

Article

Sustainable Rural Development Under Ecological Civilization: Two Mountains Theory, “Green Rural Revival”, and Post-Productivist Transition in Zhejiang

Qian Forrest Zhang ^{1,*} , Jianzhang Luo ² and Li Zhou ³ ¹ School of Social Sciences, Singapore Management University, 10 Canning Rise, Singapore 179873, Singapore² China Institute for Rural Studies, Tsinghua University, Beijing 100084, China³ Center for Social Innovation and Rural Revitalization, Tsinghua University, Beijing 100084, China; zhli34@126.com

* Correspondence: forrestzhang@smu.edu.sg; Tel.: +65-6828-0294

Abstract

Existing studies of China’s overarching ideological framework for national development, “Ecological Civilization”, have focused narrowly on environmental governance; how it reshapes sustainable rural development remains underexplored. This paper pursues two analytically distinct tasks. First, it reconstructs the policy history of how President Xi Jinping’s “Two Mountains” theory was incorporated into the Eco-civilization framework and how Zhejiang Province’s “Green Rural Revival” (GRR) program, as a lived example of Eco-civilization, was elevated as the national template for rural development in 2024. Second, drawing on three cases from a sample of 21 villages in Zhejiang, it identifies three core practices of GRR and conceptualizes it as a post-productivist project: withdrawal from extractivist production, restoration of ecological resources, and development of facilities catering to urban consumption. We argue that GRR has directed rural development in Zhejiang toward a post-productivist transition and question the model’s replicability and sustainability as the central government promotes it nationwide.

Keywords: ecological modernization; Two Mountains theory; rural revitalization; green development; rural tourism

1. Introduction

“Ecological Civilization” (*shengtai wenming*, Eco-civilization hereafter) has become an overarching ideological and policy framework guiding national development in China. Eco-civilization is a comprehensive framework that comprises both philosophical principles about a harmonious and symbiotic human–nature relationship and policy goals for environmental management, ecological restoration, and green development that pursues economic growth without harming long-term environmental health [1]. Existing studies of Eco-civilization, however, narrowly focused on its implications in the environmental domain, treating it either as a framework for environmental governance [2–5] or an alternative imaginary of environmentalism [6,7]. Policy documents and discussions in China, however, have made it abundantly clear that Eco-civilization is also a paradigm for sustainable development [8,9]. Yet, what strategies and approaches this new paradigm has introduced to sustainable rural development and how it has reshaped practices and outcomes on the ground remains underexplored.



Academic Editor: Andreas Papatheodorou

Received: 21 May 2026

Revised: 22 June 2026

Accepted: 1 July 2026

Published: 3 July 2026

Copyright: © 2026 by the authors.

Licensee MDPI, Basel, Switzerland.

This article is an open access article distributed under the terms and

conditions of the [Creative Commons](https://creativecommons.org/licenses/by/4.0/)

[Attribution \(CC BY\)](https://creativecommons.org/licenses/by/4.0/) license.

Sustainable rural development (SRD) seeks to balance economic development with ecological sustainability and social equity, ensuring the long-term viability of rural communities [10]. Eco-civilization, framed in China as a new civilizational stage advancing beyond industrialism [4], is proposed precisely as a framework for this task [1,8,11]. In studying SRD in China, researchers have investigated a wide array of policies and practices that range from eco-tourism [12–14] to sustainable agriculture [15,16], land and infrastructure (re)-development [17,18], ecological conservation [19], heritage preservation [20,21], and poverty alleviation [11,22], among others. With a few exceptions [11,18,20,23], most of these studies did not explicitly examine how the new Eco-civilization framework is reshaping dynamics in these areas. More importantly, to our knowledge, no study has so far attempted to unpack what action plans the Eco-civilization framework has offered for the nationwide implementation of SRD.

This is in no small part because most analyses of Eco-civilization focused either on its philosophical foundation and discursive construction [2,6,8,9] or its implications on environmental governance [3–5]. The vision of Eco-civilization for SRD is sometimes dismissed as merely a continuation of the government’s longstanding “commitment to economic growth” [6] (p. 196), without recognizing that a different type of growth is envisioned.

In recent years, new developments have added the much-needed implementable blueprints and policy template for SRD to the once “fuzzy” [8] (p. 49) political discourse of Eco-civilization. This study focuses on the two most significant developments in this regard: the “Two Mountains” theory of President Xi Jinping and its experiential foundation, Zhejiang province’s Green Rural Revival (GRR) project, which in 2023 has been selected by the central government as the model of SRD that all local governments are urged to emulate. The Two Mountains theory has now become a core principle in the Eco-civilization framework and articulated the vision that Eco-civilization has for SRD and the approach to pursue it; the GRR project, on the other hand, not only provided the crucial experiential foundation for the formation of the Two Mountains theory but also, serving as a lived example of Eco-civilization in practice, has now been promoted as the model for applying the Eco-civilization framework in SRD.

Studying the GRR experiences in Zhejiang therefore allows us to unpack the “socio-technical imaginary” [6] that Eco-civilization has for SRD and gain a fuller understanding of Eco-civilization and how it will shape the trajectory of rural revitalization in China. Applying the theoretical framework of post-productivism, we argue that the GRR project enacted a post-productivist transition (PPT) in rural Zhejiang through shutting down extractivist industries, shifting to non-productivist agriculture, and reconstructing rural space to cater to urban consumption, creating a consumption-based eco-economy.

The paper pursues two analytically distinct objectives. First, drawing on content analysis of key policy documents and official pronouncements, it provides a *historical account* of the political construction of Eco-civilization as a national ideology, the Two Mountains theory as the guiding principle for SRD within that ideology, and GRR as the practical template for realizing that vision at the village level, and unpacks the relationship between the three. In Section 2, we highlight the importance of the overlooked Two Mountains theory and recount the co-evolution of the GRR project and the Two Mountains theory. Second, in Sections 3 and 4, we bring in the post-productivism framework from rural geography to offer a *theoretical interpretation* of both GRR practices and Eco-civilization’s vision of SRD. Using qualitative case data from village fieldwork, this paper illustrates the concrete practices that characterize Zhejiang’s GRR and demonstrates why these constitute a PPT.

This paper is not, however, an evaluation of the outcomes of the GRR program in Zhejiang nor a study of whether and how the GRR model has been adopted outside

Zhejiang. By designating the GRR model as the practical template for national SRD, the central government is *signaling* its intent to steer rural development toward this post-productivist pathway, though whether and to what extent that aspiration is realized beyond Zhejiang is a separate question we do not address here. We therefore make no claim that the GRR model has been widely implemented nationwide, nor that a PPT is currently underway at the national scale. Our post-productivist argument applies to what has been attempted under GRR in Zhejiang. Whether the central government's promotion of this model will produce comparable transitions elsewhere remains an open question and demands future investigation.

2. Eco-Civilization, Two Mountains Theory, and Green Rural Revival: A Policy History

2.1. Eco-Civilization's Vision of Sustainable Rural Development

The concept of Eco-civilization debuted in the Chinese central government's policy discourse in the 17th Party Congress of the Chinese Communist Party (CCP) in 2007 as part of the then-Secretary General, Hu Jintao's "Scientific View on Development" agenda. Its full development as a comprehensive policy framework and its ascent to a national ideology, however, took place after Xi Jinping assumed the top leadership position in 2012. In that year, Eco-civilization was added to CCP's Party Constitution at the 18th Party Congress and identified as the last and fifth pillar that characterizes "Socialism with Chinese characteristics". Subsequently, the Central Committee of CCP and the State Council jointly issued the General Guideline on Accelerating the Development of Eco-civilization in April 2015. This document has been the focus of textual analysis in two influential early studies of Eco-civilization [2,6]. However, far more important developments soon followed.

In 2017, the 19th Party Congress further amended the Party Constitution to include Xi Jinping's "Two Mountains" theory as the principle guiding "green development" under the Eco-civilization framework. In March 2018, the national legislature ratified a constitutional amendment to add "Eco-civilization construction" as a duty of the central government. Then on 18 May 2018, in a speech delivered to the National Conference for Eco-environmental Protection, President Xi Jinping gave the most authoritative and comprehensive articulation of the Eco-civilization concept [24]. It is at this conference that the "Xi Jinping Thoughts on Eco-civilization" were officially launched, and Xi's exposition in the speech was codified to form the official narrative of Eco-civilization [25,26]. Previous studies have noted that the Eco-civilization concept was only codified under Xi's presidency and evolved from a slogan, "an abstract imaginary" with "few concrete plans and little direction" [27] (p. 324), to "an implementable narrative" [2] (p. 1186), and that its focus has shifted under Xi from combating pollution to pursuing comprehensive sustainable development [4,8]. These studies, however, have not unpacked what concrete plans and implemental approaches for sustainable development have been outlined in these newer formulations of the Eco-civilization agenda.

To our knowledge, only a few English publications mentioned Xi's 2018 speech [1,4,8], despite it being recognized within China as the most important document for understanding the Eco-civilization idea [25]. In this speech, Xi explicitly took ownership of the Eco-civilization agenda, claiming that he "repeatedly emphasized that Eco-civilization construction must be prioritized and properly dealt with" and that "he had always taken eco-environmental issues seriously" throughout his political career. This made it abundantly clear to the Party and to the country, as later demonstrated by the launch of the "Xi Jinping Thoughts on Eco-civilization", that Xi was the "main original producer of political discourse on Eco-civilization" [8] (p. 43) and nobody but himself should be credited for this agenda.

Furthermore, Xi's speech identified "six principles" for the construction of Eco-civilization [4] (p. 10). Two principles (No. 2 and No. 3) spelled out Eco-civilization's approaches to SRD. Principle No. 3 makes a call for developing an ecological economy. It states that "a healthy ecology is the most universal public good", and as such, in addition to creating more material and spiritual wealth for the people, China's development should also strive to "supply more quality *ecological products* (*shengtai chanping*) to meet people's increasing demands".

Of particular importance to SRD is principle No. 2, which states Xi's famous Two Mountains theory: "lucid waters and lush mountains are mountains of gold and silver (i.e., invaluable assets)". This "theory" has received scant scholarly attention in English literature [28,29] but is the key link between Eco-civilization and SRD. In fact, since the 20th Party Congress in 2022, in recent policy documents this theory has eclipsed the term "Eco-civilization" as the guiding principle for sustainable development [30]. According to official interpretation [25], this theory, using the metaphorical "two mountains", describes two different types of relationships between ecological environment and economic development: extracting from waters and mountains to exchange for economic wealth vs. seeing waters and mountains themselves as assets and using them as renewable capital to generate wealth. It calls for a transition to the latter as the approach for SRD. If in the early years, the Eco-civilization discourse offered no clear guidance for SRD, the Two Mountains theory now fills that gap.

Although the Two Mountains theory pointed out the direction for SRD, it lacked an implementable plan for making this transition. That is where the GRR comes in. What Xi did not mention in his 2018 speech is that he first formulated the Two Mountains theory when implementing the GRR project in Zhejiang, but it has since been made unequivocally clear that the GRR project provides the road map for implementing the Two Mountains theory and pursuing SRD.

2.2. The Two Mountains Theory and the GRR Project in Zhejiang

GRR is the official translation of a project called *Qian-Wan Gongcheng* [31,32] which is a shorthand for "*Qiancun shifan, Wancun zhengzhi*" (one thousand model villages and ten thousand rectified villages), a local initiative launched in Zhejiang province in 2003 by none other than the then provincial Party Secretary Xi Jinping. Xi started his posting in Zhejiang in October 2002, first as the Vice Governor, and was then promoted to Party Secretary in November 2002. Once in Zhejiang, he soon undertook an investigative tour across the province, which, by early June 2003, had covered 25 counties across all the eleven prefectural units in the province.

One finding that consistently struck Xi was the degraded living environment in rural villages: industrial production generated noise, dust and waste, garbage piled up, and water bodies heavily polluted. These observations reflected a reality that was not confined to Zhejiang. By the early 2000s, three decades of export-led industrialization and productivist agricultural intensification had generated massive environmental externalities across China's countryside [33]: arable land lost to industrial expansion [34], rural waterways contaminated by industrial effluents and agrochemicals [35,36], and the institutional basis of collective environmental management eroded by rural depopulation [37]. These domestic pressures coincided with growing international momentum around ecological governance. The Johannesburg World Summit on Sustainable Development in 2002 and the evolving international climate architecture placed China as the world's largest carbon emitter under increasing institutional pressure to demonstrate ecological responsibility [38]. Domestically, Party leadership had begun to recognize that the accumulated ecological costs of the reform-era growth model constituted a governance deficit threatening both rural

livelihoods and the CCP's legitimacy [39]. Xi Jinping's focus on environmental rectification in Zhejiang as his main policy agenda should therefore be read not merely as personal initiative but as an expression of an institutional conjuncture in which the imperative for ecological restructuring had already become inescapable.

During his visit to Meiling village in Xiaoshan District on 15 December 2002, he first proposed the idea of “creating a batch of model villages and towns that have achieved ‘moderate prosperity’ (*xiaokang shifan cunzhen*) as models for the entire province” [40]. This idea was then developed into a concrete action plan named the GRR Project. Xi selected 5 June, the World Environment Day, in 2003 to officially launch the project. He set the goal of the project as the following: within five years, select around ten thousand administrative villages from the total of nearly forty thousand in the province to undergo comprehensive rectification (*wancun zhengzhi*) and, out of the ten thousand, develop one thousand central villages into model villages of “moderate prosperity” (*qiancun shifan*) [40].

In this original formulation, the primary target of rectification was the degraded living environment in rural villages. The project aimed to address the problems of “dirty, chaotic, and shabby” (*zang luan cha*) through five specific projects: village road hardening, solid waste collection and disposal, waterway cleaning-up, village greening, and toilet upgrading.

In the three years following the launch, and before he moved to his next post in Shanghai in March 2007, Xi made the project his policy priority. Each year, he held an on-site mobilization meeting to give directions and allocate tasks. As the implementation of the project deepened, Xi also began to theorize the practices that the project had unleashed. On 15 August 2005, in a visit to Yu village in Anji, where the village had shut down all its quarries and cement factories to combat pollution and reforested its mountains with bamboos, Xi for the first time made the “Two Mountains” statement. An elaborated version was subsequently published on 24 August in *Zhejiang Daily* [41] under the pen name, Zhixin, where Xi explained the Two Mountains Theory as defining a new relationship between ecological protection and economic development:

“If we can turn advantages in ecological environment into those in ecological economy, such as ecological agriculture, ecological industry, and ecological tourism, then lucid waters and lush mountains will also become mountains of gold and silver.”

The Two Mountains theory, as a theory of green development, posited a reformed relationship between ecological resources and economic development: instead of being incompatible and hostile (ecological resources extracted to produce for economic development), as was the case during the industrialization phase of Zhejiang's development, the relationship should become harmonious and integrated so that economic development comes from building ecological resources. As will be detailed in the next section, this idea of pursuing a type of green development that relies on as well as reproduces and enhances ecological resources then became the new theoretical principle guiding implementation of the GRR Project in its latter stages. A co-evolving relationship developed between the GRR Project and the Two Mountains theory: the first stage of the project, in which village rectification generated positive externalities, including new opportunities in the “ecological economies”, provided practical experiences for Xi's formulation of the theory; once formed, the theory then provided the theoretical principle guiding the design and implementation in later stages of the project.

The importance of the GRR Project and the Two Mountains Theory based on that practice to Xi Jinping, which so far has not been noticed outside China, should not be underestimated. Before his rise to central leadership, Xi's most important local experience was the four and a half years serving as Party Secretary in Zhejiang [42], during which the GRR Project was his greatest and most concrete policy achievement. Not surprisingly, when

Xi rose to the top leadership in 2012, he brought this idea to the national platform. In 2013, in his state visit to Kazakhstan, at the speech at Nazarbayev University in which he first proposed the idea of the Belt and Road Initiative, he also brought up the Two Mountains theory, calling it the guiding principle in the country's approach to sustainable development.

If Eco-civilization had been an “implicitly defined” [3] (p. 775) discourse with multiple interpretations offered by various sources in its early years [6,8,27], after Xi took ownership of it, it has been codified since 2018 in the form of “Xi Jinping Thoughts on Eco-civilization”, based on the aforementioned “six principles” (later expanded to ten in 2022). In this codification, Xi's own experience with GRR in Zhejiang and the Two Mountains theory he formulated from that experience became the core of the entire Eco-civilization edifice [43]. Once we see the importance of GRR to Xi's political career and political thought, it becomes no surprise that the central government would lend all its authority to the promotion of it as a national model for Eco-civilization and SRD.

This promotion effort started in 2019 when the State Council issued a directive (State Council Bulletin, No. 8, 2019) in March to local governments, instructing them to learn from Zhejiang's GRR Project. It escalated into a nationwide campaign in 2023, the twentieth anniversary of the project's initial launch. All central-level official news outlets published articles commemorating the anniversary and celebrating its achievements. On 26 June 2023, three central agencies, including the Ministry of Agricultural and Rural Affairs (MARA), jointly issued a directive to all provincial-level units, urging them to “forcefully, orderly and effectively” promote the application of Zhejiang's GRR experiences. Since then, both central ministries and provincial governments have sent study missions to Zhejiang to learn its experiences [44,45]. Provincial governments have also swung into action in applying Zhejiang's experiences and pushing rural revitalization toward the new direction set by Zhejiang [46]. During the CCP Central Committee's Meeting on Rural Works held on 19–20 December 2023, Xi further instructed that Zhejiang's GRR experiences should be learned and applied in order to “accomplish a series of substantive projects that people can concretely feel and access” [47]. When the annual No. 1 Policy Document for 2024, the guiding document for rural works, was released in January, it formally identified “learning and applying the GRR experiences” (*xuexi yunyong qianwan gongcheng jingyan*) as the “overall handle” (*zong zhuashou*) for implementing SRD and made it a compulsory policy task for local governments across the country.

In promoting Zhejiang's GRR model, the central government saw it as a blueprint for pursuing SRD under the Eco-civilization framework. The aforementioned 26 June 2023 central directive issued to all provincial governments described the GRR Project as the “vivid and practical vehicle for carrying through Xi Jinping Thoughts on Eco-civilization” [48]. Similarly, in a speech given at a meeting mobilizing for the campaign, the Minister of MARA, Tang Renjian [44], described the project as a “theoretical source” of the Xi Jinping thought and having “extraordinary historical, theoretical, and practical significance”. In summary, knowing what the GRR Project experiences were and what lessons are drawn from these is critical for understanding the changes that are now implemented in rural China under the banners of both “Eco-civilization construction” and “rural revitalization”.

In the next section, relying on official sources, we summarize major developmental tasks that the GRR set out to complete. When we quote numbers from government sources, we are not endorsing the accuracy of these, which are often inflated [49]. Our task here is not to verify the veracity of these figures nor to comprehensively evaluate the impact of this project. Instead, we intend to chart the broad contours of this province-wide project, illustrate how it translated the visions of Eco-civilization and the Two Mountains theory into concrete practices in rural development, and illuminate how GRR's success has been constructed and promoted in the political discourse. Official policy documents and state

media serve this discursive purpose, as they document how the state has framed the GRR model for national promotion.

2.3. GRR in Policy Discourse: From Environmental Rectification to Green Revival

In the official discourse, there are three stages in Zhejiang's implementation of the GRR Project over a 20-year span [40,50]. The first stage was the original "rectification and demonstration" (*qiancun zhengzhi, wancun shifan*) program that Xi started and pushed forward during the five years he worked in Zhejiang (2003–2008). The second stage has been described as "branding and beautification" (*qiancun jingping, wancun meili*), while the last one is "embracing the future and common prosperity" (*qiancun weilai, wancun gongfu*). In these stage labels, the words *qian* and *wan* serve as rhetorical markers of continuity with the original project rather than denoting the specific numbers "one thousand" and "ten thousand".

The first stage focused on the physical transformation in villages: cleaning up pollution, building waste-disposal and sanitary facilities, improving infrastructure, and upgrading residential housing. Although Zhejiang embarked on this program of physical transformation earlier, these efforts dovetailed with the national campaign of Building a New Socialist Countryside (BNSC) that began in 2006, the primary goals of which were also improvements in village public infrastructure, sanitation and housing [51]. Thus, during this first stage, the GRR project was largely absorbed under the provincial government's efforts to implement the BNSC national campaign and did not draw much attention from outside the province. Neither did Zhejiang's experiences during the BNSC campaign stand out on a national scale [52].

The GRR Project entered its second stage in 2011, which, as the label "branding and beautification" suggests, turned its focus to planned beautification of villages and developing marketable "brands" for villages based on their respective natural or cultural endowments. The second stage emphasized applying "scientific planning" in proactively building new villages and finding or creating a new foundation for the growth of the ecological economy. Some of the practices here, such as relocating village residents to newly built concentrated settlements, demolishing old rural housing, and promoting large-scale agricultural production, were common under the BNSC campaign [51,53,54]. Zhejiang's experiences are more remarkable in the second aspect: in the planned development of new villages, intentional efforts were made to either preserve and rediscover the cultural resources of villages or build up ecological resources in villages, both of which, as our case studies illustrate later, then provide the key assets for new economic growth.

The third stage, "embracing the future and common prosperity", which is on-going and villages enter at different paces, is about realizing what the Two Mountains theory has postulated as the future of a sustainable and prosperous rural China: turning ecological assets ("lush mountains") into development opportunities, economic wealth and shared prosperity ("mountains of gold"). In this pursuit, Zhejiang by all indications is leading the country. First, Zhejiang was the most successful in improving ecological conditions in rural areas: it was the first in the country to eliminate polluted surface water sources (below Category V) in rural areas, to reach the national air quality standard, and to pass the "Ecological Province" inspection; it enjoys a 61 percent forest cover; and, sanitary toilets, wastewater treatment and solid waste collection facilities were installed in all villages [55]. These "ecological assets" then allowed villages in Zhejiang to become hotbeds for new economic activities such as rural tourism, e-commerce, and cultural, creative and recreational industries, bringing prosperity to villagers. By 2017, the province already had 4958 agri-tourism destinations; among the 160 million tourists who visited the provincial capital, Hangzhou, that year, one third toured the city's rural areas [56]. Zhejiang has also desig-

nated 2537 villages as “protected historical villages”, 2170 villages as “boutique villages with special characters” (*tese jingpingcun*), created 743 scenic touring routes in rural areas, and certified three million rural household residences as “beautiful courtyards” [40,57]. Rural household income in Zhejiang has long been among the highest in the country; the rate of increase from 2003 to 2020 (5.9 times) is also the highest in the country, while the urban-to-rural income ratio (1.9) is the lowest [40].

This concludes our account of the policy history of GRR. The following sections turn from this macro-level historical account to a theoretical interpretation of the micro-level practices observed in our three case villages.

3. Post-Productivism as Analytical Framework

The preceding section documented the GRR trajectory as a state-directed reorientation of rural space away from extractivist production and toward ecological preservation, amenity provision, and diversified livelihoods. This rural restructuring calls for a theoretical framework capable of capturing such transitions. We adopt post-productivism for this purpose, as it provides the most analytically precise vocabulary for characterizing the shift from output-maximizing agricultural productivism to a multifunctional rural economy more oriented to urban consumption needs and ecological services.

Post-productivism was originally developed to analyze rural restructuring that began in the Global North in the 1980s [58–61]. This restructuring emerged as a response to the limitations and environmental impacts of productivist approaches to rural development, which primarily emphasized using rural space and resources to maximize output from agriculture and extractive industries through intensive practices, aided by state support [60,61]. The new paradigm of post-productivism adopts a more diversified and sustainable approach, treating rural space as part of a multifunctional socioeconomic system that contributes to rural livelihoods, community cohesion, and environmental integrity [59,62,63]. A key approach is gearing rural space towards meeting urban consumption needs for leisure and amenities associated with the “rural idyll” [58,64], whereby ecological assets form the foundation for economic opportunities in urban leisure consumption, creating a sustainable symbiosis between growth and environmental integrity.

Two questions arise when we apply the post-productivism framework to rural China. The first concerns conceptual transportability: whether the framework, originally developed to describe agrarian restructuring in the Global North, travels to the Global South context [63,65]. China’s case, however, is better positioned than most for this conceptual adaptation. Its rural space underwent a thoroughgoing, state-led productivist transformation: Maoist collectivization and post-reform agricultural policies organized farmland and village settlement around output maximization, collective labor mobilization, and commodification [54,66]. More importantly, in recent years, many scholars have noted the emergence of various forms of post-productivist development in rural China and shown the utility of this framework in conceptualizing the paradigm shift in the pursuit of SRD in China [67–73].

The second question concerns whether transition implies a linear and wholesale displacement of productivism. The literature on PPT has moved decisively away from linear transition models [61]. Holmes [74], for example, develops “multifunctional transition” to capture situations in which a variable mix of political-economic agendas generates heterogeneous economic activities and spatial uses. These qualifications apply to China as well, as the state’s dual imperatives of food security and rural revitalization have produced a structurally variegated landscape. Regions like Zhejiang, which enjoy locational proximity to major urban markets and distinctive ecological or cultural assets, are actively shifting into post-productivism, while other areas remain subject to intensified productivist

pressures through land consolidation, mechanization subsidies, and grain procurement targets [71]. Nor does the transition proceed uniformly at the household level, where it does occur. Villagers navigate the shift through pluriactive livelihood strategies. Initial diversification from agricultural production into tourism proceeds cautiously; only when post-productivist activities demonstrate sustained returns do households progressively reallocate more resources toward them [75,76]. The transition is therefore piecemeal, spatially uneven, and potentially reversible and is better described as a “multifunctional” landscape in which productivist and post-productivist land uses coexist [75,77] than as a clean supersession of one regime by another. Our analysis of GRR in Zhejiang is offered in this spirit: we identify a coherent post-productivist pathway in the cases we examine, while acknowledging that this pathway characterizes a specific region with specific endowments and is not representative of rural China as a whole.

One issue that has not been adequately addressed in the broader post-productivism literature so far is the pathway that constitutes a PPT and the practical approach of implementing it. In the more spontaneous, bottom-up post-productivist transitions elsewhere, the pathways of transition are diverse [61,77]. In GRR, however, as a state-led, top-down project, we see a more uniform approach that forms the GRR model and holds both promises and limitations. From our data analysis, we identify three steps that constitute the pathway of transition to post-productivism in Zhejiang’s GRR.

4. GRR as a Post-Productivist Transition

4.1. Data and Methods

We use three cases to illustrate how the tasks in each stage were carried out at the village level and analyze key practices that contributed to the successful completion of these tasks. The three cases are drawn from a sample of 21 villages that our research team studied from July 2019 to October 2024. We conducted interviews (87 in total) and participant observations in 21 villages across eight county-level units. At each village, we interviewed villager officials, ordinary villagers, and outside contractors. All 21 villages carried out environmental rectification and completed the first stage, albeit to various degrees of success. Ten villages, however, have not completed either the second or the third stage: five villages suffered economic stagnation after the closure of polluting industries triggered outmigration; five others were scheduled by the provincial authority for de-registration (to be merged with other villages due to population decline) and thus did not receive funding for later stages. This large proportion of unsuccessful cases is a result of our sampling method: in selecting county-level units, we over-sampled the least developed southwestern part of the province, especially Lishui and Quzhou, two of the three poorest prefectures by per capita GDP (see Figure 1 for the geographic distribution of sample villages).

As this study is not intended to be a comprehensive evaluation of GRR, we focus on villages that have been used as demonstration models (*yangban*) for other places to emulate. Among the remaining 11, we selected three such cases where each represents not only a particular developmental path but also a sub-region of the province: Lujia village in Anji county in the Hang-Jia-Hu plain of north Zhejiang, Chen’ao village in Rui’an city on the southeast coast, and Jianchuan village in Jinyun county in the hilly southwestern part of the province. The other eight cases are mostly similar to the three, only varying in the types of ecological businesses pursued and degree of success. After selecting these three cases, we conducted two additional rounds of fieldwork in these villages in September 2023 and October 2024.

We took an abductive analysis approach in collecting and analyzing our field data [78]. The selection of the three cases was a theoretical sampling dictated by our theoretical task of identifying successful practices that represent the GRR model. We then inductively

analyzed case materials of the three villages to identify and conceptualize common features across the cases. Although we started with the intention of developing a new conceptualization, our analysis revealed that the existing theoretical framework of post-productivism provided the best fit in explaining observations in this non-randomly selected sample.

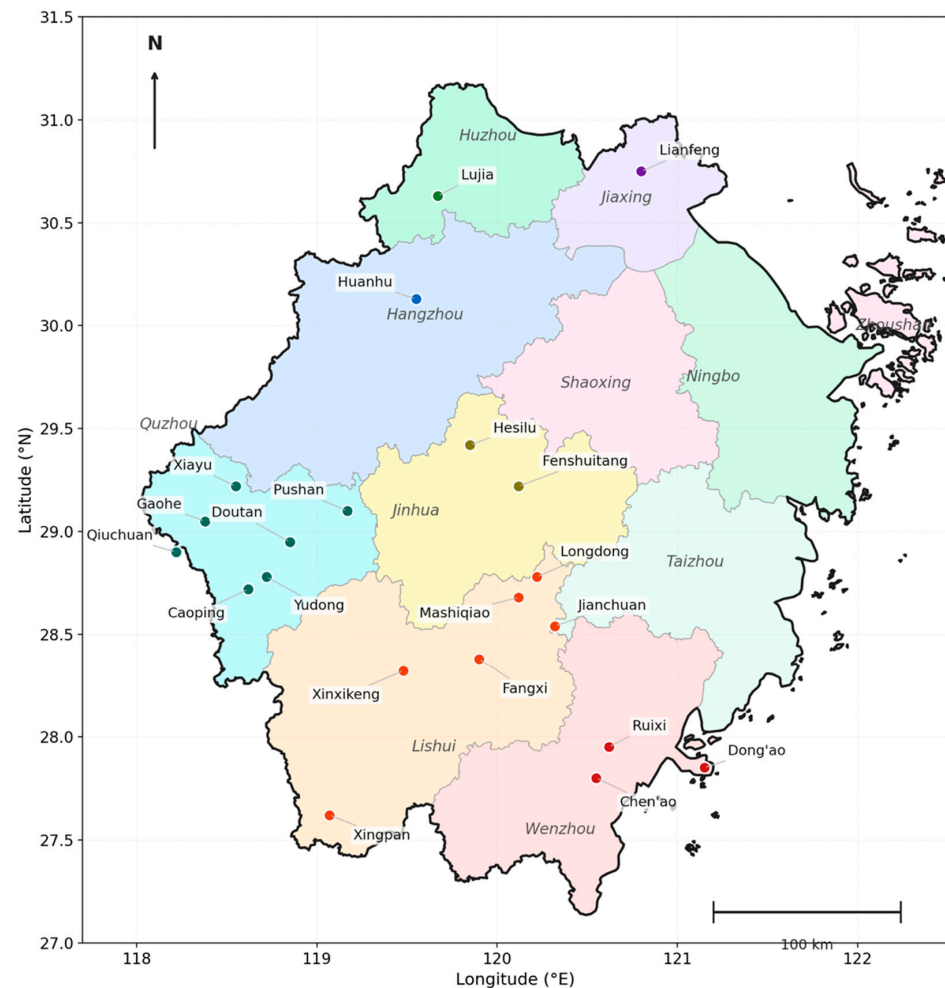


Figure 1. Distribution of sample villages across Zhejiang Province.

We use the three successful cases not to represent the variegated experiences in the entire Zhejiang, but only to illustrate the approaches through which green development goals were achieved and key factors that contributed to this outcome. Our intention here is not studying the complex political dynamics and social relationships involved in implementing such a top-down project. The problems of this type of policy implementation, such as the non-compliance or over-reaching of local officials, collusion between local governments and the business elite, and resistance from rural residents, are well-known [52,79,80].

4.2. Withdrawing from Extractivist Production

Not only is a productivist agricultural regime already dominant in most rural areas of China [54], the more developed regions like Zhejiang also boast a high degree of rural industrial development [81]. Thus, a transition to post-productivism often needs to start with the difficult withdrawal from the productivist agriculture or industry that was once or may still be the pillar of the local economy. In Zhejiang's case, this withdrawal was both forcefully imposed by the provincial government through tightening environmental regulations and financially supported with funds for environmental rectification under GRR. Villages' ability to receive funding and weather through this withdrawal varied. In

our sample, we have seen cases where such a withdrawal resulted in economic stagnation and then stalled the further transition to post-productivism. In the successful cases, on the other hand, sufficient funding and strong village leadership played a key role.

Chen'ao village is located on the outskirts of Rui'an city and just an hour's drive from Wenzhou. Like many other rural areas in Wenzhou, the village went through rapid in situ industrialization in the 1980s and 1990s [81]. Starting from just one collectively owned factory, founded in 1978, making electronic parts, a cluster of electroplating factories developed in the village. In addition to jobs and rising incomes, this thriving industry also brought severe air and water pollution to the village. One villager recalled that "even stray dogs avoided the village" (interview, 15 August 2023).

In 2002, Mr. Zhong, who had run a successful tourism business, was recruited by the township government to return to his native village to serve as the head of the village committee. His return was an example of a practice that Zhejiang had pioneered since the mid-1990s: local governments recruiting entrepreneurs and other economic elites to become village leaders in the hope of strengthening rural governance [82]. Under the GRR, Mr. Zhong led the village committee to work with local environmental authorities to shut down over 30 unlicensed electroplating factories in the village and relocate nine licensed ones to a newly built industrial park outside the village, withdrawing the village economy from its former reliance on polluting industries.

Jianchuan village, located in the hilly southwestern part of Zhejiang in Jinyun County, away from any urban centers, was traditionally an agricultural village. Villagers used to specialize in growing mushrooms and raising ducks. In 1996, a collectively owned mushroom trading center, the largest in the south Zhejiang region, was set up in the village. Ducks were traditionally raised in rivers, creeks, and other waterways, causing rampant pollution in these waterbodies. The village Party Secretary, Mr. Song, who had served five years in the military and had business experiences before, was appointed in 1992. In 2006, under the GRR Project, Mr. Song applied for and then received funding for constructing a new sewage system and for treating the water pollution caused by the productivist duck farming. All ducks were cleared out of the main river and its tributaries and either moved to ponds or raised on land.

Unlike the previous two villages, which had either thriving industries or agriculture, Lujia village, situated in the mountains in Anji county, was a poverty village, where most young people had emigrated to work in urban jobs. The remaining villagers grew tea. In 2011, the village had the lowest per capita income in the county and was ranked last in the county's hygiene inspection. When the focus of GRR was on shutting down polluting factories and treating water pollution, the village received little attention or funding, even though, like most villages back then, it had problems with waste disposal.

4.3. Restoring Ecological Assets

In addition to discontinuing the productivist agriculture and industries that had created the environmental deficit in rural villages, the shift to a sustainable path further requires an active creation of eco-environmental assets—the "lucid waters and lush mountains"—that can then provide a new ecological base for sustainable development. At the provincial level, the GRR program provided funding for a range of environmental projects; villages, however, after obtaining the funds, had considerable latitude in applying the funding in ecological restoration.

At Chen'ao, in 2003, Mr. Zhong obtained funding for a river regulation project, which he then used to build a series of small dams and a water plant on the creek that ran through the village. This project provided clean running water to village households as well as allowed the village to sell treated water to manufacturing companies in the area and grow

the village's collective finance. In 2004, the village obtained more funding from various GRR initiatives, totaling over 22 million yuan, and carried out a wholesale environmental rectification in the village. In addition to treatment facilities for solid waste and wastewater, a three-kilometer-long "ecological scenic belt" was created on both banks of the creek.

In 2005, the village embarked on a more ambitious transformation. It became the first in Rui'an to carry out a "full village redevelopment" project. The entire old village, which contained over 500 residential houses and nearly 400 industrial buildings, was demolished, and village households were relocated into low-rise apartment buildings and villas in a carefully planned "new village" that resembled an urban residential compound. The freed-up land was then used for the construction of new facilities. Another challenging task that the village embarked on was relocating over 4000 graves that had spread across the slopes around the village to two newly constructed cemeteries and then reforesting the slopes. Once that was completed in 2009, it also freed up 6 ha of land, for which the village committee then obtained the approval to be used as construction land. Using the land as collateral, the village obtained bank loans to construct factory buildings and high-rise apartments, which were soon taken up by manufacturing companies in the area and their migrant labor force. Here we see the checkered pattern in which post-productivism emerges spatially in rural China [67]: instead of being eradicated, productivist activities were reallocated to leave space for post-productivism, creating functional hybridity on a larger scale.

At Jianchuan, the village also carried out river dredging and regulation projects like those in Chen'ao with GRR funding. As a historical village, where a large number of old houses built in the Ming and Qing dynasties were well preserved, Jianchuan did not go through a village reconstruction but only carried out restorative works to repair roads and buildings.

At Lujia, the transition started belatedly in 2011 when a young entrepreneur, Mr. Rong, who had previously run a construction and decoration business, like Mr. Zhong, was recruited by the township government to take up the Party Secretary position at his native village. In his first act, Mr. Rong used his own money to give the village a 500,000-yuan interest-free loan and then used that to pay for a cleaning-up operation in the village. He also leveraged his connections to secure funding of 3.6 million yuan from the county government's GRR budget to carry out road improvement, village greening, and wastewater treatment projects.

4.4. Reconfiguring Rural Space for Urban Consumption

Under the post-productivist paradigm, a key approach to SRD is using ecological assets in rural areas to cater to urban consumption needs for leisure and amenities associated with the "rural idyll" [58] in forms such as eco-tourism, agro-tourism, cultural tourism, and quality food consumption [71]. This approach is exactly what the Two Mountains theory has prescribed: using rural ecological assets to provide "ecological products" to meet growing consumer demands. All three villages adopted this approach, although each with distinctive practices.

At Chen'ao, after building up significant collective financial assets under the GRR project, including a water plant and a large portfolio of residential and industrial properties, in 2014, the village made the next step toward "green rural revival": using the village's ecological assets in its "lucid water" to create an ecological economy. With the village collective investing and holding 51 percent of the shares and individual village households holding the rest, a shareholding company, Chen'ao Tourism, was formed. With a start-up capital of 3.5 million yuan, the company built entertainment and sports facilities in the village and offered leisure activities such as swimming, kayaking, rafting, boating, and

hiking to visitors. Individual households also operated cafes, restaurants, and bed and breakfasts to meet other consumption needs. The village's proximity to the city centers of both Rui'an and Wenzhou ensured a steady volume of visitors. In 2022, these facilities received over 350,000 visitors and generated a revenue of over 15 million yuan; annual dividends distributed to individual shareholders reached 1 million in total. The company also employed over 50 villagers.

At Jianchuan, the village sought opportunities in a new type of agriculture. In 2015, the high-speed railway connecting the prefectural capital, Lishui, to Hangzhou was completed and ran through the village's farmland on a five-kilometer-long elevated bridge. Mr. Song saw an opportunity here for the village's transition to "ecological agriculture". He orchestrated a transfer of over 33 ha of farmland bordering the railway, which had been previously used to house mushroom greenhouses, from individual households back to the village authority and then removed all the greenhouses. A landscape architect from Zhejiang University was hired to design a flower garden, in which flowers blossoming in different seasons were planted in arranged patterns. For passengers traveling on the high-speed train, looking down from the elevated bridge, the blooming flowers presented a striking scene and became an advertising board for the village. The flower garden opened to paying visitors in May 2016 and became a popular destination for tourists traveling to Lishui city and Jinyun county. In 2017, the flower garden generated an annual revenue of over 7 million yuan for the village. Over a hundred villagers were hired as gardeners and maintenance staff; many households operated restaurants and bed-and-breakfasts.

Another new economy that sprang up in Jianchuan was e-commerce. In 2015, some village households began to operate retail stores on e-commerce platforms, selling stationery and school supplies. Then, thanks to the low rent, the village's easy access via both highways and high-speed rail, and the village authority's active promotion, outside e-tailers started to move in. In this process, one villager, Mr. Kai, played a key role. His company designed cultural products such as souvenirs that were popular in local cultural events and tourist destinations. His company's presence in the village attracted many young e-tailers to Jianchuan. Village alleyways are now lined up with e-commerce shops, selling mainly stationery and cultural products. In 2023, according to Mr. Song, there were 500 people working in this sector, and e-commerce sales volume reached 80 million yuan.

At Lujia, despite its late start, Mr. Rong showed a great degree of sensitivity to policy opportunities presented by the GRR project and skillfully exploited these to bring resources to the village, orchestrating a wholesale transformation. In 2013, when that year's No. 1 Policy Document first brought up the idea of "family farms" (family-managed large-scale commercial farms, typically above 3.3 ha for those producing two harvests a year) and signaled upcoming policy support for that, Mr. Rong saw an opportunity. He and the village committee organized the transfer of 533 ha of farmland from village households back to the village authority. Since many villagers had already left for urban jobs, this was met with little resistance. He then hired a Beijing planning firm to produce a comprehensive development plan for the village. In addition to the normal reconstruction of the residential area, this new plan included a cluster of "themed family farms" that formed an agro-tourism park; a 4.5 km-long rail loop and a sightseeing train were also planned to allow visitors easy access to all the farms. With this grand plan, Mr. Rong then went out to court investors. He managed to bring back 18 investors, who rented land from the village and set up "themed family farms". These included one returned villager who took up 20 ha to grow and produce the white tea that Anji is famous for; farms for various flowers, vegetables and fruits; and one for wild boars. The idea was for tourists to take the sightseeing train to tour different farms and enjoy leisure activities such as tea tasting, fruit picking, experiential farming, horse riding, watching pig racing, and having meals.

This development plan was completed in 2016, and in 2017, according to Mr. Rong, the agro-tourism park received 250,000 visitors and had a revenue of 12.5 million yuan.

In 2017, the No. 1 Policy Document again raised a new concept, “Rural Idyll Complex” (*tianyuan zongheti*), a type of village where modern agriculture, alternative farming, agro-tourism, and leisure activities are integrated [83]. Mr. Rong again seized this opportunity. He recruited three neighboring villages to join his project and used the existing agro-tourism park and related service facilities in Lujia as the core to build a proposal that aimed to develop this into a category 4A tourist destination (a designation by the Ministry of Culture and Tourism on a 1A–5A scale). This project was successfully included in the first batch of national-level pilot cases of “Rural Idyll Complex”.

This new designation as a national-level pilot case not only brought in more government funding but also opened a new venue of economic growth for Lujia. Leveraging its proximity to Yu Village, where Xi first made his “Two Mountains” statement, Lujia established a Two Mountains College, dedicated to teaching the Two Mountains theory and showcasing its success as practiced at Lujia. This opportune move became a great success. Lujia has now become a top destination for study missions from across the country in the current campaign of learning and applying the GRR experiences and studying the Two Mountains theory. It has formed collaborative partnerships with 62 villages and townships across ten provinces and multiple universities to provide training programs together. In 2020, the village received 3692 study missions. In other words, Lujia has found a way to practice the Two Mountains theory through teaching it.

Since 2016, as tourism in Lujia grew, emigrated villagers started to return and used their homes to provide various hospitality services. The village authority also formed a shareholding cooperative, in which village households all held shares, to manage all the collective economic activities that included land rental, property development and rental, the agro-tourism park, and Two Mountains College. By the end of 2022, Lujia had accumulated a collective asset of 290 million yuan and an operating income of 6.1 million yuan in that year.

5. Discussion: Sustainability of the GRR Model and Implications for Post-Productivism

These three cases, while taking diverse developmental projects, nevertheless present a common pathway of implementing the goals and approach toward SRD set out by the Two Mountains theory. We contend that this pathway constitutes a post-productivist transition. Now that the GRR experiences as represented by these model cases are promoted by the central government as a template for SRD across the country, two questions about the sustainability of the GRR model require scrutiny.

First, in the successful cases that have achieved sustainable development outcomes under GRR, what conditions were essential to their success? In the cases we examined here, two things stand out. First, strong leadership, usually from the village Party Secretary, played a pivotal role. This leadership figure not only needs to have certain personal virtues that can win the support within the village and allow him or her (in our sample, a small minority of village leaders are female [83,84]) to mobilize the village community but, more importantly, a complex set of skills similar to those required of both a politician and a corporate CEO. In a general context of a prolonged exodus of talents from rural areas, such leadership characters are almost universally lacking in rural villages. In this new era, the previous mechanisms of elite reproduction in rural China, either through family-based intergenerational reproduction or political selection from the masses, have been disrupted. While rural areas are still capable of producing new socioeconomic elites who have the

complex skill set required for the leadership role, most of them are “absentee elites” who developed their talents outside and need to be recruited back.

As mentioned earlier, Zhejiang was the first in the country that targeted successful entrepreneurs and tried to recruit them back to lead their home villages since the mid-1990s. This effort continued into the 2000s and further ratcheted up in the 2010s. The organization departments at both county and prefectural levels were asked to set up databases for both the so-called “country elites” (*xiangxian*) and “rural revitalization talents” and establish workstations for the “country elites”, who could then regularly return to engage in village affairs. In 2019, the provincial government started a “two entries and two returns” (*liangjin lianghui*) project that aimed to promote the entry of technology and financial capital and the return of youth and “country elites” to the countryside [85]. Various policy supports, including allocation of land and financial subsidies, were provided. These programs have had considerable success. All three village leaders studied here were examples of this type of “entrepreneurial Party secretaries” [82]. That Zhejiang has one of the most vibrant private-sector economies in the country, which provided a fertile ground for developing rural entrepreneurial talent, is no doubt a key reason for this success.

Once the leadership is in place, the next challenge is resource mobilization. GRR programs, starting from environmental rectification, all require villages to have collective resources at their disposal, which are in shortage in most villages. Lujia, for example, had accumulated a collective debt of nearly a million yuan before Mr. Rong took over in 2011. Even for those villages that have some resources, these cultural heritage or ecological resources can only be unlocked and activated through obtaining regulatory approvals; making infrastructure improvements; planning, upgrading, and marketing; and with an infusion of new resources. For a province like Zhejiang, at least there is a significant amount of governmental and non-governmental resources available to support rural revitalization projects. The key is knowing how to get them.

In the past two decades, fiscal spending in rural areas and fiscal transfer to local governments in China is increasingly done through the “project system” (*xiangmuzhi*), in which lower-level units either receive fiscal transfers earmarked for specific uses (*zhuanxiang*) or need to compete for funded projects (*xiangmu*) to be implemented in their jurisdictions [86]. In the absence of strong leadership, even the universally allocated earmarked funds, such as those for toilet upgrading and wastewater treatment under GRR, often ended up being misused or underused and eventually clawed back by upper-level governments, leaving no significant improvement in villages. Lujia village before 2011 was a case in point: despite receiving the fiscal transfer for environmental rectification, almost nothing was accomplished due to the leadership’s ineptitude. In contrast, once Mr. Rong was at the helm, he started to exploit all sorts of funding sources, including applying for various projects, participating in local or provincial competitions to win prize funds, and soliciting investment and donations from “country elites”. From 2013 to 2016, Lujia received a total of 17 million yuan of external funding. Like what Mr. Zhong did at Chen’ao, Mr. Rong also obtained the regulatory approval for using the village’s construction land for commercial real estate development, bringing back three million yuan in sales revenue. Since becoming a national pilot case of “Rural Idyll Complex” in 2017, the village has further received national and local funding to the tune of a hundred million. For a village of about 2300 residents, no surprise that it became prosperous. In sum, now that the resources needed for carrying out SRD projects are mostly located externally, having an entrepreneurial leader who has the skills to mobilize these becomes ever more important.

The dependence of these cases’ success on strong leadership internally and availability of resources externally raises the second question pertaining to the sustainability of this model: is this model sustainable in Zhejiang, and is it applicable in contexts different

from Zhejiang's? For the former, the jury is still out until observations over a longer time span become available. For the latter, we have seen mixed evidence. Our team has also conducted research on GRR-like projects in other provinces (Guangdong, Ningxia, and Shanxi). While this is not the place to summarize those diverse observations, there are clear indications that outside the rich coastal provinces, the applicability of the GRR model is far more constrained, and a campaign-style, top-down imposition of this model on a large scale can potentially lead to disastrous outcomes.

Local governments in Zhejiang had far greater fiscal resources at their disposal compared to those in inland provinces. Over 20 years, all levels of government in Zhejiang have put in over 200 billion yuan of fiscal resources into the GRR Project [57]. In addition, the vibrant private economy in Zhejiang not only provided more financial resources that could be mobilized to support GRR but also trained a corps of entrepreneurs who can return to villages to lead the campaign. Furthermore, the presence of metropolises with large affluent urban populations like Hangzhou and Shanghai in proximity is also crucial to the success of the post-productivist model that Zhejiang villages pursued, which relied on urban consumption.

None of these favorable conditions is present in many localities that are now being instructed by the central government to implement this model. At a former national-level poverty county we visited in Shanxi province in August 2024, for example, we attended a "Two Mountains training" workshop, in which village leaders presented funding proposals about developing leisure tourism activities such as a water theme park and a hot spring resort when the nearest urban population is the 80,000 not-so-affluent residents in the county seat. If concentrating resources in a few selected villages to create "demonstration models", as in the case of Lujia, may be wasteful and unfair to others in Zhejiang's case, when this is done in much poorer provinces, the damage could be far greater. The impact of this on-going campaign demands continued attention in future studies.

China's GRR experience also advances our theoretical understanding of post-productivism itself. The PPT literature, developed primarily in Western Europe and North America, has described a relatively uniform transition from agricultural productivism toward rural amenity consumption and multifunctionality. The cases examined here suggest that pathways and outcomes are more diverse than existing frameworks have captured: some villages pivot toward ecotourism and leisure, others toward premium agri-food production, and others toward aesthetic amenities for urban-adjacent consumption, each generating distinct configurations of rural space and livelihood. For many rural residents who remained or returned, GRR represents an active reconfiguration of livelihood strategies, which involve transforming ecological assets into viable income streams and repositioning the village not merely as a place of residence but as a site of diversified rural production. Post-productivism here therefore does not imply the cessation of production; it describes a transition away from output-maximizing agriculture toward economic activities that draw on and reproduce ecological assets rather than depleting them.

6. Conclusions

According to official sources, 20 years of GRR in Zhejiang has resulted in a resounding success. By the end of 2022, 90 percent of villages in the province have met the requirements and been certified as "beautiful villages", and over half of the village collectives now have an annual income over 500,000 yuan [50,87]. Village-level observations from our own fieldwork and other recent studies, although revealing more unevenness across villages, largely confirm these aggregate-level trends [83,84]. Compared with other rural areas we have studied across the country, even ordinary villages in Zhejiang stand out in both the living environment and economic vitality. Improvements in the physical

environment, which was the goal of GRR's first stage, are relatively uniform across villages in Zhejiang, but in the goals of the two later stages, including ecological restoration, village reconstruction, and development of a new "ecological economy", there is far greater heterogeneity than we can present here.

Zhejiang's GRR experiences illustrate the post-productivist pathway that the Eco-civilization framework has envisioned for SRD in China through its Two Mountains theory. In studying GRR, this study makes two contributions. First, to the literature on Eco-civilization and the ecological turn in China's developmental trajectory, this study adds an important missing piece by foregrounding the Two Mountains theory and Zhejiang's GRR as its practical model and thus broadening our understanding of Eco-civilization from an environmental governance scheme to a new paradigm of SRD. The Two Mountains theory and GRR, which have not received due attention in mainstream scholarship, add the policy framework and practical program, respectively, for the application of Eco-civilization in SRD.

Second, to the literature on rural restructuring in China, this study shows that, with the ascent of the Two Mountains theory to a reigning ideology in 2018 and then the central government's promotion of the GRR model as the practical template since 2024, rural restructuring in Zhejiang has pursued a trajectory that can be conceptualized as post-productivism. The Two Mountains theory puts forward a post-productivist vision of SRD, in which ecological preservation is not done just for its intrinsic value but also as a means for a particular type of green development. It points to a path that departs from the productivist model of agricultural maximization and resource extraction but turns to post-productivist activities of consuming rural space, amenities and ecological assets.

This reorientation toward post-productivism is entirely consistent with the Eco-civilization framework's vision of the human–nature relationship. Unlike certain strands of Western environmentalism that advocate the strict separation of human activity from natural ecosystems, the Two Mountains theory holds that "the natural and the socio-political are not considered separate" [4] (p. 6) and treats ecology as "a means to articulate green modernization and sustainable development" [88] (p. 1931). This vision of "humanity in harmonious coexistence with nature" frames rural communities as simultaneously cultivating ecological resources and mobilizing them for sustainable economic purposes, rather than protecting nature from human activity.

Our post-productivist argument applies specifically to Zhejiang: a region positioned at the affluent end of the rural development spectrum, endowed with proximity to major urban markets and a vibrant private economy, yet not a main grain producer. China's rural landscape is differentiating rather than transitioning uniformly; the central government's promotion of GRR as a national template signals a policy aspiration rather than a realized outcome, as the conditions that enabled Zhejiang's transition are not uniformly available elsewhere. Where productivist imperatives around food security and grain procurement remain firmly in place, the GRR model's applicability and its impact on sustainable rural development are in doubt and await future investigation.

Author Contributions: Conceptualization, Q.F.Z., J.L. and L.Z.; methodology, J.L. and L.Z.; investigation, Q.F.Z., J.L. and L.Z.; data curation, J.L. and L.Z.; writing—original draft preparation, Q.F.Z., J.L. and L.Z.; writing—review and editing, Q.F.Z.; project administration, J.L. and L.Z. All authors have read and agreed to the published version of the manuscript.

Funding: Postdoctoral Fellowship Program of CPSF (GZC20251603), awarded to Jianzhang Luo.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board of Singapore Management

University (protocol code IRB-22-159-A088 and IRB-22-159-A088-M2(924) and date of approval 11 November 2022).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The qualitative interview data that support the findings of this study are available from the corresponding author upon reasonable request, subject to ethical restrictions on participant confidentiality.

Conflicts of Interest: The authors declare no conflicts of interest.

References

1. Xue, B.; Han, B.; Li, H.; Gou, X.; Yang, H.; Thomas, H.; Stückrad, S. Understanding ecological civilization in China: From political context to science. *Ambio* **2023**, *52*, 1895–1909. [\[CrossRef\]](#) [\[PubMed\]](#)
2. Geall, S.; Ely, A. Narratives and pathways towards an ecological civilization in contemporary China. *China Q.* **2018**, *236*, 1175–1196. [\[CrossRef\]](#)
3. Han, X.; Sheng, J. Governing the future through “ecological civilization”: Anticipatory politics and China’s great Yangtze River protection programme. *J. Contemp. China* **2024**, *33*, 774–789.
4. Weins, N.W.; Zhu, A.L.; Qian, J.; Barbi Seleguim, F.; da Costa Ferreira, L. Ecological Civilization in the making: The “construction” of China’s climate-forestry nexus. *Environ. Sociol.* **2023**, *9*, 6–19.
5. Westman, L.; Huang, P. Ecological civilisation: A historical perspective on environmental policy narratives in China. *Int. Q. Asian Stud.* **2022**, *53*, 181–206.
6. Hansen, M.H.; Li, H.; Svarverud, R. Ecological civilization: Interpreting the Chinese past, projecting the global future. *Glob. Environ. Change* **2018**, *53*, 195–203. [\[CrossRef\]](#)
7. Marinelli, M. How to build a “Beautiful China” in the Anthropocene: The political discourse and the intellectual debate on ecological civilization. *J. Chin. Political Sci.* **2018**, *23*, 365–386. [\[CrossRef\]](#)
8. Goron, C. Ecological civilisation and the political limits of a Chinese concept of sustainability. *China Perspect.* **2018**, *2018*, 39–52. [\[CrossRef\]](#)
9. Liu, C.; Chen, L.; Vanderbeck, R.M.; Valentine, G.; Zhang, M.; Diprose, K.; McQuaid, K. A Chinese route to sustainability: Postsocialist transitions and the construction of ecological civilization. *Sustain. Dev.* **2018**, *26*, 741–748. [\[CrossRef\]](#)
10. Shepherd, A. *Sustainable Rural Development*; Bloomsbury Publishing: London, UK, 1998.
11. Huan, Q.; Chen, Y.; Huan, X. A frugal eco-innovation policy? Ecological poverty alleviation in contemporary China from a perspective of Eco-civilization progress. *Sustainability* **2022**, *14*, 4570. [\[CrossRef\]](#)
12. Tang, C.; Zheng, Q.; Zhong, Q. Evaluation of the green development level of tourism in ecological conservation areas: A case study of Beijing. *Sustain. Dev.* **2022**, *30*, 1634–1654. [\[CrossRef\]](#)
13. Wang, Y.; An, L.; Chen, H. Spillover effects and influencing factors of tourism eco-efficiency for sustainable development: A case study of cities in the Yangtze River Delta. *Sustain. Dev.* **2024**, *32*, 6201–6214. [\[CrossRef\]](#)
14. Zhang, J.; Dou, S.; Liu, J.; Chen, Y. Ecological challenges on small tourist islands: A case from Chinese rural island. *Sustain. Dev.* **2024**, *32*, 1723–1742.
15. Hu, Z.; Zhang, Q.F. Alternative agrifood systems and the economic sustainability of farmers’ cooperatives: The Chinese experience. *Sustain. Dev.* **2024**, *32*, 7447–7460. [\[CrossRef\]](#)
16. Luo, Y.; Li, B.; Wang, J. Exploring the path to achieve sustainable agricultural development: An empirical analysis based on the modernization of agriculture in six central China provinces. *Sustain. Dev.* **2025**, *33*, 518–533.
17. Sun, X.; Gao, L.; Ren, H.; Ye, Y.; Li, A.; Stafford-Smith, M.; Connor, J.D.; Wu, J.; Bryan, B.A. China’s progress towards sustainable land development and ecological civilization. *Landsc. Ecol.* **2018**, *33*, 1647–1653. [\[CrossRef\]](#)
18. Yeh, E.T. The making of natural infrastructure in China’s era of ecological civilization. *China Q.* **2023**, *255*, 611–627.
19. Jiang, B.; Bai, Y.; Wong, C.P.; Xu, X.; Alatalo, J.M. China’s ecological civilization program—Implementing ecological redline policy. *Land Use Policy* **2019**, *81*, 111–114. [\[CrossRef\]](#)
20. Zeng, L. Dai identity in the Chinese ecological civilization: Negotiating culture, environment, and development in Xishuangbanna, southwest China. *Religions* **2019**, *10*, 646. [\[CrossRef\]](#)
21. Zhang, Y.; Zhang, A.; Ma, Y. An integrated mechanism and challenges of mountainous sustainable development: A review of Hani Terraces, China. *Sustain. Dev.* **2024**, *32*, 101–118.
22. Yang, Z.; Yang, D.; Sun, D.; Zhong, L. Ecological and social poverty traps: Complex interactions moving toward sustainable development. *Sustain. Dev.* **2023**, *31*, 853–864.
23. Yin, D.; Qian, J.; Zhu, H. Frontier development in the midst of ecological civilization: Unravelling the production of maca in Yunnan, China. *Geoforum* **2019**, *106*, 144–154. [\[CrossRef\]](#)

24. Xi, J. Build a Modernized Socialist Ecological Civilization. *Qiushi*, 31 January 2019. Available online: http://www.qstheory.cn/dukan/qs/2019-01/31/c_1124054331.htm (accessed on 23 August 2024).
25. Yu, H.; Liu, Y.; Wang, Y.; Zhao, Z.; Li, H.; Zhang, Y. Xi Jinping thoughts on Eco-civilization: Evolution process, essence, and significance. *Environ. Sustain. Dev.* **2018**, *43*, 12–16. (In Chinese)
26. Communist Party of China. Xi Jinping Thought on Ecological Civilization. Available online: <https://www.12371.cn/special/xxzd/hxnr/st/> (accessed on 23 August 2024).
27. Hansen, M.H.; Liu, Z. Air pollution and grassroots echoes of “ecological civilization” in rural China. *China Q.* **2018**, *234*, 320–339. [CrossRef]
28. Huang, Z.; Bai, Y.; Ali, M.; Fang, Z. “Two Mountains concept” leading the green transformation of China’s economic society. *J. Environ. Manag.* **2024**, *359*, 120960. [CrossRef]
29. Ma, L.; Hong, Y.; Chen, X. Can green economy and ecological welfare achieve synergistic development? The perspective of the “Two Mountains” theory. *Int. J. Environ. Res. Public Health* **2022**, *19*, 6460. [CrossRef] [PubMed]
30. Chinese Communist Party. *Report to the 20th National Congress of the Communist Party of China*; People’s Publishing House: Beijing, China, 2022. Available online: <https://www.gov.cn/zhuanli/zggcddescqgdbdh/sybgqw.htm> (accessed on 11 January 2025).
31. China Daily. Zhejiang Province Won UN’s Earth Award. Available online: <https://language.chinadaily.com.cn/a/201809/28/WS5badc4b9a310eff3032800a2.html> (accessed on 23 August 2024).
32. UNEP. Green Is Gold: China’s Remarkable Revival Project. Available online: <https://www.unep.org/news-and-stories/story/green-gold-chinas-remarkable-revival-project> (accessed on 18 October 2024).
33. Mol, A.P.J. Environment and modernity in transitional China: Frontiers of ecological modernization. *Dev. Change* **2006**, *37*, 29–56. [CrossRef]
34. Tan, M.; Li, X.; Xie, H.; Lu, C. Urban land expansion and arable land loss in China: A case study of Beijing–Tianjin–Hebei region. *Land Use Policy* **2005**, *22*, 187–196. [CrossRef]
35. Bai, Z.; Ma, W.; Ma, L.; Velthof, G.L.; Wei, Z.; Havlík, P.; Oenema, O.; Lee, M.R.F.; Zhang, F. China’s livestock transition: Driving forces, impacts, and consequences. *Sci. Adv.* **2018**, *4*, eaar8534. [CrossRef] [PubMed]
36. Zhang, K.; Wen, Z. Review and challenges of policies of environmental protection and sustainable development in China. *J. Environ. Manag.* **2008**, *88*, 1249–1261. [CrossRef]
37. Wang, Y.; Chen, C.; Araral, E. The effects of migration on collective action in the commons: Evidence from rural China. *World Dev.* **2016**, *88*, 79–93. [CrossRef]
38. Teng, F.; Wang, P. The evolution of climate governance in China: Drivers, features, and effectiveness. *Environ. Politics* **2021**, *30*, 141–161. [CrossRef]
39. Li, Y.; Shapiro, J. *China Goes Green: Coercive Environmentalism for a Troubled Planet*; Polity: Cambridge, UK, 2020.
40. People’s Daily. One Blueprint to Guide All Actions: The Qian-Wan Project Envisioned by General Secretary Xi Jinping Brought Transformative Changes to the Countryside. Available online: https://www.gov.cn/yaowen/liebiao/202306/content_6888068.htm (accessed on 22 August 2024).
41. Zhe, X. Lucid waters and lush mountains are mountains of gold and silver. *Zhejiang Daily*, 24 August 2005.
42. Chan, A.L. *Xi Jinping: Political Career, Governance, and Leadership, 1953–2018*; Oxford University Press: Oxford, UK, 2022.
43. The formation and practice of Xi Jinping’s thought on the three rural issues in Zhejiang. *People’s Daily*, 21 January 2018. Available online: http://www.xinhuanet.com/politics/2018-01/21/c_1122290956.htm (accessed on 26 August 2024).
44. Tang, R. Thoroughly learn and promote Zhejiang’s Qian-Wan Project experiences, strive to open up a new chapter in comprehensive rural revitalization. *Farmers’ Daily*, 30 June 2023. Available online: <http://ztjy.people.cn/n1/2023/0630/c457340-40024638.html> (accessed on 26 August 2024).
45. Qiushi. Summarize and promote Zhejiang’s Qian-Wan Project experiences. *Qiushi* **2023**, *11*, 15–22. [CrossRef]
46. Zhao, C. Localities learned and applied the development ideas, working approaches, and implementation mechanisms of the GRR Project. *People’s Daily*, 22 December 2023. Available online: <http://politics.people.com.cn/n1/2023/1222/c1001-40144303.html> (accessed on 28 August 2024).
47. Xi Jinping: Learn the experiences of the Qian-Wan Project, advance comprehensive rural revitalization. *Lianhe Zaobao*, 31 December 2023. Available online: <https://www.zaobao.com.sg/realtime/china/story20231221-1457342> (accessed on 23 August 2024).
48. Ministry of Agricultural and Rural Affairs; National Development and Reform Commission; Ministry of Finance. *Circular on Learning from and Applying the Experience of Zhejiang’s “Thousand Villages Exemplary, Ten Thousand Villages Renovated” Project*; Central Government of China: Beijing, China, 2023. Available online: https://www.gov.cn/lianbo/bumen/202307/content_6890255.htm (accessed on 24 August 2024).
49. Zhou, X.; Lian, H.; Ortolano, L.; Ye, Y. A behavioral model of “muddling through” in the Chinese bureaucracy: The case of environmental protection. *China J.* **2013**, *70*, 120–147. [CrossRef]
50. Build beautiful countryside, benefit rural masses: Insights from 20 years of the Qian-Wan Project. *Xinhua News Agency*, 25 June 2023. Available online: http://www.news.cn/politics/2023-06/25/c_1129715698.htm (accessed on 27 August 2024).

51. Looney, K.E. China's campaign to build a new socialist countryside: Village modernization, peasant councils, and the Ganzhou model of rural development. *China Q.* **2015**, *224*, 909–932. [CrossRef]
52. Ahlers, A.L.; Schubert, G. "Building a new socialist countryside"—Only a political slogan? *J. Curr. Chin. Aff.* **2009**, *38*, 35–62. [CrossRef]
53. Bray, D. Urban planning goes rural: Conceptualising the "New Village". *China Perspect.* **2013**, *2013*, 53–62. [CrossRef]
54. Zhang, Q.F. Building productivism in rural China: The case of residential restructuring in Chengdu. *Geoforum* **2022**, *128*, 103–114. [CrossRef]
55. Zheng, Y.; Wang, Y.; Chen, P. Continuous exertion and long-lasting efforts ceaselessly writing new chapters in building Beautiful China: Zhejiang province's practical exploration in implementing the Qian-Wan Project in the past 20 years. *Guangming Daily*, 29 June 2023. Available online: https://news.gmw.cn/2023-06/29/content_36660775.htm (accessed on 27 August 2024).
56. He, L.; Xu, H.; Jiang, N.; Jiang, W.; Meng, D.; Zhu, H. Where the dream started: Study the praxis of Xi Jinping thought on the 'three rural issues' in Zhejiang. *Xinhua News Agency*, 3 July 2018. Available online: http://www.xinhuanet.com/politics/2018-07/03/c_1123074596.htm (accessed on 27 August 2024).
57. Fang, W.; Huang, H.; Zheng, M.; Xu, S. Ten sets of data decode the 20 years of Qian-Wan Project in Zhejiang. *Xinhua Daily Telegram*, 13 April 2023. Available online: http://www.news.cn/local/2023-04/13/c_1129517573.htm (accessed on 27 August 2024).
58. Halfacree, K.; Cloke, P.J. *Contrasting Roles for the Post-Productivist Countryside: A Postmodern Perspective on Counterurbanisation*; Routledge: London, UK, 1997.
59. Lowe, P.; Murdoch, J.; Marsden, T.; Munton, R.; Flynn, A. Regulating the new rural spaces: The uneven development of land. *J. Rural Stud.* **1993**, *9*, 205–222. [CrossRef]
60. Ward, N. The agricultural treadmill and the rural environment in the post-productivist era. *Sociol. Rural.* **1993**, *33*, 348–364. [CrossRef]
61. Wilson, G.A. From productivism to post-productivism... and back again? Exploring the (un)changed natural and mental landscapes of European agriculture. *Trans. Inst. Br. Geogr.* **2001**, *26*, 77–102. [CrossRef]
62. Ilbery, B.; Bowler, I. From agricultural productivism to post-productivism. In *The Geography of Rural Change*; Routledge: London, UK, 2014; pp. 57–84.
63. Evans, N.; Morris, C.; Winter, M. Conceptualizing agriculture: A critique of post-productivism as the new orthodoxy. *Prog. Hum. Geogr.* **2002**, *26*, 313–332. [CrossRef]
64. Mather, A.S.; Hill, G.; Nijnik, M. Post-productivism and rural land use: Cul de sac or challenge for theorization? *J. Rural Stud.* **2006**, *22*, 441–455. [CrossRef]
65. Wilson, G.A.; Rigg, J. "Post-productivist" agricultural regimes and the South: Discordant concepts? *Prog. Hum. Geogr.* **2003**, *27*, 681–707.
66. Zhang, Q.F. Searching for sustainability: Industrial agriculture of small farmers in China and its structural strains. *J. Agrar. Change* **2026**, *26*, e70097. [CrossRef]
67. Huang, Y.; Chen, L.; Li, X. Productivism and post-productivism: An analysis of functional mixtures in rural China. *Land* **2022**, *11*, 1490. [CrossRef]
68. Huang, Y.; Hui, E.C.; Zhou, J.; Lang, W.; Chen, T.; Li, X. Rural revitalization in China: Land-use optimization through the practice of place-making. *Land Use Policy* **2020**, *97*, 104788. [CrossRef]
69. Liu, X.; Kong, M.; Tong, D.; Zeng, X.; Lai, Y. Property rights and adjustment for sustainable development during post-productivist transitions in China. *Land Use Policy* **2022**, *122*, 106379. [CrossRef]
70. Qi, D. Ecological agriculture and rural revitalization: Toward a post-productivist countryside in Nanjing, China. *Ecol. Soc.* **2024**, *29*, 3. [CrossRef]
71. Wu, M.; Zhang, Q.F.; Donaldson, J. Post-productivism and rural revitalization in China: Drivers and outcomes. *J. Rural Stud.* **2024**, *110*, 103382. [CrossRef]
72. Xie, X. New farmer identity: The emergence of a post-productivist agricultural regime in China. *Sociol. Rural.* **2021**, *61*, 52–73.
73. Zhang, R.; Li, H.; Yuan, Y. Analyzing space-time evolution of rural transition in a rapidly urbanizing region: A case study of Suzhou, China. *J. Geogr. Sci.* **2022**, *32*, 1343–1356. [CrossRef]
74. Holmes, J. Impulses towards a multifunctional transition in rural Australia: Gaps in the research agenda. *J. Rural Stud.* **2006**, *22*, 142–160. [CrossRef]
75. Wilson, G.A. From 'weak' to 'strong' multifunctionality: Conceptualising farm-level multifunctional transitional pathways. *J. Rural Stud.* **2008**, *24*, 367–383. [CrossRef]
76. Brandth, B.; Haugen, M.S. Farm diversification into tourism—Implications for social identity? *J. Rural Stud.* **2011**, *27*, 35–44. [CrossRef]
77. Almstedt, Å.; Brouder, P.; Karlsson, S.; Lundmark, L. Beyond post-productivism: From rural policy discourse to rural diversity. *Eur. Countrys.* **2014**, *6*, 297–306. [CrossRef]

78. Timmermans, S.; Tavory, I. Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociol. Theory* **2012**, *30*, 167–186. [[CrossRef](#)]
79. Heberer, T.; Trappel, R. Evaluation processes, local cadres' behaviour and local development processes. *J. Contemp. China* **2013**, *22*, 1048–1066. [[CrossRef](#)]
80. Schubert, G.; Ahlers, A.L. County and township cadres as a strategic group: "Building a New Socialist Countryside" in three provinces. *China J.* **2012**, *67*, 67–86. [[CrossRef](#)]
81. Parris, K. Local initiative and national reform: The Wenzhou model of development. *China Q.* **1993**, *134*, 242–263. [[CrossRef](#)]
82. Yan, X. "To get rich is not only glorious": Economic reform and the new entrepreneurial party secretaries. *China Q.* **2012**, *210*, 335–354. [[CrossRef](#)]
83. Munro, N.; Chng, N.R.; Chen, L. Green shoots of revival: Political leadership and the differentiation of space in a "zero pollution village" in rural Zhejiang, China. *Capital. Nat. Social.* **2024**, *35*, 57–74.
84. Chen, L.; Hansen, M.H. Gender and power in China's environmental turn: A case study of three women-led initiatives. *Soc. Sci.* **2022**, *11*, 97.
85. Zhejiang Provincial Government. Opinions on Implementing the "Two Entries and Two Returns" Project. 2019. Available online: https://www.zj.gov.cn/art/2019/10/28/art_1229017139_56699.html (accessed on 27 August 2024).
86. Qu, J. The project system: A new form of state governance. *Soc. Sci. China* **2012**, *33*, 28–47. [[CrossRef](#)]
87. Rock-solid original intentions: On the twentieth anniversary of the Qian-Wan Project. *Farmers' Daily*, 29 May 2023. Available online: <https://news.cctv.com/2023/05/29/ARTIwUel8IZKzXAJaukTLYy1230529.shtml> (accessed on 22 August 2024).
88. Rodenbiker, J. Making ecology developmental: China's environmental resettlement and the developmental displacement of ecological knowledge. *Ann. Am. Assoc. Geogr.* **2021**, *111*, 1931–1948.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.