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Beyond Rice: The Necessary Sacrifice and Community Transformation in Postwar Rural Japan, 1945–1970

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Abstract

This study investigates the dynamics of community development and transformation in postwar rural Japan through a case study of Oyama Town, a remote, mountainous locality in southern Kyushu. From 1945 to 1970, Oyama underwent a significant transition from rice cultivation to orchard farming, a shift undertaken in defiance of stringent national and prefectural policies prioritizing rice production above all other agricultural activities. This strategic pivot necessitated the forfeiture of national subsidies, a sacrifice Oyama deemed crucial for achieving economic stability and overcoming severe poverty prevalent in the early postwar years. This research elucidates how Oyama's determination to pursue high-income opportunities and long-term community advancement, despite adversarial conditions, holds broader implications for understanding rural development under restrictive policy environments.

Keywords: community development, socio-economic transformation, Oyama Town, postwar rural Japan

1. Introduction: Community Development in Transforming Rural Japan

In less than a century, Japan has undergone a dramatic transition from a predominantly rural society to one of the world's most industrialized nations. Concurrently, its rural population has sharply declined, with the total number residing in towns and villages falling from 45.8 million in 1920 to 34.6 million in 1960, and further decreasing to 27.9 million in 1980 and just 11.9 million by 2010 (Hasan, 2017). To address this depopulation, Japan has implemented a series of *gappei* (amalgamations), resulting in the merger of smaller municipalities with larger urban centers (Hasan, 2016). Consequently, the number of towns

and villages decreased from 3,013 in 1960 to only 941 by 2010 (Hasan, 2017).

The process of *gappei* has redefined many rural areas as part of cities, often leading them to adopt more urban functions over time. Interestingly, Japan lacks a precise definition for "rural area," which is often treated as a residual category in statistical terms. Generally, rural areas are considered to be those outside the Densely Inhabited Districts (DIDs) and are heavily reliant on agriculture (OECD, 1995). However, the boundary between "urban" and "rural" is increasingly blurred due to the pervasive influence of market forces. Today, the pervasive urbanization and rapid industrial penetration into rural areas have significantly impacted social, economic, environmental, and political dynamics in these regions. For instance, a substantial portion of Japan's farming sector now comprises part-time farmers. As a result, many rural areas have evolved into destinations for leisure and are emerging as urban hinterlands.

Given these developments, is it still appropriate to conceptualize rural areas solely in terms of agriculture and urban areas in terms of industry when examining the postwar process of rural community development?

Folklorist Yanagita Kunio contended that the rapid urbanization and extensive industrialization initiated by the Meiji government led to the degradation of rural areas (Yanagita, 1929). Conversely, rural sociologists such as Fukutake Tadashi embraced the postwar transformations, including changes in landlordism, household systems, and the restructuring of rural communities (Fukutake, 1964). These modernists viewed the prewar rural community as an obstacle to modernization and democratization. However, by the 1970s, the adverse effects of high economic growth prompted a reevaluation of modernization. Rural revisionists like Irokawa Daikichi, Tsurumi Kazuko, and others emphasized the significance of local autonomy, cooperation, egalitarianism, shared identity, and social viability within rural communities, arguing that these communities had become casualties of modernization and capitalist development (Irokawa, 1975; Tsurumi, 1975; Goto, 1993). Similarly, numerous political leaders in Japan supported proponents of *nōhon-shugi* (agrarian fundamentalism) to "prevent 'unhealthy' urban influences from corrupting rural areas" (Hane, 1982, p. 66).

Conversely, foreign scholars examining early postwar rural communities perceive them as undergoing significant transitions. They employ the rural-urban continuum theory to elucidate the evolution of rural life, given that post-World War II phenomena such as outmigration, industrialization, and urbanization catalyzed a shift from traditional to modern rural communities (Weber, 1958). These scholars characterize this social transformation as a process of adapting to modernity (Norbeck, 1954; Beardsley, Hall, & Ward, 1959). As various stakeholders increasingly engaged in community activities from the mid-1950s to the late 1990s, their growing vested interests contributed to the dynamism and complexity of these communities. Consequently, rural community studies have evolved into a methodology that interprets villages and communities as intricate amalgamations of socio-cultural relationships, thereby offering a comprehensive perspective on human society (Cornell, 1956; Dore, 1978; Smith, 1978; Moon, 1989). This approach is closely aligned with the focus of this research.

Recently, the sustainability of social integration and subsistence within rural communities has gained prominence in various national rural development frameworks. Autonomous development strategies are frequently considered advantageous for fostering sustainable development in these areas. For example, David Barkin (1998) emphasizes the significance of local food self-sufficiency in Mexican rural communities and advocates for the implementation of autonomous production systems utilizing ecologically sustainable technologies, including traditional agriculture and ecotourism. While this study concurs with Barkin's perspective, it shares Kitano's (2009) reservations regarding the feasibility of contemporary rural communities achieving sustainable economic development in complete isolation from global economic forces. The impacts of these forces may be uneven, contingent upon a community's economic, social, political, and geographical contexts. Furthermore, this study rejects the notion that direct integration with the global economy represents the sole solution for community development. Development is shaped by the interplay of human interactions with social, cultural, economic, and environmental resources, necessitating consideration of the broader historical context of social, economic, and cultural transformations. Therefore, community development in rural Japan must be examined not in isolation but within a national and even international framework.

2. Economic Development and Rural Change in Postwar Japan, 1945–1970: An Overview

In 1868, the Tokugawa shogunate was dismantled during the Meiji Restoration (*meiji ishin*), which marked a pivotal transition in Japanese history. Shortly thereafter, Japan underwent its' industrial revolution in the 1890s. This confluence of the Meiji Restoration and industrialization fundamentally transformed Japan's political economy from a feudal system to a capitalist one. The imperial government pursued a policy of *fukoku kyōhei* (rich nation and strong army) through *shokusan kōgyō* (industrial promotion and enterprise development). As a result, light industries, such as textiles, began to overshadow agriculture as the primary drivers of economic growth. Despite this economic transformation, approximately half of Japan's population remained engaged in agriculture until the onset of the Second World War, leading to a persistence of subsistence farming in rural areas.

In the late 1930s, Japan entered the Second World War, during which the government prioritized the mobilization of manpower for the production of war materials. This focus on wartime production led to a significant decline in agricultural output due to a shortage of labor. As part of the broader democratization efforts, compulsory land reform was implemented under the direction of the General Headquarters (GHQ) of the occupation forces. Enacted between 1947 and 1950, this reform involved redistributing one-third of the nation's farmland from landlords to owner-farmers (Dore, 1959; Tuna, 1965; Ogura, 1967; Kaneda, 1980). The land reform was deemed successful, contributing to political stability and resulting in increased agricultural productivity and improved living standards in rural areas (Dower, 1979; Jussaume, 1991).

Concurrently, in 1947, agricultural cooperatives (*nōkyō*) were established across Japan through the democratization and reorganization of agricultural associations. These

cooperatives, organized on a village basis, continue to encompass virtually all farm households. In the same year, the "Local Autonomy Law" was enacted alongside the introduction of the new constitution, aiming to enhance local governance by granting local populations greater control over local affairs. This law positioned municipal governments (*shi-chō-son*) on an equal footing with prefectures and major metropolitan areas (*to-dō-fu-ken*). However, in practice, local governments did not immediately achieve the level of independence that the GHQ had envisioned (Dower, 1979).

The latter half of the 1950s marked a period of significant industrialization and urbanization in Japan. This era saw a dramatic transformation in Japan's industrial landscape, shifting from traditional light industries to modern heavy industries, including mechanical and metal sectors. The burgeoning demand for industrial labor precipitated a rapid migration of workers from agriculture to industry. Concurrently, Japan experienced a demographic transition characterized by a sharp decline in both fertility and mortality rates.

The prospect of higher wages in industrial employment attracted young villagers, who sought seasonal work in urban areas. This phenomenon, known as *dekasegi*, intensified the issue of *atosugi* (the succession of family headship) in rural regions. Historically, rural Japan has addressed industrial labor demands through the provision of *dekasegi* workers, a factor that contributed significantly to Japan's postwar economic growth.

Conversely, Japan has witnessed a significant decline in its farming population. This trend accelerated markedly post-1960, with the farming population dropping below 11 million by 1965 and reducing to approximately half of its 1960 level by 1975 (Smith, 2001). A related trend is the gradual contraction of the agricultural sector, or primary industry. The reduction in the agricultural workforce indicates a shift towards service and tertiary industries.

In the years following the end of World War II, 48.3 percent of Japan's workforce was engaged in agriculture. By 1960, this proportion had decreased to 30.2 percent (Hane, 1996). This shift contributed to a widening gap between farm and non-farm incomes, exacerbating socio-economic issues in rural areas across Japan.

In response to the escalating crisis in rural areas, both farmers and policymakers sought viable solutions. One notable intervention was the enactment of the Agricultural Basic Law in 1961, which aimed to modernize agriculture and address the growing productivity disparities between the agricultural sector and other industries. This legislation established new standards for state compensation to farmers for their rice production.

In the same year, Prime Minister Ikeda Hayato, a former Ministry of Finance official, introduced the *Shotoku Baizō Seisaku* (Income Doubling Plan), which aimed to double Japan's national wealth within a decade. This plan marked the symbolic beginning of Japan's rapid economic growth, with the average annual growth rate reaching 10.7 percent between 1961 and 1970 (Goto, 1993).

However, both the Agricultural Basic Law and the Income Doubling Plan had detrimental effects on many farming communities, particularly in mountainous rural regions of Japan. Despite these ongoing challenges and the adverse impacts of such policies, certain

communities have managed to sustain their existence by devising and implementing innovative development strategies. These communities, having successfully navigated the pressures of change, warrant comprehensive study and analysis.

3. Research Method

This study employs a qualitative approach and utilizes the single case study method. Community development is an expansive topic, and qualitative research allows for exploration from multiple perspectives. The single case study method is particularly favored by scholars examining postwar rural Japan[1] (Hasan, 2017). The single case study method employed in this research entails a thorough examination of a single instance within a specific context, offering detailed and nuanced insights. However, this methodological approach is not without its limitations, which can significantly affect the interpretation of the research findings.

Firstly, single case studies are intrinsically vulnerable to subjectivity and researcher bias. The perspective of the researcher can significantly influence the processes of data collection, analysis, and reporting. Such biases may undermine the objectivity of the conclusions, as the researcher's preconceptions can distort the interpretation of the findings (Yin, 1994).

Another critical limitation of the single case study method is its limited generalizability. By concentrating on a single case, this approach often falls short in extending its conclusions to other cases or broader populations. However, Flyvbjerg (2006) contends that the principal objective of single case studies is not to achieve statistical representativeness but to provide a deep and contextual understanding of a specific case. Consequently, it is important to recognize that the case study of Oyama's development should not be regarded as representative of all postwar rural Japan. The narrative is not intended to reflect the diverse realities of Japan's rural communities comprehensively. Instead, the research aspires to shed light on specific aspects of rural community development and to offer insights that may stimulate further research and discourse in this field.

This case study is grounded in a comprehensive review of existing literature and extensive field research[2] conducted over a three-year period in Oyama Town[3], located in Oita Prefecture on the southern island of Kyushu. Historically, Oyama was the most impoverished municipality in Oita Prefecture until the early postwar era. To combat its severe poverty, Oyama implemented the New Plum and Chestnut Movement (commonly referred to as the NPC Movement)[4]. This initiative was later promoted nationwide as the One Village One Product (OVOP) Movement[5] by Hiramatsu Morihiko, the former governor of Oita Prefecture. The NPC Movement originated in 1961, while the OVOP Movement was launched in 1979. Despite being introduced nearly two decades after the NPC Movement, the OVOP Movement gained greater international recognition, though its roots can be traced back to the NPC Movement. Hiramatsu himself acknowledges, "Oyama is the origin of my OVOP. Oyama has excelled as the leading planner among the 58 cities, towns, and villages in Oita Prefecture" (cited in Advance Oita, 1987, p. 164). Moreover, Oyama is renowned among trainees of the Japan International Cooperation Agency (JICA), attracting hundreds of visitors annually from around the globe to study rural development and community capacity building (Hasan, 2017).

Despite this prominence, there is a notable scarcity of studies, especially in English, that delve into Oyama's community development narrative. This research aims to address this gap through detailed fieldwork.

A ten-year rural development plan was established by Oyama under the NPC Movement, coinciding with Japan's transition from the "postwar reconstruction period" to the "high-speed economic period." This case study specifically focuses on the period from 1945 to 1970. It is anticipated that this comprehensive analysis will be of particular interest to anthropologists, rural sociologists, and experts in community development.

This study employed ethnography as the primary method for data collection. Ethnography, with its diverse applications, has proven to be particularly valuable in rural research contexts in Japan[6]. A core characteristic of ethnographic research is its reliance on immersive fieldwork (Burgess, 1982). Accordingly, this study conducted exploratory fieldwork (Fetterman, 1998), employing an unstructured, flexible, and open-ended participant observation approach. Primary data were predominantly obtained through unstructured and open-ended in-depth interviews, conducted personally throughout the fieldwork. Interviewees were informed about the study's objectives and assured of strict confidentiality regarding their responses.

The analysis of data involved three key processes: data reduction, data display, and conclusion drawing (Huberman & Miles, 1998, p. 180). Initially, data were organized into manageable units through a process of coding. Following this, detailed descriptive and explanatory accounts of field observations were provided, a fundamental aspect of field research (Lofland, 1971). Consistent with Clifford Geertz's approach to ethnography, the study employed extensive and detailed descriptions, referred to as "thick description," a concept introduced by Geertz in 1973.

Subsequently, the data were analyzed and interpreted to identify themes and categories, a core technique in qualitative research (Creswell, 2003). In the final stage of analysis, data triangulation was employed to enhance the quality and validity of the findings. This involved cross-referencing results from both primary and secondary datasets to identify overlaps, divergences, and other salient patterns, thus ensuring a comprehensive and substantiated conclusion. As noted by Brewer (2000) and Fetterman (1998), triangulation is essential for ensuring data quality and ethnographic validity.

4. Case Study: Transition from Rice Cultivation to Multifunctional Orchard Farming

Rural communities exhibit significant spatial variations, even within the same country. In Japan, for instance, rural communities in Eastern Japan differ markedly from those in Western Japan. The former are generally characterized by lowland, rice-based agriculture, whereas the latter typically engage in upland cropping systems. Oyama, situated in Western Japan, is located near the Oyama River, adjacent to the northern part of Hita City. Geographically, Oyama is positioned at altitudes ranging from 100 to 500 meters and is shaped like an elongated leaf (Yahata, 1988).

Oyama encompasses a total land area of 4,572 hectares, with mountainous cedar forests

constituting 53 percent of this area, while agricultural lands account for a mere 9 percent (Hasan, 2017). The region's topography is marked by high mountains running from north to south. Due to the elevated mountains to the east and west, the morning sun rises late, and the setting sun disappears early, resulting in a very short period of daylight (*nisshō jikan*) in Oyama. The scarcity of flat land throughout the area necessitates the use of terracing to convert sloped terrain into rice paddies. This stratified agricultural approach aligns with Oyama's geographical characteristics, as the lower and steeper slopes are utilized for orchard and crop cultivation.

Throughout the 20th century, farm sizes in Japan remained relatively small. For instance, in 1910, 70 percent of farmers worked plots of less than 1 hectare, and only 3 percent cultivated more than 3 hectares, a practice that was later restricted by the Agricultural Land Law of 1961 (Bray, 1986). The average farm size in Japan stands at merely 1.6 hectares (Todorova & Shigeno, 2008). This pattern of small-scale farming is evident in Oyama as well. The farmlands in Oyama are clustered in small valleys and are somewhat distant from the farmers' residences. The total farmland in Oyama spans only 360 hectares, with an average of just 0.5 hectares per farming household (Advance Oita, 1987; *Ōyama-chō-shi hensan-i'inkai*, 1995).

Oyama has experienced a significant population decline over the past 60 years. The population peaked at 6,503 in 1950, decreased to 5,755 in 1965, and further to 4,701 in 1975. Although there was a slight increase in the decade between 1975 and 1984, the population once again declined in the subsequent decade from 1985 to 1994 and has continued to fall. By 2010, Oyama's population had decreased to 47.93 percent (3,386) of its peak in 1950. A related concern is the increasing aging population; the proportion of residents aged over 65 years was 31.2 percent in 2010, compared to 23 percent for the overall population of Japan. Despite these challenges, Oyama's depopulation is representative of broader trends, as neighboring towns and villages also experienced population declines every five years. In contrast, Oyama's proximity to Hita City means that its depopulation is less severe compared to more remote rural areas.

The nature of the transitions and community development efforts in Oyama during the postwar reconstruction and rapid economic growth period, spanning from 1945 to 1970, warrants a detailed examination. This inquiry will be addressed in the subsequent sections.

Prewar Oyama, akin to many rural communities in Japan, was predominantly engaged in "subsistence agriculture" (Hasan, 2016). The harsh conditions of subsistence farming, compounded by the region's geographical constraints—namely, limited arable land and steep mountainous terrain—hampered the villagers' ability to generate substantial cash income. Attempts to diversify income sources, such as cultivating cash crops like hemp or harvesting Hita *sugi* (cedar) logs for rafting downstream, were undermined by technological advancements. Specifically, the advent of polyethylene nets significantly diminished the demand for natural hemp nets. Consequently, Oyama's economic hardships persisted into the early postwar years. During this period, rice and wheat were primarily grown for household consumption (Hasan, 2016). The dire economic situation relegated Oyama to the lowest ranks among the 58 municipalities in Oita Prefecture, characterized by scarce water resources, the

absence of paved roads, and homes with thatched straw roofs and mud walls. Women in Oyama were occupied with labor-intensive and time-consuming tasks, such as childcare, livestock management, and water collection, leaving them little opportunity for leisure or social engagement. The overall condition of the village was bleak, with residents displaying limited hope and ambition for development. The early postwar development trajectory of Oyama remained entrenched in the traditional Meiji-period practices of rice farming and livestock raising, leading to its characterization as a "materialistically and emotionally impoverished village."

Until 1960, Japan functioned as a *jikyū jisoku nōgyō* (subsistence farming) society, with farmers primarily cultivating rice, beans, potatoes, and similar crops. However, a significant shift occurred in 1961 with the enactment of the *nōchi-hō kaisei* (Amendment of the Agricultural Land Act) by the central government. This amendment introduced several notable changes, with the most prominent feature being the *sentaku-teki kakudai* (selective expansion) of crop production. Under this policy, farmers were incentivized to focus on the cultivation of economically viable crops, specifically large quantities of either rice or wheat.

Subsequent to the Amendment of the Agricultural Land Act, the *nōgyō kōzō kaizen* (Agricultural Structure Improvement Project) was instituted as a national policy. This initiative promoted *kibo kakudai* (scale expansion), which had two primary outcomes: *tairyō seisan* (mass production) and *tairyō hanbai* (mass sale). The underlying objective was to maximize profits through the production and sale of large volumes of a single crop. To achieve this, farmers were encouraged to expand their agricultural lands and utilize large-scale machinery. The expansion of land, known as the *tochi kairyō jigyō* (Land Improvement Project), and the adoption of heavy machinery, referred to as the *nōgyō kindai-ka jigyō* (Agriculture Modernization Project), were key components of this policy.

The "Land Improvement Project" was a government-initiated program aimed at expanding rice fields and farmlands across Japan, with the exception of Hokkaido and Okinawa. This initiative provided both state and prefectural subsidies to support agricultural expansion. The subsidy allocation was uniform nationwide, excluding Hokkaido and Okinawa. For instance, in Oita Prefecture, the subsidy distribution was identical across various municipalities, including Oyama Town, Oita City, and Usa Plain. In contrast, Hokkaido and Okinawa, designated as "special remote islands," received a relatively higher subsidy rate, approximately 80 percent of the total funding. For other regions, the subsidy coverage was approximately 70 percent. Specifically, within Oita Prefecture, this comprised 50 percent from the state and 20 percent from the prefecture, leaving farmers with a self-financing obligation of 30 percent. These subsidies were allocated for infrastructure improvements, such as constructing roads between fields, developing irrigation channels, and enlarging rice paddies.

It is crucial to recognize that the land required for leveling to create rice paddies in flat coastal areas is significantly less compared to that needed in mountainous regions such as Oyama. For instance, leveling a 10-are (0.1-hectare) rice field in a flat area might cost approximately 10 million yen, with the subsidy reducing the farmer's out-of-pocket expense

to 3 million yen. In contrast, the cost to level the same-sized rice field in mountainous terrain can be up to three times higher, amounting to 30 million yen. In such cases, farmers would receive 70 percent of the cost as a subsidy, equating to 21 million yen from the state, leaving them with a substantial self-financed amount of 9 million yen.

Compounding the issue, the entire subsidy often ended up benefiting civil engineering and construction contractors who were responsible for developing new farmland. Consequently, a total expenditure of 30 million yen was effectively diverted to contractors: 21 million yen in state subsidies and 9 million yen paid directly by farmers. Notably, the state did not acknowledge that these subsidies primarily benefited contractors; instead, it portrayed the funding as a direct benefit to the farmers. Although the farmers technically received the subsidies, the funds were essentially funneled back to contractors due to the necessity for additional loans to cover leveling costs.

Furthermore, the production yields were markedly different between flat and mountainous areas. A rice field of the same size in a flat area could produce up to 10 bales (600 kg) of rice, thanks to longer daylight hours. In contrast, the same-sized field in mountainous regions like Oyama would yield only 6 bales (360 kg) due to less favorable growing conditions. This disparity meant that while farmers in flat areas could achieve higher productivity, those in mountainous regions faced ongoing debt despite the substantial investments made.

Additionally, the state-funded agricultural modernization project required farmers to cover 50 percent of the costs for large and heavy machinery, while the state subsidized the remaining half. The prefecture did not contribute any funds. The small machinery typically used was ineffective for expanding farmland, necessitating the purchase of expensive large-scale equipment. For example, if a farmer purchased machinery costing 10 million yen, they were responsible for 50 percent of this cost, amounting to 5 million yen, which often required borrowing. Consequently, many farmers, lacking sufficient financial resources, accumulated significant debt.

These policies and initiatives were designed with the primary objective of optimizing the profitability of agricultural products. However, the resultant agricultural surpluses, particularly in rice, led to an era of overproduction that subsequently presented challenges for policymakers. The 1961 “selective expansion,” specifically targeting rice production, was also referred to as the *kome no zōsan seisaku* (Increase in Rice Production Policy). This policy aimed to significantly boost rice output, reflecting Japan’s previous period of food scarcity.

Nevertheless, within a decade, as farmers began to repay their loans—acquired for purchasing large machinery to enhance rice production in expanded fields—the situation changed. The demand for rice diminished, leading to a decline in both consumption rates and market prices. Consequently, in 1970, the Japanese government introduced the *kome no gentan seisaku* (Rice Acreage Reduction Policy) in response to the overproduction crisis.

In conjunction with the 1961 “selective expansion” and the “Increase in Rice Production Policy,” the *kome ippyō zōsan undo* (Increase in Rice Production Movement) was initiated in

Oita Prefecture. The objective of this movement was to elevate rice production to 1 *hyō* (60 kg) per 1 *tan* (approximately 10,000 square meters) of rice field throughout the prefecture. As part of the agricultural structure improvement project, farmers expanded their rice fields to meet this production target and persistently pursued the rice production enhancement movement.

However, a significant issue arose during this period with the introduction of Prime Minister Ikeda Hayato's "income-doubling policy." Theoretically, as income increases, so should savings, which would ostensibly lead to higher consumption of staple foods such as rice. It was anticipated that with increased income, individuals might consume more rice—potentially up to twice as much. In practice, however, this theory did not hold. As countries develop economically, the consumption rates of staple foods like rice or wheat often decline. Conversely, developing nations tend to exhibit higher consumption rates of such staples. Thus, the assumption that rising income would directly correlate with increased rice consumption did not materialize.

As previously noted, Oyama is characterized by extensive sloping lands, which are not conducive to conventional rice cultivation. Consequently, if farmers are instructed to cultivate rice on these inclines, some will seek out flat areas for rice farming, leaving the remaining sloped lands unused and potentially reverting to wilderness. In response to this challenge, then-Mayor Yahata Harumi advocated for leveraging Oyama's existing topographical features—specifically its sloping lands and traditional *satoyamas* (Japanese rural landscapes)—by cultivating crops better suited to these conditions. This approach, known as the *ōyama-ryū nōgyō kōzō kaizen jigyō* (Oyama Way of Agricultural Structure Improvement Project), emphasized selecting crops that would thrive on slopes and thus enhance farmers' incomes while preserving the *satoyamas*.

This strategy was designed not only to optimize the use of *satoyamas* but also to minimize their degradation, thus promoting environmental sustainability. However, because land reorganization did not occur in Oyama, local residents were resistant to the forced alteration of sloping lands, leading to a reluctance to comply with the central government's policies. As a result, the agricultural landscape of Oyama continues to be predominantly characterized by terraced fields.

In the early 1960s, Japan's economic expansion led to significant shifts in dietary preferences, with a notable increase in the consumption of dairy products and meat. This period also saw the rise of health-conscious food trends. During this time, the demand for *ume* (plums) surged, with plums being esteemed as "green diamonds" in the food market. Similarly, *kuri* (chestnuts) emerged as economically lucrative crops, with their profitability being up to ten times greater than that of rice. Both plums and chestnuts were particularly well-suited to the climatic and topographical conditions of Oyama and required minimal manual labor, being harvestable in spring and autumn, respectively.

Consequently, the cultivation of these crops was promoted by Oyama authorities as a promising alternative. In 1961, under the auspices of the first NPC Movement, a strategic shift from rice cultivation to the production of plums and chestnuts was undertaken by

Oyama, with the anticipation of a substantial increase in farmers' incomes. It is important to note, however, that while the majority of rice cultivation ceased, some farmers continued to grow rice on a smaller scale, primarily for personal consumption.

The transition away from rice cultivation required Oyama to confront two significant challenges. Firstly, it necessitated a departure from the deeply entrenched traditional model of agriculture centered on rice and livestock. Secondly, it meant forfeiting national and prefectural subsidies that were previously integral to its agricultural economy. As previously discussed, Oyama's postwar development had been constrained by the conventional Meiji-period focus on rice farming and livestock husbandry—practices that were labor-intensive, time-consuming, and economically unviable in the long term.

To address this predicament, Yahata Harumi implemented a policy to eliminate livestock rearing, particularly cattle, and to reject the narrow, Meiji-era mindset that impeded agricultural innovation in Oyama. Yahata's approach was clear: "I want those who cannot escape from such outdated ideas to retire from the front lines of agriculture" (Matsunaga, 1989, p. 196). Yahata also consistently refused to endorse proposals from *yakuba* (local government) employees that merely adhered to national or prefectural policies without consideration of local needs:

> You will be engaged in extensive work in the future. I want you to reflect on whether, when undertaking tasks mandated by the country or prefecture, the work will ultimately benefit the town and its residents. In other words, the local government should not merely act as a subcontractor for the national or prefectural authorities. It should actively participate in policy-making (Mr. H, former *yakuba* employee, personal communication, October 22, 2010).

The primary objective of the initial NPC Movement was to transition from "ton agriculture" to "gram agriculture," focusing on cultivating crops that, while lighter in weight, commanded higher market prices (Matsunaga, 1989, p. 37). This shift was designed to enhance farmers' incomes, which at the time averaged approximately 80,000 yen annually. The movement aimed to achieve a monthly harvest value of 80,000 yen and a total household income of 1 million yen within a decade, by 1970. To support this goal, three key working conditions were established for farmers: the tasks should be light, manageable, and labor-saving.

The implementation of the first NPC Movement was overseen jointly by the *yakuba* and the Oyama *nōkyō* (agricultural cooperative). The *yakuba* undertook several measures to ensure the movement's effectiveness. Initially, they secured necessary financing. Recognizing that plum trees require at least three years to bear fruit, the *yakuba* committed to a rigorous three-year plan, which included local government funding prioritized for infrastructure development, procurement of young trees, seedling care, establishment of sales channels, and provision of technical guidance (Advance Oita, 1982). For example, the village's general budget for Fiscal Year 1961 was approximately 30 million yen, but it was subsequently increased to around 64 million yen, indicating a substantial investment in the NPC Movement (Matsunaga, 1989). This supplementary budget for the NPC Movement exceeded the initial village budget, underscoring the significant emphasis placed on the initiative.

Conversely, farmers were expected to contribute minimal manual labor. The movement set an ambitious target of cultivating a total of 300 hectares of plums and chestnuts—100 hectares for plums and 200 hectares for chestnuts—despite the fact that only 496 hectares of arable land were available in Oyama. Given the critical role of rice for daily sustenance, persuading farmers to abandon rice cultivation was challenging. To address this, the *yakuba* provided farmers with free backhoes to facilitate the labor-intensive task of clearing mountainous land for new plum and chestnut orchards. Additionally, financial assistance was offered for the purchase of seedlings and young plants. Considering that plum and chestnut farming required four to five years to yield income, farmers were supported with interest-free loans through the *seikatsu shikin* (lifestyle financing system) to ensure financial stability during this period.

Secondly, the *yakuba* focused extensively on infrastructural development. The local government constructed access roads to farmers' fields and invested in road construction machinery, including bulldozers and backhoes. Given that, apart from NPC-related activities, there were minimal tasks for *yakuba* employees during the first three years of the NPC Movement, more than half of the *yakuba* staff were reassigned to the Department of Industrial Promotion, which was tasked with advancing the movement.

For technical support in the relatively novel cultivation of plums and chestnuts, farmers benefited from the *shidō hojoin seido* (guidance assistance system). This system provided technical and operational support through the relocated Department of Industrial Promotion staff and assistance from the *nōkyō* (agricultural cooperative). The staff frequently utilized bulldozers to prepare new planting areas, maintain farm roads, and dig planting holes, in addition to performing their usual clerical duties.

Additionally, the *yakuba* offered technical assistance through two agricultural extension programs: the Agricultural Study Youth Group and the Agri-Partners. To enhance community engagement and interest in the NPC Movement, an annual "Hawaii Tour" was launched by Oyama in 1967, under the slogan *ume kuri uete Hawaii e ikou!* (translated as Let's plant plums and chestnuts and go to Hawaii!). This trip, organized by the Oyama *nōkyō*, was financed through a loan that was to be repaid over five years. The slogan aimed not only to encourage travel to Hawaii funded by the sale of plums and chestnuts but also to foster local agricultural development, with the expectation that future generations would benefit from enhanced living standards.

Plums and chestnuts were planted not only in upland areas but also in paddy fields by the local farmers. Nearly all seedlings prepared for the NPC Movement were planted within the village. Over the initial two years, Oyama's farmers planted approximately 15,000 plum seedlings and 20,000 chestnut seedlings (Matsunaga, 1989). Despite the aggressive nature of this policy, the prefectural agricultural administration criticized Oyama, labeling its approach as a *dokuritsu koku* (autonomous territory) or an *amerika-teki chūkyō hōshiki* (American-style communist method) (Advance Oita, 1982). By 1970, the total production of plums and chestnuts had reached 220 tons and 100 tons, respectively, in Oyama (Matsunaga, 1989).

As previously discussed, during the early 1960s, the Japanese central government promoted the expansion of farmland horizontally. In response, Oyama implemented a counterstrategy

focused on the vertical dimension of farming. One key objective of this approach was to introduce *suichi nōgyō* (vertical agriculture), allowing farmers to maximize the use of vertical space and utilize the area beneath plum and chestnut trees. In Oyama, this method, also known as *juka saibai* (under-tree cultivation), is referred to as *shun-kyū nōgyō* (ten-day period income agriculture).

In addition to the space under fruit trees, this approach also employs vacant corners of dry-farmlands and ridges between rice fields. This agricultural system produces a variety of crops, including watercress, Chinese chives, asparagus, *wasabi* (Japanese horseradish), *konnyaku* yam, *myoga* ginger, Japanese parsley, Japanese peppers, and herbs. Unlike traditional crops that generate regular monthly income, these products provide occasional financial returns, hence the designation "ten-day period income agriculture." Through this system, farmers in Oyama were able to achieve incomes that were more than three times the average farm incomes in Oita Prefecture (Matsunaga, 1989). Moreover, this form of agriculture is accessible to elderly individuals as it demands fewer working hours and less manual labor while still offering modest income opportunities. Consequently, crops cultivated under this method are referred to as *ikigai-sakumoku* (worth-living crops) (Ibid.).

5. Discussion: The Necessary Sacrifice

The case study of Oyama Town's community development and transformation from 1945 to 1970 reveals several noteworthy observations. While some of these observations reflect common characteristics of early postwar rural mountainous communities, others are distinct to Oyama Town itself.

Firstly, throughout the prewar period and into the late 1950s, Oyama, like many other rural communities in Japan, experienced a life marked by hardship and monotony. The villagers engaged in labor-intensive and time-consuming agricultural practices, resulting in persistently poor socio-economic conditions. The pervasive poverty stifled their aspirations for a better future. Prior to the NPC Movement, residents of Oyama cultivated primarily rice and wheat, with incomes restricted to a single annual harvest. Despite their year-round efforts, earnings were confined to the harvest period alone.

Secondly, Oyama's topographical constraints—characterized by limited arable land and steep mountainous terrain—precluded large-scale farming. This geographical limitation necessitated the adoption of small-scale, alternative farming practices that were both less labor-intensive and more productive.

Thirdly, Oyama recognized that enhancing farmers' incomes was fundamental to broader community development. The community acknowledged the risks associated with dependence on a single crop and deemed crop diversification essential for increasing agricultural income. After thorough assessment, Oyama selected plum and chestnut cultivation as the most suitable crops, given the region's mountainous terrain and limited arable land. While rice continued to be grown, it was primarily for subsistence rather than commercial purposes, with no households relying on rice cultivation as a primary income source.

Fourthly, the initial NPC Movement was driven by local government initiatives, with farmers being actively engaged in the program. The movement aimed to boost incomes and reduce labor hours, setting a collective income target of one million yen per household within ten years. The effective administrative and economic collaboration within the NPC Movement earned it recognition as an autonomous and innovative approach, likened to an "American-style Communist Method."

Fifthly, villagers were encouraged to learn through experiential means, including a motivational trip to Hawaii. This initiative symbolized Japan's post-WWII recovery and its emergence as an industrialized nation. The media highlighted the significance of the "Plum and Chestnut Hawaii Tour" in the late 1960s, which dispelled Oyama's previous negative image and showcased the achievements of ordinary villagers.

Sixthly, in the early 1960s, the central government offered funding for large machinery and the expansion of paddy fields. However, this project required extensive labor and substantial expenses, which contrasted with the more cost-effective and less labor-intensive multi-dimensional orchard farming practiced in Oyama. In Oyama, fruit trees were cultivated in multi-layered steps, and the spaces beneath the trees were used for additional crop cultivation. The "ten-day period income agriculture" model created new employment opportunities and ensured a high income for both elderly farmers and young women in the community.

Finally, Oyama's shift from rice to orchard farming was a direct contravention of the national agricultural policy, which prioritized increased rice production to enhance food supply. This defiance of national policy, and the consequent loss of national subsidies, was considered a "necessary sacrifice" by Oyama in pursuit of higher incomes and long-term community development.

6. Conclusion

This paper has examined how Oyama, a small rural community in Japan, transitioned from a rice farming to an orchard farming community between 1945 and 1970, despite the central government's strong emphasis on rice production. This shift in crop diversification enabled Oyama's farmers to achieve the income target of one million yen by 1970, as set by the initial NPC Movement. Over two decades, Oyama successfully transformed its' agricultural practices from rice cultivation to orchard farming. This case highlights the variability of community development, which is socially constructed and influenced by a complex interplay of local narratives and specific contextual factors.

Rice farming under the challenging conditions in Oyama was both arduous and economically unviable. In response, a multidimensional agricultural production system was implemented by Oyama on its limited farmland, which enhanced farmers' incomes and led the community from extreme poverty to economic prosperity and cultural richness. The transition from rice to orchard farming highlights the potential of agricultural diversification in driving rural economic development. The community's success in transforming its agricultural practices despite restrictive national policies underscores the benefits of adapting agricultural strategies

to local conditions and resource availability. Other rural communities facing economic stagnation or decline could benefit from similar diversification approaches. By shifting from monoculture to more varied crop production, rural areas can enhance their economic resilience, improve farmers' incomes, and reduce dependency on single crop markets. This lesson is particularly pertinent for regions with declining agricultural viability due to environmental changes or market fluctuations.

The experience of Oyama underscores the efficacy of endogenous regional revitalization, which leverages local resources and expertise to drive development. This approach contrasts with top-down, centrally imposed strategies that often fail to account for local conditions and priorities. For other rural communities, adopting an endogenous model can foster more sustainable and contextually relevant development. By tapping into local knowledge, traditions, and resources, communities can create tailored solutions that address their unique challenges and opportunities. This perspective challenges the conventional focus on external intervention and highlights the importance of empowering local stakeholders in the development process.

Oyama's evolving demographic profile, characterized by a declining population and an increasing proportion of elderly residents, is a common issue in many rural areas. This demographic shift impacts agricultural practices and community development strategies. The observed trend towards cultivating herbs and mushrooms reflects a broader pattern of adapting agricultural activities to demographic and economic changes. Other rural communities experiencing similar demographic transitions may need to consider innovative approaches to agriculture and community engagement that accommodate an aging population while attracting younger residents. Strategies such as promoting agritourism, developing rural-urban linkages, and supporting small-scale, high-value agriculture could help mitigate the effects of population decline.

The experience of Oyama also highlights a critical gap in current development strategies, which are often urban-centric and driven by central government priorities. This narrow focus on monetary metrics and urban-oriented policies may overlook the specific needs and aspirations of rural communities. A paradigm shift is necessary to embrace a more holistic approach to rural development, one that considers economic, social, environmental, and political dimensions in an integrated manner. Policymakers must transcend generic, one-size-fits-all solutions and engage in a nuanced evaluation of rural contexts, ensuring that development strategies are reflective of and responsive to local realities.

Finally, the case of Oyama emphasizes the necessity of context-specific solutions in rural development. The successful adaptation of agricultural practices in Oyama was contingent upon a deep understanding of local conditions and challenges. This highlights the importance of avoiding overgeneralization and adopting strategies that are finely attuned to the unique characteristics of each rural community. The broader implications of Oyama's case highlight the importance of tailoring development strategies to local needs and ensuring that rural communities are active participants in shaping their development trajectories. Research and policy interventions must prioritize local knowledge and experiences to address the diverse

and complex issues confronting rural areas with greater efficacy.

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No additional data are available.

Notes

Note 1. For examples, consult the works of Bailey (1991), Beardsley et al. (1959), Bernstein (1983), Brown (1979), Cornell and Smith (1956), Dore (1978), Moeran (1984), Moon (1989), Norbeck (1954), Partner (2004), Ritchie (1999), and Smith and Wiswell (1982).

Note 2. Field research is a method of investigation that focuses on the examination of real-life contexts and situations (Burgess, 1982).

Note 3. Until January 1969, Oyama was a small village. On February 1, 1969, it transitioned to its current status as Oyama Town under the "town system" (*machi-seido*) (*Ōyama-chō-shi hensan-i'inkai*, 1995; Hasan, 2016). Subsequently, on March 22, 2005, Oyama Town was amalgamated with the adjacent Hita City (Hasan, 2017).

Note 4. The NPC Movement encompasses three distinct phases: the New Plum and Chestnut (NPC I) Movement, the Neo Personality Combination (NPC II), and the New Paradise Community (NPC III) Movement. For comprehensive analyses of the NPC Movement, consult the works of Advance Oita (1982), Yahata (1988), and Hasan (2015).

Note 5. For an in-depth analysis of the OVOP Movement, refer to the works of Hiramatsu (2006, 2008).

Note 6. For examples, consult the works of Embree (1939), Norbeck (1954), Cornell and Smith (1956), Beardsley et al. (1959), Dore (1978), Brown (1979), Smith and Wiswell (1982), Bernstein (1983), Moeran (1984), Moon (1989), Bailey (1991), Goto (1993), Ritchie (1999), Partner (2004), Kitano (2009) and Miyamoto (2010).

References

Advance, O. (1982). *Ōyama dokuritsukoku* [Autonomous Oyama]. Oita: Advance Oita.

Advance, O. (1987). *Niji wo ou gunzō* [The rainbow chasers]. Oyama, Hita: Oyama Agricultural Cooperative Association.

Bailey, J. H. (1991). *Ordinary People, Extraordinary Lives: Political and Economic Change in a Tōhoku Village*. Honolulu: University of Hawaii Press. https://doi.org/10.1515/9780824843366

Barkin, D. (1998). *Wealth, Poverty and Sustainable Development*. Mexcio: Centro de Ecologia y Desarrollo, A., C.

Beardsley, R. K., Hall, J. W., & Ward, R. E. (1959). *Village Japan*. Chicago and London: University of Chicago Press.

Bernstein, G. L. (1983). *Haruko's World: A Japanese Farm Woman and Her Community*. Stanford, California: Stanford University Press. https://doi.org/10.1515/9780804765725

Bray, F. (1986). *The Rice Economies: Technology and Development in Asian Societies*. Berkeley, Los Angeles and London: University of California Press. https://doi.org/10.1525/9780520914933

Brewer, J. D. (2000). *Ethnography*. Buckingham and Philadelphia: Open University Press.

Brown, K. L. (1979). *Shinjō: The Chronicle of a Japanese Village*. Pittsburgh: University Center for International Studies, University of Pittsburgh.

Burgess, R. G. (1982). *Field Research: A Sourcebook and Field Manual*. London: Allen and

Unwin.

Cornell, J. B., & Smith, R. J. (1956). *Two Japanese Villages: Matsunagi, A Japanese Mountain Community/ Kurusu: A Japanese Agricultural Community*. Ann Arbor: The University of Michigan Press.

Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative and Mixed Method Approaches.* London: Sage.

Dore, R. P. (1959). *Land Reform in Japan*. London: Oxford University Press.

Dore, R. P. (1978). *Shinohata: A Portrait of a Japanese Village*. New York: Pantheon Books. https://doi.org/10.2307/3032560

Dower, J. W. (1979). *Empire and Aftermath: Yoshida Shigeru and the Japanese Experience, 1878–1954*. Cambridge (Massachusetts) and London: Council on East Asian Studies, Harvard University. https://doi.org/10.1163/9781684172153

Embree, J. F. (1939). *Suye Mura: A Japanese Village*. Chicago and London: University of Chicago Press.

Fetterman, D. M. (1998). *Ethnography: Step by Step* (2nd ed.). Thousand Oaks: Sage.

Flyvbjerg, B. (2006). Five Misunderstandings About Case-Study Research. *Qualitative Inquiry, 12*(2), 219-245. https://doi.org/10.1177/1077800405284363

Fukutake, T. (1964). *Nihon nōson shakairon* [Theory on the Japanese farm village society]. Tokyo: Tōkyō daigaku shuppankai.

Geertz, C. (1973). *The Interpretation of Cultures: Selected Essays*. New York: Basic Books.

Goto, J. (1993). *Rural revitalization (chiiki okoshi) in Japan: A case study of Asuke Township* (Unpublished doctoral dissertation). University of California, Los Angeles.

Hane, M. (1982). *Peasants, Rebels, and Outcastes: The Underside of Modern Japan*. New York: Pantheon Books.

Hane, M. (1996). *Eastern Phoenix: Japan Since 1945*. Oxford: Westview Press.

Hasan, E. (2015). *Oyama: An ethnography of rural development and change in postwar Japan* (Unpublished doctoral dissertation). Ritsumeikan Asia Pacific University, Beppu, Oita.

Hasan, E. (2016). Singing sustenance: An ethnographic account of village songs and community development in postwar rural Japan. *Issues in Social Science, 4*(2), 1-20. https://doi.org/10.5296/iss.v4i2.10154

Hasan, E. (2017). Nature-based tourism and revitalization of rural communities in Japan: An ethnographic case study of Oyama Town. *Journal of Social Science Studies, 4*(1), 140-159. https://doi.org/10.5296/jsss.v4i1.10189

Hiramatsu, M. (2006). *Chihō jiritsu e no seisaku to senryaku* [Polices and strategies for regional independence]. Tokyo: Toyo Keizai Inc.

Hiramatsu, M. (2008). *The One Village One Product Movement: Spreading throughout the World*. Oita: Oita OVOP International Exchange Promotion Committee.

Huberman, M. A., & Miles, M. B. (1998). Data Management and Analysis Methods. In N. K. Denzin, & Y. S. Lincoln (Eds.), *Collecting and Interpreting Qualitative Materials* (pp. 179-210). London: Sage.

Irokawa, D. (1975). The survival struggle of the Japanese community. *The Japan Interpreter, 9*(4), 466-494.

Jussaume, R. A. Jr. (1991). *Japanese Part-Time Farming: Evolution and Impacts*. Ames, Iowa: Iowa State University Press.

Kaneda, H. (1980). Structural change and policy response in Japanese agriculture after the land reform. *Economic Development and Cultural Change, 28*(3), 469-486. https://doi.org/10.1086/451192

Kitano, S. (2009). *Space, Planning, and Rurality: Uneven Rural Development in Japan*. Victoria, B.C.: Trafford Publishing.

Lofland, J. (1971). *Analysing Social Settings*. Belmont: Wadsworth.

Matsunaga, T. (1989). *Tane wo maki yume wo ou* [Sow seeds, chase dreams]. Fukuoka: Nishinippon Shimbun.

Miyamoto, T. (2010). *The Forgotten Japanese: Encounters with Rural Life and Folklore*. (J. S. Irish, Trans.). Berkeley, California: Stone Bridge Press.

Moeran, B. (1984). *Lost Innocence: Folk Craft Potters of Onta, Japan*. Berkeley: University of California Press.

Moon, O. (1989). *From Paddy Field to Ski Slope: The Revitalisation of Tradition in Japanese Village Life*. Manchester and New York: Manchester University Press.

Norbeck, E. (1954). *Takashima: A Japanese Fishing Village*. Salt Lake City: University of Utah Press.

Ogura, T. (1967). *Agrarian Problems and Agricultural Policy in Japan*. Tokyo: The Institute of Rural Economic Affairs.

Organisation for Economic Co-operation and Development (OECD). (1995). *Agricultural Policy Reform and Adjustment in Japan*. Paris: OECD.

Ōyama-chō-shi hensan-i'inkai (Oyama Town Record Editorial Board) (1995). *Ōyama-chō-shi* [Oyama Town record]. Oyama, Hita: Oyama Town. https://doi.org/10.17129/botsci.1459

Partner, S. (2004). *Toshié: A Story of Village Life in Twentieth-Century Japan*. Berkeley, Los Angeles and London: University of California Press. https://doi.org/10.1525/9780520937758

Ritchie, M. (1999). *Village Japan: Everyday Life in a Rural Japanese Community*. Rutland,

Vermont and Tokyo: Charles E. Tuttle Company.

Smith, K. (2001). *A Time of Crisis: Japan, the Great Depression, and Rural Revitalization*. Cambridge (Massachusetts) and London: Harvard University Asia Center. https://doi.org/10.1163/9781684173419

Smith, R. J. (1978). *Kurusu: The Price of Progress in a Japanese Village, 1951–1975*. Kent: Dawson.

Smith, R. J., & Wiswell, E. L. (1982). *The Women of Suye Mura*. Chicago: University of Chicago Press.

Todorova, S., & Shigeno, R. (2008). Some aspects of the Japanese post-war and Bulgarian transition agricultural reform policies. *Rural Economy and Sociology, Tsukuba University 25*, 45-66.

Tsurumi, K. (1975). Yanagita Kunio's work as a model of endogenous development. *Japan Quarterly, 22*(3), 223-238.

Tuna, E. H. (1965). *Twenty-six Centuries of Agrarian Reform*. Berkeley: University of California Press. https://doi.org/10.1525/9780520312128

Weber, M. (1958). *The City*. Glencoe: Free Press.

Yahata, H. (1988). *Nōkyō wa chiiki de nani ga dekiru ka* [What can agricultural cooperatives do in the regions]. Tokyo: Ienohikarikyōkai.

Yanagita, K. (1929). *Toshi to nōson* [The city and the countryside]. Tokyo: Asahi Shinbun-sha.

Yin, R. K. (1994). *Case Study Research: Design and Methods* (2nd ed.). London: Sage.