residents. In Truong Yen, according to an official of the commune, 90% of agricultural land was turned into land used for tourism services. Along with land-use changes came other changes, including disturbances to irrigation systems for the remaining 10% of agricultural land.

These land-use changes have induced changes in livelihoods. As Trang An welcomes more tourists into the area, a variety of new jobs have become available for local people. With boating tours being the main attraction, around 2,600 boat rowers are now employed to take visitors along the scenic routes through the caves (Fig. 9.3). Other tourism-related activities have also developed rapidly within and around the area, such as guards, cleaners, construction workers, tour guides, souvenir sellers, and workers in restaurants and craft production. Ecotourism accelerated the transition from farming to tourism-related services.

Residents of Truong Yen commune traditionally relied on subsistence farming as their main source of income but the transition to more diversified livelihoods started before the development of ecotourism as a consequence of environmental

Fig. 9.3 Boat tours in Trang An (Photo by G. Pulliat, 2017)

and economic changes. Climate variability has always been an integral concern for farmers. Rice crops are particularly sensitive to any change in climate and ecological condition, so rice cultivation is considered to be highly vulnerable to climate change (Komaladara et al. 2015; Matthews et al. 1997). In Ninh Binh, reports have increasingly appeared in the news about farmers losing their entire crop as a result of flooding or pests (Bao Moi 2010; Thai 2017; Vy 2016). These incidents seem likely to be associated with the overall temperature increase in Ninh Binh (0.08°C in a decade), and residents' accounts of more extreme cold and hot days in recent years (Ninh Binh's Provincial People's Committee 2015a).

As earning a living through rice cultivation becomes more and more precarious, struggling farmers in both Ninh Binh and in other provinces turn to other livelihoods. In the Red River Delta, the combination of agricultural and nonagricultural livelihoods is widespread. As early as 2004, a study conducted by the World Bank revealed that while 78% of the Red River delta's households were engaged in agriculture, only 17% relied exclusively on agricultural income (Wells et al. 2005). In Truong Yen, a group of women we met with during fieldwork sewed blankets as an additional source of income. They said that if the sewing work was more regular and stable, they would consider abandoning their fields. While rice cultivation remains part of the households' livelihoods as an easily accessible source of income and food, it is often no longer the exclusive nor the main one. This is a long-term trend observed elsewhere in Vietnam and the rise of ecotourism has accelerated its pace.

9.3.3 A Transformational Adaptation

The Trang An ecotourism site and the larger Trang An complex megaproject can be considered a bold move toward *transformational* climate change adaptation. Following Brooks et al. (2011), we identify three broad categories of adaptation. The first category refers to *adaptation deficit to existing climate variability*. Adaptation processes and activities in this category help increase the capacity of communities and the systems on which they depend *to cope with and recover from* the effects of current climate variability. The second category concerns *adaptation to incremental changes* in climate-related risks and capacity of societies *to accommodate more frequent extremes and variability*.

While these first two categories are more concerned with developing *resistance* to climate and environmental changes, the third category involves adaptation to qualitative changes in climate and environmental transitions—converting or replacing current systems (economic, livelihood, etc.), to *create conditions for viable and more sustainable development* even at increasing risks of new climate variability and hazard manifestations. This third category of adaptation is, therefore, more transformative in nature.

Ecotourism in Trang An involves profound changes to the local communities and environment. Rather than developing resistance to risks in rice cultivation by strengthening dikes or adopting more climate-smart agricultural techniques, local communities in Trang An turn to tourism-related work to earn a living. Although boat tour operation is dependent on the appropriate water level and, therefore, is climate sensitive, the Trang An complex combines both ecotourism and spiritual tourism, which mitigates the potential adverse effects of climate on boat tours in the overall local economy. Hence, the new economic system that has emerged with the rise of ecotourism significantly increases the local community's capacity to cope with and adapt to climate risks. As such, the development of ecotourism fosters more climate-resilient livelihoods. Research in other countries has also explored ecotourism as a strategy for transformative climate adaptation. For example, both Kenya and the Philippines adopt ecotourism as a livelihood diversification strategy to become more resilient in the face of climate change (Pearsall 2017; Ogara et al. 2013).

9.4 Emerging Vulnerabilities: Old and New Inequalities

9.4.1 A Challenging Transition in a Peri-urbanizing Area

The transition in Trang An following tourism investment since 2003 is far from straightforward. While Trang An is commonly depicted as a successful, greener local development project and a model for community-based tourism by local and national authorities and international organizations such as the World Tourism Organization

and UNESCO, there is a discrepancy between the dreamy storyline of Trang An told in advertisements, and the realities of day-to-day living that the local community experiences. Informal conversations conducted during the field research with residents in Trang An revealed the lesser-known struggles and tensions in the community when local residents found themselves in the midst of changes in land use, livelihood, access to resources, and power. The relatively rapid transition from lowland rice cultivation to ecotourism-based services has socioeconomic costs.

Respondents from both the tourism-management side and local service providers in Truong Yen commune mentioned many challenges. From the tourism-management perspective, those challenges relate to urban transition and the gap between rural dwellers' habits and urban, 'modern' expected behaviours. The respondents mentioned the issue of a so-called 'farmers' mentality', which is said to be an obstacle to bringing professional tourism service to visitors and, therefore, to enhancing tourism quality. In other words, tourism managers in Trang An perceive a challenge associated with turning long-time farmers into workers in the tourism industry. This discourse around rural dwellers' lack of 'modernity' and their capacity to meet high standards of service is quite common among Vietnamese urban planners and speaks to the rhetoric of the Communist Party as well as to a social distinction process (Nguyen-Marshall et al. 2012). This is typical in peri-urban areas in Vietnam and China as a result of normative urbanization in both countries (Leaf 2011). The expansion of administrative structures into formerly rural settings encompasses an effort to '"civilize" the countryside' (Leaf 2011, 531).

Although the transition brings benefits and a new source of income for local communities, local people find that vulnerabilities have emerged in the form of skill gaps, tourism seasonality, and control of resources that complicate the transition from an agriculture-based local economy to a tourism-service-based economy.

9.4.2 The Side Effects of an Uncompleted Project

Large-scale projects, such as ecotourism development in Trang An, directly involve and change the lives of many people, especially those living in and around the ecotourism site. While the local community can be direct beneficiaries of these transformations, they can also be caught in tricky situations when projects remain unfinished or become dormant. This is the case of the Sao Khe River-dredging project. Fourteen kilometres in length, the Sao Khe flows along the citadels of the ancient capital Hoa Lu, and through the caves in the ecotourism site. It has been recognized as a national historical relic, and is also a major component of the Trang An project. Despite its key role, the Sao Khe River-dredging project has dragged on without an end date. Although it was planned to be completed in 2010, as of November 2017, the project remained dormant. It was reported that there were changes in the project investors and project planning with a major adjustment adopted in 2009 (Do 2016). However, even with the new plan, the project has yet to come to fruition. Its delay has consequences for both local residents and for the river's environmental conditions.

The lack of progress affects the flow and quality of water. One of the residents lamented that the beautiful and historically significant Sao Khe River of the past had now become a 'painful tragic scene', because of the stagnant dredging work and consequent blocking of the water. Residents questioned the way the project was proposed and carried out, but their requests through regular formal channels (commune and district meetings) have not led to any changes. Local residents' well-being continues to be more or less affected by localized flooding during rainy seasons, and by intensified water pollution from waste from mass animal husbandry and blocked water flow.

The project's delay has also caused resettlement issues. The entire length of Sao Khe River is supposed to be dredged, and new waterways are planned to extend ecotourism rowboat routes to Trang An culture park (under construction) located within the current boundary of Ninh Binh City. The plan involves the resettlement of 140 households on the Sao Khe River alone, and even more households will be affected by proposed waterways, bridges, and roads (Hoang 2009). Because of the delay, a number of households are left waiting to be resettled and compensated. The land assets inventory was conducted and recorded for all households involved in the project as early as 2007. Residents expected that compensation and resettlement would soon follow, but that was not the case. As of the summer of 2016, our interviewees still voiced concerns about how the unfinished project renders them unable to upgrade their houses, or borrow money to help with the family's economic situation, because their land and houses are not eligible as collateral. The ownership of land is a critical asset for access to formal loans so the suspension of secured access to land has much wider consequences on residents' livelihoods. The confusion around the project and the fate of their houses increases residents' uncertainty in their daily lives. They are thus relatively more vulnerable than residents outside the project zone.

9.4.3 A Case of Green Grabbing?

The transformation of Trang An from agricultural land to an ecotourism site involves not only a change of land use, but also a change of land ownership. In Truong Yen commune, 90% of agricultural land was seized for ecotourism development purposes. Based on a public–private partnership, the site is managed, protected, and promoted by Xuan Truong, a private enterprise that is now a key player in Ninh Binh Province. The company holds a 70-year lease to the Trang An–Tam Coc-Bich Dong Scenic Area. Both officials of Ninh Binh and members of the local community in Truong Yen commune commonly claim that the Xuan Truong company now owns all of Trang An. During an informal discussion, a local official said 'all this land now belongs to Xuan Truong'.

Agricultural land seizure for development purposes is very common in peri-urban areas across Vietnam and there are frequently contestations over the amount of compensation (Nguyen 2009; Nguyen Leroy 2015; Phuc et al. 2014). In Truong Yen, expropriated households received the equivalent of ten years' crop loss. The calcu-

lation was done in 2003 for crops lost over a ten-year period from 2003 to 2013.[4] Local residents in Trang An village reported that, back in 2003, local authorities told them that the compensation would be recalculated in 2013 at the time of the Land Law's revision, but no official documents made such promises. In 2013, the local community did not receive further compensation or get their land back (even the part of the land that was not touched by dredging or other work for ecotourism purposes). A resident explained: 'Most importantly, our land is wasted while the local residents don't have jobs. Tourism planning here is slow and problematic'. According to the 2003 Land Law, the right to land cultivated with annual crops expires after 20 years (Tran and Dinh 2014). With the revision of the Land Law in 2013, this right has been extended to 50 years, which aggravates residents' sense of loss over their agricultural land. A group of residents filed complaints, and even went to Hanoi to present the issue, but the issue remains unresolved.[5]

Is this case an illustration of land grabbing, or more precisely green grabbing—-land grabbing for environmental purposes (Fairhead et al. 2012; Holmes 2014)? Despite the local community's grievances, the local authority and the Xuan Truong Enterprise argue that they did exactly what was dictated by law at the time. However, the residents have expressed a great sense of loss because they were given the impression that further arrangements would occur in 2013, and because the value of farmlands extends beyond the market value of rice crops, which is the basis of compensation calculation. As Nguyen puts it, 'Value has innumerable interpretations, ranging from the emotional value of a piece of land a family has been tilling for generations to the value of long-term stability that a piece of land can provide' (in Hansen 2013, 13).

9.4.4 Toward New Power Relationships Between Local Stakeholders

The rearrangement of land ownership has deeply affected the power relationships between Xuan Truong Enterprise and residents. Locals have little leverage to negotiate with the new owner of the land, their new employer, the Xuan Truong Enterprise. An interviewee warned one of the authors that if she were to show up at Trang An boat station with a notebook and pen and introduce herself, many of the boat rowers, the majority of whom are women, would not dare to tell the truth about their working conditions and their situation for fear of getting fired. Employees of the company are unable to negotiate their employment terms.

[4]Residents received a total of VND 3.2 million (USD 153) for 360 m^2 for land that cultivates one crop per year, and VND 4.6 million (USD 220) for 360 m^2 for land that cultivates two crops per year. 360 m^2 is equivalent to one *sao*, the unit used for the redistribution of land after decollectivization in the late 1980s. As a general rule, each person received one *sao* of land in 1993.

[5]The provincial authorities are in charge of the expropriations, compensations, and conciliation in case of land conflicts.

Currently, boat rowers earn VND 150,000 (USD 6.6) per boat ride. They must wait for their turn and they get on the waiting list to row boats only by providing unpaid labour for various tasks on the tourism site (e.g., planting trees, cleaning, moving construction materials). Because many of these activities involve keeping the site clean and green, a representative from Xuan Truong Enterprise referred to these nonpaid tasks as a way of enhancing environmental awareness and protection. From the employees' perspective, however, the arrangement is unfair.

For each day of unpaid labour, a rower gets to provide two boat rides, but they have to wait for their turn according to the waiting list, which can take a long time, especially during the off-season (May–January). An informant reported on the shared sentiment of fear among employees if they voice complaints. S/he related an incident where an employee was fired because she demanded extra wages. Since most employees do not own farmland anymore, the rowboat job is often their main source of livelihood so they cannot afford to lose it and they have little bargaining power. The precarity of their situation has increased. Another resident shared: 'Before each family had about 3,600 m^2 of farmland. Now some have farmland, some don't. They don't dare to speak the truth'. The change in land use has deeply reshaped the power relationships in the area.

In the context of agricultural land conversion, alternative livelihoods are of utmost importance. However, government support, such as job training, is limited and often inefficient. In Truong Yen commune, training sessions for women to undertake blanket sewing were organized, but few participants found the training useful because there was not enough connection with and demand from the factories. While livelihoods derived from ecotourism are considered more climate resilient than rice production, they are not without climate vulnerabilities. Eco-tours in Trang An on *sampans* are dependent on the water level because the tour includes passage through nine caves. Whenever the waters are too high, or when there are weather events, tour activity is affected (Fig. 9.4). According to a member of the Xuan Truong Enterprise management team, an unusual amount of rain toward the end of 2015 caused significant disruption to tourism services at Trang An ecotourism site. The increasingly unpredictable weather as a result of climate change adds uncertainty around this livelihood.

There is a great risk that the local communities are not the main beneficiary of ecotourism (Kiss 2004; Neto 2003; Scheyvens 1999). In Trang An, there is a discrepancy between the sense of prosperity that tourism has brought to the community, and local residents' perception of increasing vulnerabilities. Those vulnerabilities relate to new uncertainty around the access to and management of resources (loss of farmlands, unclear resettlement plans, unclear management of waterways), and new uncertainty around their working conditions—several local residents now work for the managing company and are dependent on it, with little capacity to negotiate their terms of employment.

Fig. 9.4 Trang An Ecotourism Site: Service halted after tropical storm Mirinae in July 2016 (Photo by T. Hoang, 2016)

9.5 A Green Development for Whom?

While Trang An is not among the most hazard-prone or most exposed areas, the process of change in Trang An can provide an example for other peri-urban and urban centres to creatively utilize their natural strengths to self-transform and better adapt to the threats of climate change. Uncertainties and potentially devastating impacts that climate change could have on the poverty and vulnerability of residents call for proactive measures, perhaps with a transformation of socioeconomic and environmental landscapes, in addition to the reactive responses to cope with the damage once it has already occurred. In Trang An, ecotourism development can be considered a solution-oriented approach to climate adaptation, and simultaneously part of an urban greening process.

On the other hand, a closer look at the less-than-smooth transition in Trang An from an agriculture-based economy, where each household has access to farmland, to a tourism-based economy (with new power dynamics led by a powerful private company) reveals the challenges to creating climate-resilient urban governance that is both inclusive and equitable. The formal channels through which residents can raise their voices include commune and district meetings with representatives from the local communities, but the questions and opinions raised during these meetings about

the Sao Khe River (for instance) are often met with silence and inaction from the local government. 'It's discouraging', says a representative from one of the commune's parastatal organizations. It is unclear who has responsibility. Because Trang An is under the governance and management of multiple agents, local residents are blocked in their attempts to reach the elusive authority for concerns and issues—until a management process with identified players is defined, clarified, and publicized,

Our fieldwork observations also indicate that there is a lack of young people's voices and perspectives. If Trang An is going to preserve its natural and cultural heritage values, the local youth must be involved. It seems that investment (both by the state and Xuan Truong company) has been poured into creating boat tours and building a massive pagoda complex with the aim of maximizing tourism profits. But for those other key areas in Trang An where profit is in the backseat (such as conservation, environmental protection of nontourist areas, and environmental and cultural education about the site), no breakthrough has been observed. This is unfortunate because conservation and educational activities could harness the potential of the local youth. Job training should also target the youth for a longer-term vision for the community's well-being and ecotourism development in Trang An.

While some elements of the Trang An Complex, including the Sao Khe River-dredging project, remain unfinished, Xuan Truong has ambitions to expand its public–private partnership model and establish a chain of mega-ecological, spiritual, and historical tourism sites in Northern Vietnam, including projects in the provinces of Thai Nguyen, Ha Nam, and Hai Phong (Hoai 2016). This represents a new development pattern, advocating for the protection (and valorization) of natural resources. However, people have various concerns about this pattern of development. As one resident shared, 'We want our voices to be heard. When the country and its people still face much hardship, it doesn't matter the size of the statue … Like the Bai Dinh Pagoda, it could be medium-sized, and resources would be better spent on building and supporting local people's lives'.

Can Trang An be considered a model of sustainable development? In various case studies, evidence shows that ecotourism often causes the same problems as traditional tourism (Ly and Bauer 2014; McNall et al. 2016), including consuming similar resources and producing similar waste (Wall 1997). As the number of visitors in Trang An rises, one may wonder how (or whether) resource consumption, pressure on the local environment, and increased differentiation between the tourism-sector employees and the other workers will be addressed. There might be a significant gap between the theory of ecotourism and the subsequent environmental protection it should foster (Ly and Bauer 2014).

With respect to Trang An as a part of Ninh Binh's urban greening process, two questions emerge from the case study. First, Ninh Binh City's expansion to encompass all of Trang An, a UNESCO World Heritage site, within its urban boundary suggests that there will be rising competition for the use of land. In a more competitive context, what priority will be given to the protection of the site and the sustainability of the model? It is unclear how much funding from tourism service fees goes into conservation work and education—one of the core promises of ecotourism. In a

national context where conservation and environmental protection have always been a challenge, one has to question how these issues will be managed when urban development adds extra pressure on the use of local resources.

Second, if appropriately managed, the site is expected to be the green lungs of the city. As documented in the environmental justice literature, for various reasons the environmental policies often benefit wealthy areas and populations (Mitchell et al. 2015), rather than the deprived ones. Therefore, one also has to question whether the development of the site within the urban system will fuel an eviction of low-income rural populations whose land will be taken over by wealthier urban dwellers. Does this model result in yet another case of environmental injustice?

Finally, while ecotourism emphasizes environmental outcomes, it is based on the commodification of nature and natural resources (Heynen and Robbins 2005; Liverman 2004). We question (1) how green benefits are shared or not (i.e., a question of social and environmental justice), and (2) how "green" the project really is, given its imperative (we question the greening process itself). Our field research revealed a pattern of business-as-usual that puts economic profit above other concerns (including local communities' well-being). Environmental protection seems to be a new rationale for land grabbing (even if it is compliant with the land law).

9.6 The Green Band-Aids

Since the *Doi Moi* reforms were enacted in 1986, the Vietnamese party-state has incentivized industrialization and modernization, with the aim of turning a poor agrarian society into an industrial, urban-based one.[6] These changes come at the cost of substantial environmental destruction. Meanwhile, Vietnam is among the most vulnerable countries in the face of climate change. Hence, climate change has become a critical issue and the need for a more sustainable development pattern has become imperative. Ecotourism addresses several issues. In Ninh Binh, it provides substantial environmental protection, while offering more climate-resilient livelihoods to local communities. It also contributes to a greener urban development at the scale of the city.

Does ecotourism in Ninh Binh actually contribute to a more environment-oriented urban development and to communities' adaptation to climate change? This study suggests that it is the case, but that there are serious limits to this positive answer. The extent to which the urban and peri-urban environment will be protected, and greener urban planning will allow for climate change adaptation and mitigation will depend on the magnitude of negative side effects and outcomes of tourism development. The tours offered on the site, a major source of livelihoods for residents, are still climate sensitive.

[6]Doi Moi reforms are a set of open-door policies that marked the beginning of 'a market economy with socialist orientation' in Vietnam.

Our focus on residents' perception of the ongoing development project as a closer look into the transition process gives a more complicated and nuanced picture than the often-related success story. Despite its limited scope, this study shows how new vulnerabilities, as well as social and environmental justice issues, can emerge in a context of rearranged power relationships and (peri)urbanizing environments. This points to the lack of equity in the site's governance. Local communities are included in the implementation of the ecotourism project but they have little capacity to speak up and they seem to be bearing most of the cost of the transition, symbolized by increased uncertainty, while the Xuan Truong Construction Company appears to have the most powerful voice in overall decision-making.

Administrators should not draw solutions for greener cities and more climate-resilient urban planning as an opportunity for capital accumulation and land grabbing. Until matters of environmental and social justice are given the attention they deserve, and until the natural world is preserved for its own sake and not for the capital accumulation of a few, models such as Trang An can only be like green-growth band-aids. Undoubtedly, these green band-aids are needed. But at places where the voices of the more vulnerable are suppressed, the question remains: green for whom?

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