

Post-productivism and rural revitalization in China: Drivers and outcomes

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ABSTRACT

We propose that post-productivism offers a useful analytical framework for understanding the multi-scalar and diverse changes that are taking place in China's rural revitalization. As a theoretical framework that emerged from the study of rural changes in the Global North, the applicability of post-productivism in the Global South has been contested. This paper offers the first comprehensive analysis of the emergence of post-productivism in rural China and uses post-productivism as a framework to conceptualize a wide range of changes in China's rural revitalization. We conceptually clarify the driving forces that give rise to post-productivism and the outcomes these drivers produce. The two key drivers of post-productivism in China have been: 1) discontents with productivist agriculture from the state, urban consumers, and rural communities, which manifested in a shift in government's policy priority from agricultural production to ecological restoration, urban consumers' demands for "quality food", and rural producers' demands for a "quality life", and 2) urbanites' desire to experience the rural idyll, which translated into demands on rural space for urban consumption. We use seven representative cases to illustrate the various types of post-productivism that the two drivers have generated in rural China. These cases underscore that the transition to post-productivism is a key characteristic of China's rural revitalization.

1. Introduction

Since the 1990s, post-productivism emerged as an analytical framework purported to conceptualize the rural restructuring that began in Global Northern countries characterized by a transition from an agriculture-centered, productivist regime to a "multifunctional countryside," one decoupled from the dependence on agriculture and catering to consumption needs of urban residents (e.g., Argent, 2011; Halfacree, 2006; Lowe et al., 1993; Wilson, 2001; for objections to this concept, see Evans et al., 2002). As this postulated transition was an experience largely restricted to the Global North, post-productivism was thought to be "discordant" with the conditions of rural development in the Global South. Most fundamentally, countries lacking productivist agriculture could hardly shift to post-productivist systems (Wilson and Rigg, 2003). For this reason, scant research has focused on post-productivism in rural areas in the Global South (see Omoto and Scott, 2016; Xie, 2021). To our knowledge, no study has systematically examined the diverse social forces that drive the emergence of post-productivism and the various rural changes it creates in a developing context.

More recently, as scholars increasingly view rural decline as a global phenomenon, they pay closer attention to efforts towards "rural renewal, revitalization and restructuring" in a range of countries attempting to arrest this decline (Liu et al., 2020, p. 1924). In the process, scholars have identified similarities between developed and developing countries (Li et al., 2016; Liu and Li, 2017). The transition to post-productivism, which diversifies the rural economy and increases the flow of resources and people between rural and urban areas, has, in some cases, revitalized rural areas in the Global North (Beacham et al., 2023; Li et al., 2019). Could the post-productivism framework be fruitful in identifying and understanding the dynamics of rural revitalization in a developing context such as China?

This question is especially relevant given that conditions for a transition to post-productivism in rural China are ripe. Unlike elsewhere in the Global South, decades of efforts to modernize agriculture in China have led to the rapid rise of productivist agriculture (e.g., Zhang, 2022). On the other hand, more recently, a series of changes in both rural policies and political discourses, which culminated in the launch of the "Rural Revitalization" strategy by the central government in 2017, signaled a change of direction in the country's rural development

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trajectory (Han, 2020). Some recent studies have described rural changes at a macro-level that can be perfectly understood as a transition to post-productivism, despite the lack of using the terminology (Liu et al., 2020; Zhang et al., 2022). Others have directly used the post-productivism framework to illuminate specific cases at a micro-level (Lu and Qian, 2023; Wu and Gallent, 2021; Xie, 2021).

Despite efforts to explain these changes, the burgeoning literature on rural revitalization in China still lacks a holistic conceptual framework that can help understand the complex dynamics of rural revitalization and heterogeneous experiences found in individual cases. In this paper, we propose that post-productivism offers such a theoretical framework. We do so by positing a comprehensive conceptual analysis of the “drivers” of the post-productivist transition in the Chinese context, which we detail with representative cases that illustrate a diverse set of outcomes emerging from this transition. Our analysis shows that because most of the new developments under the rural revitalization strategy are indeed post-productivist in nature, the transition to post-productivism is a central dynamic driving rural revitalization in China. In applying post-productivism to understanding rural revitalization, this paper makes two contributions: first, it conceptually clarifies the drivers and outcomes of the post-productivist transition and broadens the use of the concept to a Global South context; second, it provides a holistic conceptual framework for understanding the diverse experiences of rural revitalization in China. Our hope is that such a framework can be used to understand the dynamics of post-productivism in other contexts.

2. The debate on post-productivism: drivers and indicators

Post-productivism describes a series of rural changes, primarily in Europe, during the 1990s that both critiqued and responded to the excesses of productivism. Productivism is an approach to rural development that uses rural space primarily as a base for agricultural production and other extractive industries, one that prioritizes the maximization of food production through intensive farming techniques and industrial inputs (e.g., Lowe et al., 1993; Ward, 1993).¹ As the environmental and socio-economic issues that resulted from productivist agriculture became more exposed in the mid-1980s, the rationale and legitimacy of the productivist regime received increasing criticism (Potter and Tilzey, 2005). Subsequently, new policies and alternative practices gradually de-coupled rural areas in these countries from a dependence on productivist agriculture, spurring counter-urbanization and increased flows of urban resources and people to the countryside and transforming rural space in ways that catered to urban consumers' leisure and amenity needs (Mather et al., 2006; Wilson, 2001).

The post-productivism literature has been criticized for the “fuzziness” in the term's definition, as researchers have instead focused on identifying its indicators and characteristics (Evans et al., 2002; Mather et al., 2006). As Wilson and Rigg (2003, p. 693) argue, “a central weakness in the productivist/post-productivist theorization of agricultural change” that confuses “appearances with driving forces”. In attempting to rectify this problem, they offer six indicators that emerge from their detailed study of post-productivism: 1) a shift in policy emphasis from agricultural production towards environmental protection; 2) the rise of organic farming with a focus on high-quality, pollution-free and traditionally grown produce; 3) counter-urbanization driven by a reverse migration to rural areas; 4) the inclusion of marginal actors in the ‘core’ of the decision-making process, particularly in the affairs of environmental preservation; 5) the move away from

agricultural production towards the consumption of the countryside; and 6) on-farm diversification. Ironically, this attempt to rationalize the conceptualization of post-productivism replicates the problems they raise, as their six ‘indicators’ of post-productivism are an amalgam of both social forces driving the transition to post-productivism (e.g., policy shifts and counter-urbanization) as well as outcomes that these drivers produce (e.g., organic farming and on-farm diversification).² The former are broader social-cultural or political-economic changes that are often external to rural residents, whereas the latter are practices that both local and outside actors adopt in response to those changes. While critics have pointed out the need for a better understanding of “deeper processes” that drive the post-productivist transition (Evans et al., 2002; Mather et al., 2006), few efforts were made to address that deficiency (as we note below, Holmes (2002) is a notable exception).

The present article aims to rectify the conceptual nebulousness by explicitly conceptualizing the drivers of post-productivism and summarizing the outcomes that they generate in the Chinese context. We argue that two forces—1) discontent with the negative impacts of productivist agriculture from the state, urban consumers, and rural communities and 2) urbanites' desire for a ‘rural idyll’—drive the transition to post-productivism.

First, the central state has become increasingly alarmed by the adverse effects of productivist agriculture on the environment. While still trying to maintain a delicate balance between the conflicting policy goals of agricultural production and environmental conservation, the state's policy priority in recent years has shifted toward the latter (Hansen et al., 2018). Productivism required a complex network of policies that privileged maximizing food production and its attendant requirements (Lowe et al., 1993). The ensuing environmental degradation includes the reduction in agricultural landscape diversity and biodiversity, depletion of soil fertility, pollution caused by the overuse of agrochemicals, and intensive energy use and increased emissions (Horrigan et al., 2002; Ward, 1993). The concurrent intensification of these problems and the rise of ecological rationality spurred many governments in the Global North to shift policy priorities away from maximizing agricultural output to environmental protection and ecological restoration, restructuring the relationship between the environment and agriculture (Evans et al., 2002). Specifically, the policies aimed to lower stocking and farming densities (Baylis et al., 2008), reforest and rewild pasture and arable farmland (Jepson, 2016), and engage marginal actors such as environmental NGOs and indigenous groups in environmental preservation (Holmes, 2002).

Apart from the state, discontent with productivist agriculture from both urban consumers and rural producers and the resultant search for alternatives is crucial to the rise of post-productivism. Urban consumers have grown increasingly concerned about the impact of productivist agriculture on food safety, public health, and community welfare, leading to growing demands for “quality foods” (Evans et al., 2002; Goodman, 2003). “Quality” in a post-productivist context was socially constructed to contrast with productivist food systems in three dimensions—scale of production, method and location (Ilbery and Kneafsey, 1998). Productivist agriculture pursues mass production (Potter and Tilzey, 2005); “quality” foods are typically cultivated on a small scale (Goodman, 2003). Productivist agriculture applies industrial inputs to maximize yields; the production of “quality” food relies on the use of traditional farming methods and organic and locally sourced inputs (Ward, 1993). Whereas productivist agriculture is globally distributed (Murdoch et al., 2000), quality food production associates locally grown products with freshness, safety and flavor, as well as shorter supply chains and low energy use (Renting et al., 2003). The rising demand for “quality foods” from urban consumers translates into a diverse range of

¹ The early association of productivism with large-scale corporate farming (e.g., Bowler 1985) has proven contentious—our intention is not to focus on the impact of productivism on smallholders but rather to apply the framework to China's case in a bid to better understand post-productivism and rural revitalization.

² A similar practice of mixing outcomes and drivers is also found in the “seven dimensions” of post-productivist transition that Wilson (2001) identified.

alternative agriculture practices that can be summarized as “alternative food networks” (AFNs). Post-productivist agriculture includes a range of alternatives to the conventional productivist agriculture, such as organic, sustainable, regenerative, and low-input agriculture (Beus and Dunlap, 1990). These alternatives seek to not only change the production system—replacing industrial inputs with organic and locally sourced inputs, shifting from monoculture to multi-cropping—but also restructure the relationship between consumers and producers through building shorter, localized supply chains and alternative distributive networks (Wilson, 2001; Evans et al., 2002; Martindale, 2021; Woods, 2005; Xie, 2021). Thus, post-productivist agriculture is characterized by not only the product, but also the method and purpose of production. For instance, although organic farming is often post-productivist, it can be productivist if its primary goal is to maximize output and profit (De Wit and Verhoog, 2007).

While the shift in urban attitudes and demands have been well-documented, the literature has largely neglected the importance of rural reactions to productivism that is equally, if not more, important in driving the rise of post-productivism. While productivist agriculture focused on industrializing agriculture in ways that boosted productivity, it paradoxically resulted in widespread rural decline. By replacing labor with technology and controlling production through urban-based “food empires” that both supplied inputs and distributed outputs (van der Ploeg, 2010), productivism caused widespread depopulation, economic decline and social decay in many rural communities (Li et al., 2018, 2022; Liu and Li, 2017).³ Farmers who stubbornly remained in agriculture by expanding their scale were increasingly squeezed by agro-industrial capital in commodity chains, exposed to greater market fluctuations, and experienced increasing economic precarity (Renting et al., 2003; van der Ploeg, 2010). Directly exposed to all the agro-chemicals used in production, such farmers also bore the brunt of the hazardous environmental impact of productivist agriculture (Dhananjayan and Ravichandran, 2018).

The economic precarity brought by productivist agriculture, paired with the increasingly obvious ecological and social inequity, spurred growing discontent among agricultural producers, generating growing support behind post-productivist countercurrents (Beingessner and Fletcher, 2020; Zhang, 2024). In practice, this leads to not only alternative farming practices or participation in AFNs, but also efforts to arrest the social decay in rural communities and re-embed rural-urban linkages in social bonds and mutual respect. This set of rural-initiated dynamics that drives the emergence of post-productivism, which we will refer to as rural residents’ demand for a “quality life”, has so far been neglected in debates on post-productivism. Critics have pointed out the urban-centric bias of the post-productivism literature, but their efforts to include rural driving forces into the analysis were limited to rural migrants returning home (Gkartzios, 2013), or they simply abandoned the post-productivism approach for its inability to incorporate these diverse dynamics (Lu and Qian, 2023). Both missed the opportunity to correct the urban-centric bias of post-productivism and broaden the approach by including these rural-based dynamics as a driver of post-productivism.

The second driving force can be broadly described as the desire for the “rural idyll”, which includes alternative lifestyles, activities, aesthetics, and amenities associated with the idyl rural imagery and manifests as demands for using rural space to meet these urban consumption needs (Shucksmith, 2018). Since the 1970s, changes such as the increasing wealth of urbanites, problems of urbanization,

depopulation in some rural areas, and changing aspirations for rural areas have combined to reshape the use of rural space (Woods, 2005). This is reflected in a shift in the use of rural space from agricultural production to activities that cater to urban consumption needs in amenities, aesthetic pleasure, and leisure (Ilbery and Kneafsey, 1998).

These broadly defined anti-urbanism sentiments, manifested in urban residents’ desire for various forms of the “rural idyll”, drove urban residents to the countryside and created a diversity of post-productivist practices. These include both long-term settlement in the countryside in various forms such as return migration, gentrification, and second home purchases (Shucksmith, 2018), which we will refer to as “counter-urbanization”, as well as short visits to the countryside for leisure, amenity, or aesthetic consumption. We will broadly refer to these short-term visits as “rural tourism” and divide them into three groups: cultural tourism, leisure tourism, and nature tourism.

Based on a study of post-productivist transition in Australian rangelands, Holmes (2002) posits three driving forces of post-productivism—agricultural overcapacity, which then drove policy change, changing societal values, and the emergence of amenity-oriented uses. Our conceptualization builds on Holmes’s argument, but tailors it to the Chinese context. We posit that both the changes in state policies and in societal values stem from the discontents among the state, urban consumers and rural communities with productivist agriculture. Agricultural overcapacity, on the other hand, is not a salient issue in China.

3. Rural revitalization and post-productivism in China

To what extent can this framework be used to describe the dynamics seen in a developing country in the process of rural revitalization such as China? As noted above, one fundamental problem in applying the post-productivism framework to study the developing world has been the discordance between the framework and the absence in most Global South countries of a well-established productivist agricultural regime, from which a transition to post-productivism could commence (Wilson and Rigg, 2003). When certain practices that resemble post-productivism were found—such as high environmental sustainability, low intensity and productivity, and weak integration into markets—these were more often characteristics of a ‘pre-productivist’ agricultural regime (*ibid.*, p. 687). Further, even in cases where productivist agriculture is well established, it is still likely that the dynamics underlying post-productivism would differ between developing and developed contexts.

China, we argue, is an exception in this regard. Research on the agrarian change in China has extensively documented and analyzed the rise of a new agricultural regime that conforms with the characteristics of productivism—“a commitment to an intensive, industrially driven and expansionist agriculture with state support based primarily on output and increased productivity” (Lowe et al., 1993, p. 221). Although the term “productivism” has not been used in this discussion, if we go through the list of dimensions of productivism that Wilson (2001, p. 80) compiled, except for a few ideological dimensions that are incompatible with historical and political background, China fits all the other descriptions. Large-scale state subsidies and financial support for agriculture began in the 2000s, ranging from abolishing all agricultural taxes nationwide in 2006 to reduce the burden on farmers, to supporting agricultural intensification and scaling up by providing subsidies for farm machinery purchase, land consolidation and technological upgrading (Zhang and Zeng, 2021). To support intensive and industrialized agriculture, scattered rural farmland has been consolidated into large contiguous tracts and transferred to professional agribusinesses (Ye, 2015). Smallholders who remain in agriculture adapt by adopting productivist practices, either on their own or in a relationship with corporatized agribusinesses (e.g., Yan and Chen, 2015; Zhang and Donaldson, 2008). In doing so, such smallholders remain trapped on what Ward (1993) has described as an agricultural treadmill, facing the

³ Productivism in the Global North is commonly associated with the replacement or corporatization of smallholders. While such replacement is not inherent to the transition to the productivism, the effect remains the same—those smallholders who survive the transition often do so by adopting productivist practices, while others are compelled to seek alternatives, leading to depopulation and other problems.

constant pressure of increasing scale, intensifying technology use, and searching for additional income sources.

The productivist agricultural regime in China has been highly successful in achieving its intended goals of raising agricultural productivity and maximizing output: after surpassing 500 million metric tons for the first time in 1996, annual grain production reached 600 million metric tons in 2012, and then 650 million metric tons in 2015—the largest in the world—and has stayed above that level since then (Xinhua News, 2022). Similar to the experiences in the Global North, these productivist achievements, however, came with a price—negative impacts on rural communities, urban consumers and the environment—and created discontent which then became a key driving force behind the search for alternatives, including those that can be characterized as post-productivist. Productivist agriculture has contributed to problems such as the declining quality and safety of foods (Si et al., 2015), increasing incidence and severity of crop diseases (Wang et al., 2022), environmental degradation (Chen et al., 2017), the exodus of smallholders from agriculture driven by unfavorable government policies and intensified competition from agribusinesses (Zhang and Zeng, 2021), as well as rural depopulation and social decay (Liu and Li, 2017). These problems provided a strong impetus for both the central government to find remedies and shift its policy priority and for urban consumers and rural producers alike to search for alternatives, creating the top-down and bottom-up drivers for post-productivism we discussed above.

At the central level, since the late 1990s, China's leaders have increasingly recognized the devastation caused by maximizing agricultural output, leading to attempts to contain or mitigate the impact by restricting and redirecting some productive activities and land uses (Siciliano, 2012). Remedial measures include forest and rangeland conservation programs, the management of agricultural land, and the consolidation of protected areas (Chen et al., 2017). A myriad of new policies, such as the Natural Forest Protection Program and the Grain for Green campaign, were introduced to restore or enhance environmental functions (Yeh, 2009). Centrally, this shift in policy priority to environment conservation and ecological restoration was both prompted and guided by President Xi Jinping's theory of "ecological civilization," which is often expressed as "lucid waters and lush mountains are invaluable assets" (Hansen et al., 2018).

In 2017, the central leadership launched the new national strategy of Rural Revitalization, aiming at achieving five broad goals before 2050: economic vitality, ecological liveability, civilized rural communities, effective governance, and prosperous livelihoods (Han, 2020; Liu et al., 2020). At least the first three objectives—diversified rural economies for sustained vitality, improved ecological conditions, and revived rural communities—are also explicit goals of the post-productivist agenda. While scholars debate the degree to which these central-level policy changes are effective in revitalizing the countryside, these priorities provide central ideological support for local efforts, and thus can serve as a crucial impetus for the transition to post-productivism in rural China.

In addition to top-down policy shifts, bottom-up initiatives also emerged widely in both urban and rural China that were driving the emergence of post-productivism. Just as in most Western countries, Chinese consumers' demands for quality foods have been rising. However, while Western consumers have emphasized issues such as animal welfare and sustainable and local production, Chinese consumers have primarily prioritized food safety (Si et al., 2015). Recurring incidents of food contamination, coupled with the emergence of a middle class with greater purchasing power, have foregrounded food safety in public consciousness, exposed the limitations of productivist agriculture and the foods it produced, and fueled the demand for alternative agriculture (Martindale, 2021; Xie, 2021). Attempts at alternative agriculture include community supported agriculture (CSA), organic farms, urban farms and recreational garden plot rentals (Si et al., 2015). In rural areas, villagers have also taken initiatives to revitalize local economy

and community through practices such as agricultural diversification (Li et al., 2016) and community reconstruction (Yan et al., 2021).

Furthermore, a rapid increase in urban demand for space for leisure, culture and lifestyle activities is also driving the shift in rural space use from production to consumption. In most cases, this shift proceeds from productivism to post-productivism.⁴ Many rural communities construct or reconstruct their habitats into places for consumption, such as historical or cultural villages for tourism (Su, 2011), or integrate agriculture with tourism by running rural bed and breakfast and catering (Park, 2014) or on-farm diversification businesses (Lor et al., 2019). Since the late 2000s, these local efforts have been aided by top-down initiatives such as Livable Village Planning, Beautiful Countryside Planning and Build Socialist New Countryside (Long et al., 2010).

In China's rural revitalization process, both drivers of post-productivism mentioned above are present; the objectives of rural revitalization are also closely aligned with the goals of post-productivism. The transition to post-productivism, therefore, is a central dynamic of rural revitalization in contemporary China. This close relationship between rural revitalization and post-productivism has been recognized in previous studies. Liu et al. (2020), for example, described rural revitalization in China as a transition from a "single agricultural system" first to a "multifunctional rural system" (2005–2020) and finally to an "integrated urban-rural system" (2020 onwards)—a multifunctional countryside and increased integration between rural and urban areas are defining characteristics of post-productivism. Similarly, in the four "revitalization pathways" that Zhang et al. (2022, p. 290) identified in the Chinese context, three of them are pathways to post-productivism: first, "urban-suburban integration", which leads to increased mobility between rural and urban areas and more land use for "amenities for meeting the urban lifestyle"; second, "characteristic protection" of traditional and ethnic culture for rural tourism; and finally, "relocation and mergers" to facilitate ecological restoration. Making this connection explicit and framing rural revitalization as a transition to post-productivism, we argue, provides a useful holistic conceptual framework for studying rural revitalization.

4. Methodology

This study primarily relies on qualitative data of representative cases that the authors collected first-hand through fieldwork. Case study is grounded on the assumption that the phenomena being studied are inherently connected to the environment in which they appear. Case study research helps produce detailed, comprehensive, and holistic examination of complex post-productivism within real-life context (Harrison et al., 2017). The data collection is part of a long-term research project on rural and agricultural changes in China that we started in 2007. While our initial research topic was changes in agricultural production, especially the rise of productivist agriculture, we soon noticed that alternative practices were also present. As we entered the second decade of our research in 2017, which coincided with the launch of the Rural Revitalization strategy at the national level, we began to see a greater number and diversity of cases where alternatives to productivism were pursued by a range of local and outside actors. By 2023, we have built up a database of nearly 200 cases, spread across 24 provinces and autonomous regions, around a quarter of which had some form of alternative practices. By case, we refer to a socio-economic organization, such as a village community or a civic or business organization, which includes individuals collectively participating in post-productivist activities. Thus, our cases include both natural villages as well as

⁴ In marginal agricultural areas (e.g., unproductive land, remote, ethnic minority areas), however, where pre-productivist forms of agriculture (e.g., subsistence farming or commercialized farming using traditional techniques) persist, the transition is from pre-productivism to post-productivism (Lor et al., 2019).

organizational units such as cooperatives or organic farms—organizations that might selectively engage a subset of village residents or include members across multiple villages. We present seven selected cases (indicated in Fig. 2) that we consider “typical cases” that best illustrate the causal relationship specific to a particular group of cases, that is, how a particular driver of post-productivism created the observed outcome.

Given that there was no existing knowledge about our target population (villages and organizations in rural China that had adopted some form of post-productivist practices), there was no possibility of random sampling. Instead, we adopted a purposive sampling method, selecting cases that had been either reported in the media or mentioned by scholars as successful cases in their respective alternative practices, reasoning that the dynamics and practices of post-productivism would manifest more fully in these mature cases. We also supplemented these with a convenience sample that consisted of cases we encountered either in the vicinity of these successful cases or while we were studying other issues in rural China. We collected data through open-ended interviews and non-participant observations and supplemented the primary data with secondary sources such as media report, scholarly research and government statistics, when available. Except Haique Village, the other six cases relied on the primary data. A total of 114 interviews were conducted for these cases: two interviews in Green Finger Farm, 24 in Riverband, 28 in Xingfu, 31 interviews in Taoping, four in Fang’s Yard, and 25 in Nangou. Our data collection aimed to understand the post-productivist actions taken by local actors, the motivations behind these actions, the changes they experienced, and the background context. These data allow us to present a narrative analysis of the experiences of each case. Although our sample is not representative, we observed that the diversity in alternative practices among our cases seemed to reach a “saturation point”—no new practices were observed in three recent fieldtrips in 2023.

We followed the grounded-theory approach in collecting and analyzing our data. The approach emphasized the avoidance of theoretical predictions or preconceived theories before data collection (Strauss and Corbin, 1998). Grounded theory approach was iterative, embodied in a continuous cycle of data collection, coding and analysis. Our first step in data analysis was “open coding”, in which we identified, labeled, and characterized all the cases of post-productivist practices in our database. The codes we used include “Grain for Green”, “Ecological Civilization”, “New Socialist Countryside”, protected area, ecological resettlement, organic farming, CSA, food safety, local food, farmers’ market, rural reconstruction, second homes, “nong jia le”, eco-tourism, agritourism, traditional villages, and ethnic villages. In the second step, “axial coding”, which explores the relationship between codes and organizes them into categories, we grouped our cases into the seven types of post-productivist outcomes summarized in Fig. 1. In the final step, “selective coding”, we focused on the causal relationships in the transition to post-productivism, and inductively conceptualized the two primary drivers of the transition and the five sub-types. This approach enabled us to develop insights firmly rooted in the collected data (Suddaby, 2006) and formulate a framework that identify the drivers and outcomes of the post-productivist transition in rural China.

5. Transition to post-productivism in China

5.1. Discontent with productivism

5.1.1. Environmental impacts of productivist agriculture and shift in state policy priority

From 1998 onwards, the central government’s rural policy priority has gradually shift from maximizing agricultural output to environmental protection, a change that is reflected in the increasing emphasis on the environment in the top leader’s signature “theory”—from the “construction of eco-agriculture” by Jiang Zemin, to “ecological civilization” by Hu Jintao and to the “Two Mountain Theory” by Xi Jinping).

The relationship between agriculture and the environment was restructured as a result (Yeh 2009). The following analysis is centered on a brief review of the Sloping Land Conversion Program, dubbed the “Grain for Green” campaign, as well as its implementation and impact in one specific location—Haique Village.⁵

The scaling back of productivism for ecological restoration began in the late 1990s in China, and Grain for Green is one of the most widely implemented campaigns. The Grain for Green campaign was launched on a trial basis in 1999 in three provinces, namely Sichuan, Shaanxi and Gansu, before it was rolled out nationwide on January 10, 2002. It covered more than 25 provincial units, involving around 60 million farmers (Liu et al., 2008).

Haique Village, located in Bijie City, Guizhou Province, covers an area of 11.87 square kilometres, including 1780 mu of arable land,⁶ and is home to 229 households, or 960 villagers. In the 1980s, the United Nations deemed Haique Village “unfit for human habitation”, as most of the forest had been cleared for agriculture with only less than 5 percent remaining. In 1988, the per capita income in Haique was a mere RMB33 and per capita food supply was 107 kg (The Compilation Committee of Bijie Experimental Zone, 2011).

In 2002, Haique Village officials carried out the Grain for Green project despite strong opposition from villagers who feared the loss of arable land. Village officials offered a compromise: the less productive land was afforested, while the fertile land was left for cultivation. This solution reduced tensions and facilitated the execution of the campaign. Over the past decades, the village has made significant progress, with over 30 barren hills now covered in forests. According to China International Poverty Alleviation Centre (2021), Haique’s total forested area reached 13,400 mu, equivalent to 15.4 mu per capita, and a remarkable forest coverage of 70.4 percent in 2021.

The Grain for Green campaign changed local livelihoods. Between 2002 and 2019, farmers who ceased agricultural production on their farmland and grew trees instead received an annual subsidy of 150 kg of cereal per mu from the Hezhang County government. Although the campaign resulted in the reduction of farmland, it has paved the way for the emergence of forestry livelihoods. Some locals are employed as rangers, while others shifted to agroforestry activities, such as cultivating mushrooms, konjac and asparagus, as the new income source (Li, 2020).

The Grain for Green campaign ended on a national scale in 2020, but economic benefits from the reforestation continued due to the implementation of a carbon sink forestry program, a national initiative to combat climate change. The program grants carbon tickets to areas with newly forested land. These tickets, which indicate the amount of carbon sequestered and oxygen released from forests, can be traded on the national carbon trading market, bought by companies striving to meet their energy-saving and emission-reduction targets (Wang et al., 2022).

In April 2022, Haique Village received Guizhou province’s first carbon ticket for collective forestry for the reduction in CO₂ emissions, a total of 34,627.7 metric tons due to the planting of 7346.5 mu of Huashan pine between 2016 and 2020 (Li, 2022). According to the average trading price of RMB30 per metric ton of reduced CO₂ emissions in 2020–2021, the ticket is valued at approximately RMB1.04 million, or RMB4,500 per household.

The Grain for Green campaign saw agricultural production as a threat to various environmental goals (e.g., soil and water conservation, biodiversity, emission reduction and carbon sequestration) and pushed for the replacement of agricultural production with afforestation. Similar policy changes that scaled back productivist agriculture for environmental conservation can be widely found in rural China. For

⁵ For Haique Village, our analysis relies on secondary sources. We have similar cases in our sample, such as a couple of ethnic Lisu villages in the Lancang River valley in Yunnan, but the primary data are not as rich.

⁶ Fifteen mu make up 1 ha.

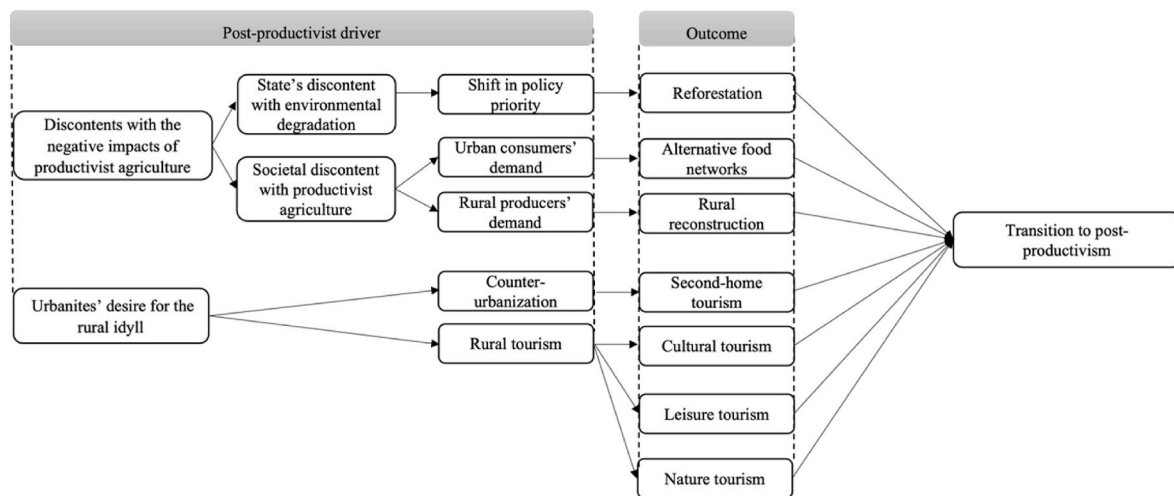


Fig. 1. summarizes the two primary drivers of post-productivism discussed above, further divides them into five sub-types, and lists the variety of outcomes they create in the Chinese context. We do not suggest a one-to-one causal relationship between drivers and outcomes. Instead, any particular outcome—a form of post-productivist practice—can be the joint result of multiple driving forces at work, as we will elaborate later.

Fig. 1. Post-productivist drivers and outcomes (Source: Authors' original).

instance, *tuimu huancao* (pasture to grassland) began as a variant of Grain for Green, but it has since developed into an independent program that retires livestock, restores grasslands and regulates graze intensity in western China. Another example is the Ecological Protection and Restoration project, which aims to maintain national ecological security through comprehensive land remediation, contaminated soil restoration, and biodiversity protection. As indicated in the National Land Planning Outline (2016–2030), this project is carried out in Tai Mountain, Qilian Mountains, Loess Plateau, Beijing-Tianjin-Hebei Water Containment Area, Sichuan-Tiannan Ecological Barrier, and Northeast Forest Belt (National Development and Reform Commission, 2017).

The environmental degradation that resulted from productivist agriculture was a key factor that motivated the central state's shifting of policy priority from agricultural production to ecological protection. As the Haique case shows, in shifting to the environmentally-oriented new use of rural space, compromises and negotiations with local communities also shaped the outcome of this transition (Jepson, 2016). This pathway to post-productivism is typically found in areas that are marginal in the productivist agricultural regime, where the incompatibility between agricultural production and environmental goals is the most pronounced and where the scaling back of agricultural production is the most cost-effective.

5.1.2. Urban consumers' discontent with productivist agriculture: quality foods and alternative food networks

That urban consumer demand has sparked alternative forms of agriculture in China has been widely studied (e.g., Si et al., 2015; Zhong et al., 2022), including some that explicitly use a post-productivist framework to conceptualize this development (Xie, 2021). The 'alterity' of these new forms of agriculture, compared to the dominant productivist regime, lies in three aspects: production goals (the priority on quality over quantity), production methods (the use of traditional, organic and ecological techniques) and participating actors (mostly new farmers coming from non-farming backgrounds). In this section, we use Green Finger Farm to illustrate how urban consumers' discontent with productivist agriculture and the foods it produced gave rise to alternative agricultural practices. Green Finger Farm in Guangdong Province is initiated and operated by urban residents and primarily driven by their demands for quality foods, a pattern representative of most AFNs in China (Si et al., 2015).

Green Finger Farm, located in the suburbs of Zhuhai city, Guangdong Province, was a community-supported agriculture (CSA) project started

by Mr. Zou, a typical "New Farmer" in the CSA sector—an urbanite who migrated to peri-urban or rural regions to engage in agriculture (Zhong et al., 2022). An agricultural economics major from a leading university, Zou took an internship at Beijing's Little Donkey Farm, the most influential CSA farm in China. This experience taught him the principals of the CSA model and convinced him that CSA presented a new model of rural-urban integration.

In 2013, Mr. Zou and his team leased 20 mu of farmland in a township in Zhuhai to start an organic farm. A year later, however, the farmland lease had to be terminated, as local villagers wanted to increase the rental price to a level that Mr. Zou could not afford. Mr. Zou managed to secure the support of the city government, which brokered the lease of 300 mu of farmland on 20-year tenure for Green Finger. As the new site of the farm was flood prone, Mr. Zou and his team was compelled to invest in the construction of a levee and an elaborate drainage system.

Green Finger operates as a membership-based CSA organization. The farm grows a wide range of vegetables using organic methods. Only a few varieties (choy sum, tomato, and cucumber) have obtained official organic certification, a costly process in China. For the rest, Mr. Zou says that, since consumers trust their reputation, they are still labeled and priced as organic. To increase variety, Green Finger also sources organic vegetables from other producers with trusted quality control processes.

Urban consumers can join for an annual membership fee—packages ranging from RMB5,500 to RMB13,300 per year in exchange for regular deliveries of organic vegetables. Green Finger followed the CSA principle of collaboration and risk sharing. Between 2017 and 2019, when the farm was hit by several natural disasters, the management team asked members to pay next year's membership dues in advance to provide funding for re-building the farm. These members were compensated with additional produce beyond their normal quota. Most urban members, according to Mr. Zou, join the CSA just to secure the supply of organic foods and do not really embrace the social and ecological visions of CSA, an observation that is widely echoed in other studies of AFNs in China (Martindale, 2021; Si et al., 2015).

Green Finger Farm has achieved considerable success. As of July 2023, the farm boasted approximately 2200 members. To diversify its business, promote the farm, and augment farm income, Mr. Zou and his team have expanded into agritourism. An organic restaurant and bar was built to cater to the needs of agritourists (see Figs. 3 and 4). As of July 2023, these facilities have accommodated over 400 tourists.

Green Finger Farm has been granted the title of Zhuhai's Dragonhead

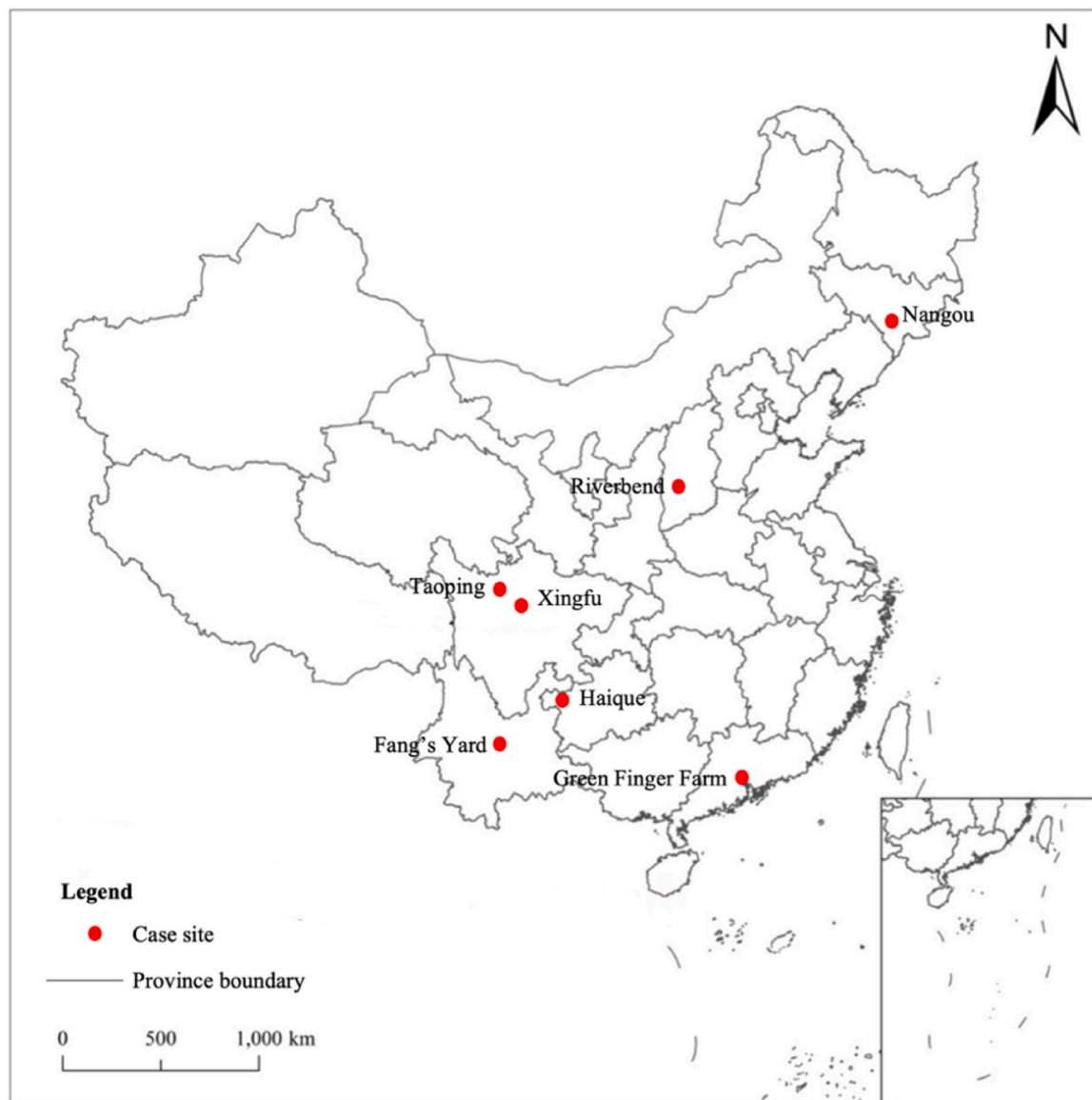


Fig. 2. The locations of case sites (Source: Authors' original).

Agricultural Enterprise. The municipal government urged the farm to help increase local employment and upgrade local agriculture, facilitating the achievement of its rural revitalization goals. Green Finger now has 160 employees, only half of them were local villagers; the rest, especially the managerial staff, were all “new farmers.” According to one employee we interviewed:

We have been encouraged by Zhuhai government officials to offer new employment opportunities for local villagers. Our team now consists of over 80 local farm workers. The local workforce is predominantly over the age of 55 and have difficulties in finding jobs in cities. Our efforts are directed towards assisting these villagers in local employment. (Interview, 10 July 2023)

Alternative agricultural initiatives driven by urban consumers like the Green Finger have become a common practice on the outskirts of cities; their positive impacts on the local rural communities, however, are constrained. Green Finger has generated some employment opportunities for villagers, but the work undertaken by villagers was no different from the traditional farm work and did not provide considerably higher incomes. All the managerial roles are occupied by non-local “new farmers”. The limited participation of rural farmers in organic

farming, coupled with their continued reliance on conventional agriculture, underscore the pervasive obstacles encountered in the advancement of alternative agriculture (Si et al., 2015; Zhong et al., 2022).

5.1.3. Rural communities' discontent with productivist agriculture: quality life and rural reconstruction

The discontent in rural communities with productivism was rooted in the economic precarity and social decay brought about by productivist agriculture. A rural-based movement of reconstructing agricultural production and rural communities, broadly known as the Rural Reconstruction Movement (RRM)—has received much less attention as a driving force behind the emergence of alternative agriculture and the transition to post-productivism. While recognizing its potential for spurring the growth of alternative agriculture, the limited studies on the RRM mostly focus on the political and cultural agendas of the movement and offer little empirical evidence on the practices of alternative agriculture (Yan et al., 2021). The only study that explicitly examined the RRM as a driving force for the convergence and scaling up of fragmented AFNs (Si and Scott, 2016), however, used a case (the Little Donkey Farm



Fig. 3. Green Finger Farm (Source: Authors' original). (For interpretation of the references to colour in this figure legend, the reader is referred to the Web version of this article.)

in Beijing) that was urban-initiated and involved few rural farmers. The Riverbend Cooperative in Shanxi Province, which was initiated by rural residents and supported by RRM activists, presents a different pathway to post-productivist agriculture.

The Riverbend Cooperative is a comprehensive cooperative that has a membership base of 3800 farming households across 43 natural villages and 8000 urban consumer households in two nearby cities. Riverbend Cooperative, officially formed in 2008 and registered as a joint cooperative of 22 specialized cooperatives, was the product of decade-long social mobilization that started in Riverbend village, led by a former relief teacher at the local primary school and a core group of local women. In the early 2000s, Riverbend suffered the same kind of socio-economic decline common across rural China: most young people had migrated to cities, elderly people left behind struggled to care for themselves, many houses had been left abandoned, village governance was in disarray, and alleyways in the village were blocked by garbage piles. Many local farmers engaged in specialized production of asparagus, but a market downturn in 2000 left many indebted. This group of women activists' initial goal was to enliven the social life in the village through organizing public dancing for village women. To their surprise, this activity spread rapidly—to ten, and then 30, and eventually 43 villages across the county, regularly joined by over 1000 women across multiple locations.

Emboldened by this initial success, this group of women activists organized more social activities, including study sessions, sports events, and debate contests. In 2004, a women's association was formed, which then mobilized the entire Riverbend village to launch a public hygiene campaign that finally cleared up the garbage that had piled up in the village for years.



Fig. 4. The restaurant in Green Finger Farm (Source: Authors' original). (For interpretation of the references to colour in this figure legend, the reader is referred to the Web version of this article.)

In 2008, as the Riverbend Cooperative was formed, the leadership group made a conscious strategic change from supporting farmers' adaptation to productivism to supporting their shift toward post-productivist production. Member households were asked to set aside part of their farmland for "land conversion," forgo the use of chemical inputs for three years to allow soil fertility to recover before organic production could begin, and shift from monoculture to multi-cropping. A typical household with 10 mu of farmland was expected to cultivate five different crops, including a staple grain for self-consumption. Multi-cropping helped to restore a healthier local ecological system, increase biodiversity, as well as to reduce the incidence of pests naturally, without chemical pesticides. Spreading harvesting time across the year also reduced households' dependence on wage labor during peak seasons. Agricultural production in the cooperative was coordinated to first meet self-consumption needs within the community, not to maximize commercial value.

Only in 2014 did the cooperative start to build a distribution network capable of reaching urban consumers in two nearby cities. The cooperative required such consumers to join as members and comply with the moral principles and lifestyle choices of the cooperative. For the cooperative, re-building a community based on solidarity and united by shared values—not just the production and supply of alternative foods—had always been their primary goal. Along these lines, the cooperative also opened elderly care and childcare facilities by renovating abandoned houses in the village and continued with the moral education programs that it had started in the early 2000s (See Fig. 5).

Unlike other cases of CSA like Green Finger, in Riverbend, the agricultural production is done by the farmers who were the original owners of the land and residents of the villages. The initiative also originated



Fig. 5. An abandoned house renovated and used as an elderly care facility in Riverbend (Source: Authors' original).

locally, motivated by locals' discontent with the social decay in rural areas. The leadership group had tried, before 2008, to augment farmers' incomes from productivist agriculture by offering technical training on the use of industrial inputs and organizing specialized cooperatives adopting a productivist approach. However, both initiatives perpetuated the farmers' exposure to economic precarity of the market system, and thus failed to free farmers from the 'agricultural treadmill'. These failures, when juxtaposed with the successes they had in running community-based social activities, made leaders realize both the intrinsic limitations of productivist agriculture and the importance of social mobilization and cultural reconstruction to the development of an alternative, post-productivist economy.

Compared to the CSA cases studied in the literature (Martindale 2021; Si et al., 2015; Zhong et al., 2022), the Riverbend Cooperative is exceptionally successful. It illustrates how rural residents' discontent with productivist agriculture acts as a driving force and how a unique type of post-productivist outcome arose from rural farmers' (as opposed to "new farmers") efforts to promote social and cultural reconstruction and exit productivist agriculture.

5.2. Urban desire for the rural idyll

The second driving force of post-productivism is urbanites' desire for the rural idyll, which translates into demands for using rural space to meet urban consumption needs in alternative lifestyles, leisure activities, and cultural and aesthetic practices. The restructuring of environmental and agricultural policies and the emergence of post-productivist, alternative agriculture, as discussed above, already undermine the significance of the countryside as a place for production. Urban consumers' rising disposable income and their dissatisfaction with various urban malaises further drive the shift towards using rural space for consumption, where they can pursue a different lifestyle and leisure activities distinct from those in cities.

China's distinctive rural land system creates unique dynamics in the commodification of rural land for urban consumption use (Zhang and Wu, 2017). A dominant trend of counter-urbanization in the West is suburbanization, which refers to the development of rural areas into residential communities for urban commuters while keeping a relatively rural landscape (Cooke and Denton, 2015). That process, however, is

severely restricted in China as rural land is legally prohibited from being used for commercial property development. Recent reforms have allowed more flexibility in the transfer and leasing of rural construction land for commercial purposes; however, the government tightly regulates this process, requiring multiple approvals and compensation measures (Kan, 2021). This rural land system constrains suburbanization in China and limits most urban consumption of rural space to the purchase of second homes and short-duration tourism. The latter occurs in several forms: 1) cultural tourism (the appreciation of cultural and aesthetic features of rural areas), 2) leisure tourism (the consumption of rural products, lifestyle, and landscape), and 3) nature tourism (centering primarily on naturally attractive areas).

5.2.1. Counter-urbanization: second homes in the countryside

China has experienced a surge in second-home ownership since the early 2000s. This trend is tied to the emergence of an urban middle class with increased recreational time and disposable income, the rising popularity of housing as an asset, and the increasing desire for the rural idyll (Huang and Yi 2011). In this section, Xingfu Village is used to illustrate how rural space is commodified as dwellings for the urban middle class.

Xingfu Village is located at the outskirts of Chengdu city, Sichuan Province and is the site of around 1000 purpose-built second homes. The development of second-home properties in Xingfu was strongly supported by Qingxia township and initiated by Xingfu Gongshe Ltd (XG)⁷ as part of the post-disaster reconstruction efforts following the 2008 Wenchuan earthquake. An agreement for reconstruction was established between Qingxia township, the village community, and XG. XG acquired a large plot of farmland at below market price for second-home development, in exchange of offering resettlement to local villagers who were affected by the Wenchuan earthquake and providing them with new employment. Both the township government and village community had hoped that this agreement would provide speedy recovery to villagers affected by the earthquake, while also diversify the local economy and create new job opportunities through real estate development. A village council member gave a more detailed description about the engagement

⁷ XG is a private real estate company established by a Chengdu businessman.

of XG at Xingfu:

Post-disaster reconstruction at Xingfu and the nearby regions did not receive much attention from the Chengdu municipal government. There was not enough financial support for post-disaster reconstruction plans. At that time, the Chengdu municipal government introduced this collaborative initiative to solve the issue of post-disaster finance. (Interview, 7 August 2019)

Homes built during the first phase quickly sold out. Two new phases followed to meet the surging demands from urban consumers. By the end of 2019, all three phases of second-home development had been completed and over 1000 new second homes built. Most second-home buyers are from Chengdu, and commute between their primary residence and second homes on weekends and national holidays. The construction of second homes, however, only created a few employment opportunities. Qingxia township and the Xingfu Village committee had to pressure XG to create more jobs for local villagers. XG implemented two further initiatives: first, contracting more local farmers to produce agricultural products, which were rebranded as tourism products by XG and sold to second-home-owners; second, providing hospitality and entrepreneurship training courses for local villagers. These efforts had limited success in increasing local engagement in the second-home business. A local villager explained:

The XG project did generate some jobs. But the impact was relatively small ... Very few locals participated in the project. On the one hand, we were not sure how to participate. On the other, the quality of the produce they asked us to provide was too high. (Interview, 9 August 2019)

The aspiration of urbanites for rural idyll led to the development of second homes in Xingfu. The coalition between local authorities and housing developers acted as the catalyst in shifting Xingfu from an agricultural production site to an urban consumption area. While the construction of second homes and counter-migration of urban homeowners to Xingfu village fundamentally transformed the village landscape, local villagers benefitted relatively modestly. Most of the profits arising from second-home development—property appreciation—accrued to XG and second-home owners.

5.2.2. Cultural tourism: ethnic tourism in Taoping Village

The consumption of the countryside often involves a focus on rural culture. Ancient villages, where the local cultural or architectural heritage became tourist attractions, are primary examples of this type of post-productivism (Su, 2011). The rise of tourism as a pillar of the local economy gradually syphons the local labour force out of agriculture and into the more remunerative tourist economy, while infrastructure development for tourism can take up farmland and other resources, causing the decline of agricultural production and the emergence of a local post-productivist economy.

Taoping Village is a traditional Qiang minority ethnic village situated in Li County, Sichuan province. In the 1980s and 1990s, local villagers' main livelihood was peach farming. In the 1990s, the opening of the nearby Miyaluo-Gurgo Scenic Area and the Ninth Ring Highway of Chengdu led to an influx of visitors to Taoping. A few villagers gave up peach tree cultivation to run tourism businesses, including operating ethnic restaurants, bed and breakfasts, grocery stores and souvenir shops, as well as serving as tour guides. In 1999, the Li County Government established the Taoping Tourism Management Office to manage Taoping as a tourist attraction; tickets were thereafter required to access the Village. The Management Office assigned tourists to villager-run B&Bs on a rotational system, ensuring that each B&B in Taoping benefited equally from tourism growth. In 2006, Taoping Qiangzhai Tourism Development Co., Ltd. (TQTD) was founded. The Li County Government required the company to designate a new area to build the Taoping New Village, where new catering and accommodation facilities were constructed to serve tourists, while the original Taoping Old Village was restricted for sightseeing only, aiming to properly

preserve the stone-castle-style traditional Qiang houses that Taoping had been known for. The functional zoning of Taoping reflected the rapid development of cultural tourism. A villager described how Taoping New Village turned into a new tourist zone:

Taoping New Village was once farmland planted with peach trees. TQTD subdivided them into small plots. Each family was allocated a plot for housing construction through a lottery system. (Interview, 12 August 2019)

The Wenchuan earthquake and the ensuing post-disaster recovery underscored the significance of government intervention in promoting tourism development in Taoping. The earthquake caused the complete destruction of homes in Taoping New Village and the collapses of some houses in Taoping Old Village. The National Bureau of Cultural Relics provided RMB80 million to restore 113 traditional houses in the Old Village, while Hunan and Sichuan provinces contributed RMB300 million to renovate 109 houses in the New Village (see Fig. 6).

Starting in 2012, Taoping is managed by Li County Cultural Auspicious Tourism Development Co. (LCCA), which is jointly owned by the Li County Government and the Taoping Township Government. LCCA continues to employ a dividend-based system to manage the Taoping attraction. Before the earthquake, the participation of many locals who lacked the funds to renovate houses for hospitality businesses was limited to casual employment, while still continuing with peach farming. The post-disaster reconstruction gave each household a well-designed home, removing the final barrier for Taoping villagers to give up agriculture entirely. Now, all villagers operate B&Bs and agricultural production in Taoping has ceased. A government official of Taoping Township remarked:

Now, with nearly all villagers involved in the tourism sector, cultivating peach trees has fallen out of favor. Growing peaches is not profitable and labor-intensive. Working conditions and earnings in the hospitality sector are far better. (Interview, 12 August 2019)

The promotion of cultural tourism in remote regions, with the backing of local governments and rural communities, has demonstrated itself as an effective strategy for the areas to cater for urban consumption (Su, 2011). With the development of cultural tourism, not only the use of rural land is shifted from agricultural production to cultural consumption, but rural residents' livelihoods change from based on productivist agriculture to tourism-based, as the latter provides greater economic returns.

5.2.3. Leisure tourism

The improvement in transportation infrastructure and the explosion of automobile ownership in urban China have combined to turn short "escape" trips to the countryside into an important component of urbanites' leisure time. During weekends and holidays, urbanites pour into the countryside to pursue a variety of leisure activities, including agriculture-related activities such as farm tours, culinary lessons, fruit picking, and gardening—commonly referred to as agritourism—and sports activities such as hiking, horseback riding, and fishing—but most importantly, consumption of quality food. In 2022, the revenue of rural leisure tourism exceeded RMB 700 billion yuan in China, and the number of employees in this sector was more than 11 million (China News, 2023). Rural areas immediately surrounding the cities benefited the most from this development. To meet urbanites' consumption needs, farmers built new facilities on their homestead land, agricultural production was diversified, and rural residents shifted into various new service jobs.

One case in point is Fang's Yard, which the team visited in 2007 and 2015. Located in Shuang Village in Ning County on the outskirts of the provincial capital, Kunming city, Yunnan province, this family-run agritourism enterprise exemplifies a *nongjiale*—literally means "having fun in a rural household"—which has become one of the most common types of agritourism in China (Park, 2014).



Fig. 6. A plaza and newly built houses in Taoping New Village (Source: Authors' original).

Mr. Fang, an urban entrepreneur whose wife is a native of the village, rented over 50 mu of slope land from the village on which the family planted a variety of fruit trees in the existing cherry and loquat orchard, adjacent to newly built dining and lodging facilities. Fang's Yard have diversified farming production, the goal of which is not to maximize the output, but to cater to the consumption and leisure needs of urbanites making day trips from the nearby Kunming city. The on-farm activities are carefully designed to align with the horticultural cycle. In addition to attracting visitors to view cherry blossoms in March, visitors come to pick produce in turn—cherries (April and May), followed by plums (June and July), mushrooms (August and September), and finally chestnuts (October).

For an entrance fee of RMB20, Fang's Yard offers a diverse range of seasonal activities centered on the region's natural beauty and agricultural bounty. The farm is located near a reservoir, which provides visitors with a range of outdoor activities such as hiking, fishing and boating. Besides these immersive leisure activities, the catering service at the farm is a highlight of on-farm diversification efforts, offering visitors the opportunity to sample organic meat, fruits and vegetables that are grown on the farm.

The growth of leisure tourism, exemplified by the case of Fang's Yard, spurs the flow of urban people and resources into rural areas, not only supporting rural economies by diversifying income sources for farmers, but fostering new connections between urban consumers, agricultural practices, and rural communities. This post-productivist transition can potentially create a new type of rural-urban linkage that is more equitable and socially embedded than that of centering around the production and consumption of food under productivism.

5.2.4. Nature tourism

Natural attractions in rural areas are another major destination for urban tourists. While some of the rural-based leisure activities described above are integrated with the consumption of rural lifestyle and village environment, the nature tourism discussed in this section features natural sites with little relationship to rural life. However, given the dense population in the Chinese countryside, these natural attractions, even in remote areas, are still often located near rural settlements and agricultural activities to the extent that tourism activities will have a significant

impact on rural space use and livelihoods.

One illustrative case is Nangou, a remote village in a mountainous area in Jilin Province in northeastern China, between 90 and 120 min from its closest major cities. In 1993, the provincial government's sports authority selected the mountains near Nangou as the site to build Beidahu, among China's first alpine sports facilities. In 2007, when Changchun hosted the 6th Asian Winter Games, all alpine competitions took place at Beidahu. In 2010, a private real-estate company from Beijing, Qiaoshan, won the bid from the sports authority to develop and operate the Beidahu Ski Resort for 40 years. Over the past decade, snow sports experienced rapid growth in China, a trend to which the 2022 Beijing Winter Olympics greatly contributed. Well positioned to take advantage of winter sports' increasing popularity, Beidahu Ski Resort went through a construction boom, with new hotels, apartment buildings, and retail facilities built to accommodate the fast-rising volume of visitors.

The ski resort was only accessible via a four-lane road that ran through the valley in which the 12 hamlets of Nangou village were nestled. The ski resort's rapid expansion necessitated the expropriation of the farmland of four of these hamlets, which were relocated to a new residential area (New Village) built along the main road. Although the other eight hamlets were located further away from the mountains and most of their land was not affected by the resort expansion, farmers' livelihoods and the use of space in all twelve of these hamlets were nevertheless completely transformed by the growth of nature tourism. Most of the approximately two hundred or so households in these eight hamlets were either adjacent to or a short drive away from the main road. Traditionally, most households in Nangou engaged in productivist agriculture, specializing in maize monoculture. In 2013, a few families that relocated to the New Village opened the first few restaurants and guesthouses. Since then, tourist numbers increased rapidly each year, and now nearly all households throughout Nangou actively participate in the industry.

Villagers' participation in the tourism industry took three main forms. First, many households now run restaurants and guesthouses. Both sides of the main road linking the resort gate and the New Village are now lined with one guesthouse after another. Each, built on rural households' homestead land, include a restaurant, hotel rooms and parking space in the rear. By undercutting the prices of resort hotels,

such as Club Med and Holiday Inn, these family-run hotels attract the budget-conscious crowd. They shuttle guests to and from the resort, a service that also attracts guests staying in the resort to enjoy authentic country-style dining at affordable prices. Even households in the New Village not located on the road offer guesthouses or long-term rentals for season-pass-holders. Second, rural residents find employment in the resort, both fulltime and year-round, and seasonal employment as hotel and restaurant staff, ski patrol and instructors, lift operators, and maintenance workers. Finally, villagers find self-employment opportunities providing tourists services such as giving private ski lessons, driving taxis, running equipment rentals and travel agent services. While most households still grow maize on their allocated rural farmland during the off-season (the ski season runs from mid-November to mid-March), that production, now mainly mechanized, requires little labor and constitutes an insignificant portion of their income.

Nangou village's transformation has benefitted many, such as the Du family—a team of two brothers and their wives and children, who now operate one of the largest restaurant-cum-guesthouses. In 2014, they started with a small roadside restaurant and portioned their own houses into several guestrooms. They used their family car to shuttle guests to and from the resort. The brothers' children got involved—the older brother's daughter served as a sales agent, and the younger brother's son as a ski instructor. As profits gradually increased, the operations expanded, allowing the brothers to renovate and enlarge the restaurant building, add two rows of one-story buildings forming a twelve-unit guesthouse, pave part of the family's cornfield next to the restaurant into a parking lot, and add a fleet of three cars and minivans transporting guests. Gradually, the children's role also shifted—the daughter now is a full-time manager in the resort's procurement department, while the son has found opportunity outside as a freelance ski instructor. In 2022, he was booked solid throughout the season, despite charging RMB1,500 per day. In the winter of 2022, the two brothers also decided to invest RMB1.2 million to acquire the homestead land of their next-door neighbor, an aging couple in their late seventies, for the further expansion of their business. The family's farming operation has diversified from maize monoculture to growing a variety of fruit trees, mainly in service of their own restaurant, where frozen pears, a local delicacy, have become popular.

Our sample includes other cases like Nangou—Qiongkushitai village in Yili, Xinjiang, Hemu village in Altay, Xinjiang, Yuhu village in Lijiang, Yunnan, and Beihong village in Mohe, Heilongjiang—in which scenic areas attract eager urban consumers, and in doing so, triggering a transition from a predominance of productivist agriculture to a vibrant and diverse service economy focused primarily on tourism. In Nangou, this shift has led to the proliferation of various tourism-oriented business and employment, which has led to significant increases in local families' incomes. Engaging in nature tourism does not necessarily terminate villagers' participation in agricultural production, but, to most villagers, in their now diversified livelihoods, agriculture has become a secondary or even insignificant income source.

6. Discussion

This study attempts to fill a gap in the post-productivism analytical framework by suggesting that two driving forces are crucial in the transition to post-productivism and illustrating these through case analysis in China.

The first driving force is the discontents with the adverse impacts of productivist agriculture from the state, urban consumers, and rural communities, which, respectively, manifest in a shift in government's policy priority from agricultural production to ecological restoration, urban consumers' demands for "quality food", and rural producers' demands for a "quality life". The most salient policy shift in China is that from an exclusive emphasis on maximizing agricultural production to a more balanced pursuit of environmental restoration, displayed in a series of environmental legislations and various reforestation and

conservation programs. At the same time, discontents with productivist agriculture from the society—urban consumers' discontent with food quality and rural producers' discontent with economic precarity and social decay—give rise to various bottom-up initiatives promoting post-productivism. Alternative agriculture, organized either in an exogenous (Green Finger Farm) or an endogenous (Riverbend Cooperative) manner, provides some options for addressing food quality demands and promoting the socio-economic sustainability of rural communities.

Second, urbanites' desire for the rural idyll manifests in China through both counter-urbanization and rural tourism, both of which repurpose rural space from agricultural production to urban consumption. The potential of rural space to become objects of urban consumption is rooted in its natural environment, landscape and traditional culture. On the other hand, both the rising disposable income of the urban population and new problems resulted from rapid urbanization such as over-crowding, high housing price, and social alienation, acted as the impetus that drove urban consumption into rural areas, triggering a post-productivist transformation of rural space use and the rural economy.

In the Chinese context, these two drivers interact with national and local dynamics to give rise to seven distinct post-productivist practices, summarized in Table 1. Although post-productivist practices are widely found in rural China, post-productivism has by no means eclipsed productivism as the dominant development regime in rural China. Indeed, the productivist agricultural regime remains dominant, and the emergence of post-productivism appears to be a highly uneven spatial process. We suspect that post-productivist practices concentrated in 1) peri-urban areas that can easily attract urban consumption, 2) ecologically sensitive areas targeted by new environmental policy initiatives, and 3) areas with rich cultural heritage or natural endowments, but we do not yet have systematic data to confirm these.

In addition to clarifying the drivers and outcomes of post-productivism, this study also contributes to the research on rural revitalization in China by drawing the connection between the pathways toward rural revitalization and the transition to post-productivism. We observe that the key goals of China's rural revitalization strategy, including the diversification of the rural economy for sustainable economic growth, greater urban-rural integration, and improvement of rural living environment and life quality (Han, 2020; Liu et al., 2020), are also key characteristics of post-productivism. The pursuit of post-productivism thus overlaps with the goals of rural revitalization.

The relationship between rural revitalization and the transition to post-productivism, however, is more complicated than a linear pattern. In the cases studied here, the participation and support for post-productivism among some rural communities who were involved in productivist agriculture suggests that besides urban factors, rural actors are vital to initiating and shaping the transition and that the shift to post-productivism does not inherently come at the expense of—but instead can benefit—actors dependent on productivist systems. However, we do not suggest that productivism inherently impedes the goal of rural revitalization. Indeed, increasing agricultural productivity and restructuring the agri-food system to give rural producers a greater share in value chains remain effective ways of boosting household and rural economies.

7. Conclusions

This study clarifies the driving forces that give rise to post-productivism and the outcomes these drivers produce in rural China. The emergence of post-productivism responds to the discontent with the adverse impacts of productivist agriculture from the state, urban consumers, and rural communities, as well as urban aspirations for rural idyll. The diverse practices of post-productivism that the transition to post-productivism has generated in rural China coincide with the pathways identified in the rural revitalization strategy, which aims to diversify the rural economy from dependence on agriculture, improve

Table 1
Drivers and outcomes of post-productivist transition in rural China.

Drivers			Outcomes	Case
Discontents with the negative impacts of productivist agriculture	State's discontent with environmental degradation Societal discontent with productivist agriculture	Policy shift to ecological restoration	Reforestation	#1 Haique Village, Guizhou
		Urban consumers' demands for "quality food"	Alternative food networks	#2 Green Finger Organic Farm, Guangdong
		Rural producers' demands for "quality life"	Rural reconstruction	#3 Riverbend Cooperative, Shanxi
Desire for the rural idyll	Counter-urbanization		Second-home purchases	#4 Xingfu Village, Sichuan
	Rural tourism		Cultural tourism	#5 Taoping Village, Sichuan
			Leisure tourism	#6 Fang's Yard, Yunnan
			Nature tourism	#7 Nangou Village, Jilin

ecological conditions, and strengthen rural community. We therefore propose that post-productivism provides researchers a useful conceptual framework for understanding the dynamics of rural revitalization in contemporary China.

The study has three limitations. First, although the cases of post-production we describe benefit smallholders to some degree, these cases may not necessarily be reflective of general patterns. Clearly, there are winners and losers among rural residents in the transition to post-productivism, just as there were under productivism. The systematic understanding of the impact of post-production on rural residents and others is beyond the scope of this paper—indeed, in every outcome discussed, the impact of post-productivism is currently the subject of vigorous and heated scholarly debate. Second, the emergence of post-productivism is inherently a spatially uneven process and is importantly shaped by spatial conditions; yet this study is not able to systematically investigate the spatial and political-economic dynamics that explain the uneven development of post-productivism. Third, while we have discussed how the drivers and outcomes of the post-productivist transition in China differ from those in the Global North context (e.g., Holmes, 2002), this study is unable to answer to what extent these findings from China are generalizable to other Global South contexts. Given that the agrarian transition in many Global South countries followed distinctive paths and gave rise to different dominant agricultural regimes, the reactions to those, if they take the form of post-productivism at all, are likely to be different from the Chinese case. For example, unlike the post-productivist, reverse migration of urbanites to the countryside in China, seeking quality food and consuming the rural idyll; in Latin America, the resistance to the global industrial food system centers around the “re-peasantization” agenda, exemplified by social movements such as La Via Campesina. In seeking the return of land to peasant farming, these movements are better characterized as a return to pre-productivism.

We hope that a sharpening of the definition and causes of post-productivism will facilitate further research into the process of rural revitalization in China. More importantly, we hope that this reframing will bear fruit in understanding other countries experiencing a rise of post-productivism, from both the Global North as well as the Global South. Such efforts can further refine our understanding of post-productivist rural development. Regarding China’s development, we suspect that the growth of post-productivism will not gradually replace productivist practices, but instead will produce a socioeconomically heterogeneous and spatially diverse development landscape. How these newly emerged post-productivist dynamics and practices interact with the dominant productivist agricultural regime, which offer new insights into the uneven development of post-productivism, is an important issue that awaits future research.

CRedit authorship contribution statement

Meiling Wu: Writing – review & editing, Writing – original draft, Methodology, Data curation, Conceptualization. **Qian Forrest Zhang:**

Writing – review & editing, Writing – original draft, Methodology, Data curation, Conceptualization. **John Donaldson:** Writing – review & editing, Writing – original draft, Supervision, Data curation.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

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