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T20 Policy Brief

Task Force 05

INCLUSIVE DIGITAL TRANSFORMATION

Revitalizing Local Economies: A Case of Japan's Furusato Nozei Program and its Digital Transformation Impact on Tax Decentralization, Economic Growth, and Sustainable Development

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Abstract

Effective fiscal decentralization is crucial to address the issues of development gap and social inequalities and to unlock the benefits of decentralization. Local governments can tailor measures to their needs, stimulating economic growth and prosperity in marginalized communities. This policy brief highlights a unique tax decentralization initiative (Japan's Furusato Nozei Program), in which taxpayers donate their taxes to local governments through digital platforms (such as the Satofull Website) in exchange for a variety of local offerings provided by participating municipalities. To support the concept of Furusato Nozei Program, the policy brief underscores the role of digital transformation that contributes to information dissemination, tax payment simplification, and public participation enhancement in the tax decentralization process. These benefits can support local economies and advance all Sustainable Development Goals (SDGs), especially for local governments struggling to generate tax revenue due to depopulation or lack of major industries. G20 countries can develop strategies to leverage digital solutions in revenue mobilization and tax decentralization, including promoting digital tax payment platforms, improving transparency and accountability, and increasing public involvement in local governance. Through collaboration and technological innovation, G20 countries can advocate fiscal decentralization, reduce regional disparities, and promote sustainable development across all regions.

Keywords: decentralization, Furusato Nozei Program, hometown tax donation, digital platform, revitalization, SDGs

Diagnosis of the Issue

Policymakers face numerous challenges related to the uneven distribution of urban and rural growth, which can be attributed to lower birth rates and a continuous increase in the aging population (Bellofatto and Besfamille. 2021). The consequences of an aging population in rural areas lead to reduced tax acquisition from citizens, lower workforce availability and productivity, and overall lower economic activity in these areas (Korwatanasakul *et al.* 2021). The fiscal burden brought by the aging population, especially in rural areas leads to disproportionate urban and rural growth. This poses problems on local government revenues and government expenditures due to increased public health expenses and demand for social welfare programs (e.g., retirement benefits). Hence, the government and policymakers must strike a balance between investments in senior citizen support and revenue generation (Korwatanasakul *et al.* 2021).

Development gaps between urban and rural areas, along with regional inequalities, carry out significant challenges with broad implications. Urban centers tend to have better access to resources, infrastructure, and employment opportunities than rural areas, exacerbating economic and income disparities. On the other hand, social inequality is deepened in rural regions by a lack of infrastructure, causing limited access to basic services such as healthcare and education. Moreover, uneven access to technology restricts rural development and increases the digital gap between urban and rural areas. A study by Salemink *et al.* (2017) conducted a systematic review for 157 papers on the role of digital development in rural development in Western countries. From their research, increasing urban-rural differences were found in the quality of data infrastructure (e.g., Internet access, mobile broadbands, fiber optics) while low education levels in rural areas adversely affected further diffusion and adoption of technologies.

The issue of disproportionate growth between urban and rural regions calls for sustainable development. Some examples include initiatives such as building and supporting resource capacity in underdeveloped areas to improve public services and infrastructures and interventions for developing equitable, inclusive legislation. Unequal growth across regions has a detrimental effect on sustainable development due to the inequitable distribution of resources. Hence, sustainable development requires economic growth that covers inclusivity and equity for all (Samans *et al.* 2015). A way to achieve this is through fiscal decentralization since it allows reallocating resources to areas that need financial support, such as rural and underdeveloped regions (Bellofatto and Besfamille 2021). However, fiscal decentralization may lead to regional disparities. Kyriacou *et al.* (2015a) observed that the quality of governance matters in fiscal decentralization; countries with poor governance had heightened regional disparities, whereas countries with stronger governance experienced regional convergence. The multi-dimensionality of the impacts of decentralization can also determine the strength or quality of governance of a region; areas that successfully executed fiscal decentralization could indicate strong governance as local governments are being empowered and held accountable for the fiscal responsibilities in their community (Faguet 2014). However, areas that poorly implemented fiscal decentralization can indicate poor governance as increased inefficiencies in public services and unequal distribution of resources would rise (Kyriacou *et al.* 2015a).

Additionally, many local governments have insufficient human resources and inadequate administrative services, which often hinder the effectiveness of fiscal decentralization measures. To address these issues and gain potential benefits from tax decentralization, effective approaches to fiscal decentralization are needed to enable local governments to initiate and sustain development initiatives based on their individual

needs and to promote economic growth and prosperity in marginalized communities. As we delve into recommendations for tackling these complex issues, the importance of digital transformation emerges as a fundamental component of effective fiscal decentralization strategies. An application of digital solutions in fiscal decentralization would not only aid in tax decentralization but also facilitate smoother information flow, supports data-driven decision-making, and empowers local governments to promptly address emerging challenges.

Recommendations

1. Integrate digital solutions in procedures and administrative processes to promote tax decentralization

Digitalization enables government organizations to provide online platforms where citizens may easily access information, submit applications, and get services from anywhere. Incorporating digital technology into tax administration processes could not only increase efficiency but also foster government accountability and transparency, which in turn supports sustainable growth of local communities.

In the 2000s, due to the IT Basic Act and the e-Japan Strategy, Japan's public sector experienced a boom in digitalization. Although progress has been achieved in areas such as network infrastructure and eCommerce, the problems related to the implementation of digitalizing government initiatives remained challenging. In May 2008, the Japanese Furusato Nozei Program (also known as the “Hometown Tax Donation Program”) was introduced following the Act of Local Tax Laws Amendment in April 2008. This program addresses interregional disparities by allowing taxpayers to choose municipalities to donate their taxes. In return, taxpayers receive gifts from municipalities. In summary,

taxes flow from Furusato taxpayers' residential municipalities to municipalities of other areas (Hirata 2023; MIC, Japan n.d.b). Before digitalization, the tasks were mostly handled manually by staff members who juggled them alongside their regular duties, including accepting donations, procuring gifts, and responding to inquiries before and after gift shipments. The business side was also busy with tasks like responding to inquiries, arranging gift deliveries, and advancing shipping fees. Due to these extra workloads placed on local governments caused by a lack of manpower, resources, and technology, the adoption of this program was limited.

The first attempt to digitalize the program was in September 2012, when the world was experiencing an explosion of “cloud” technologies and the Internet of Things (Zaslavsky and Jayaraman 2015). A private company launched a website to exhibit gift information from different municipalities. The application forms the credit card payment became available in 2013. Driven by the need for administrative digitalization and the development of information and communication technologies (ICT), the program nowadays functions via several major private websites, e.g., Furusato Choice, Rakuten Furusato Nozei, and Satofuru, under the administrative control of the Ministry of Internal Affairs and Communication (Rausch 2019). These aforementioned websites provide agency services such as posting gifts on a website, accepting donations, credit card processing, delivery management, and storage administration.

Digital solutions in tax decentralization simplify tax donations, which greatly contributed to the spread of the program in the past years, particularly during the COVID-19 period (Fig 1). In 2022, the number of hometown donations through this program reached 51,842,914, and the amount of hometown tax revenue reached 965.41 billion Japanese Yen (JPY). Furthermore, digital platforms allow municipalities to prevent misappropriations of funds, concentrate on their core tasks, and create an environment

where businesses can focus on producing quality items, thus contributing to community development.

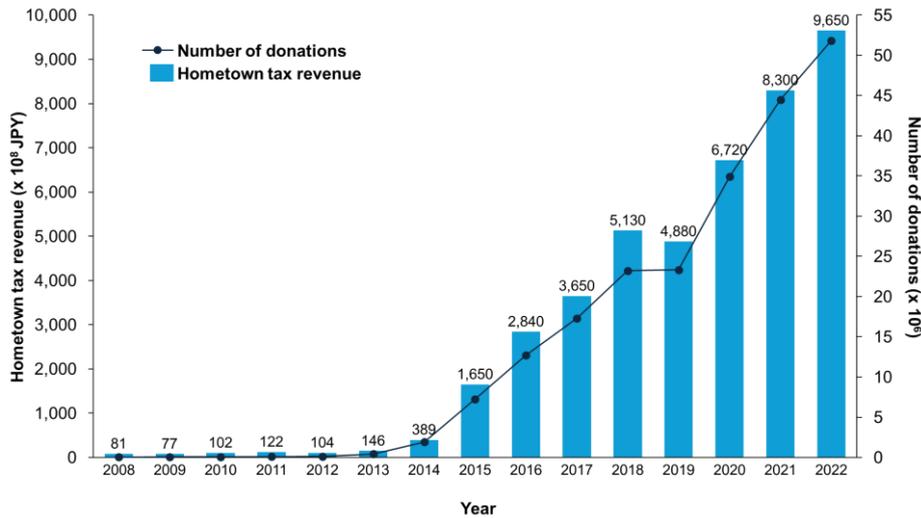


FIGURE 1. The Furusato Nozei donation number trend and associated tax revenue (2008–2022)

Public sectors in many countries face digitalization challenges highlighted by the COVID-19 pandemic, termed a "digital defeat," due to broader reliance on non-digital technologies like papers and fax machines. On the other hand, technologically, the 2020s witnessed rapid advancements in artificial intelligence (AI) and the expansion of blockchain into various industries, shaping the concept of "Web 3.0". Governments should integrate these technologies into their strategic vision for the public sector, introducing policies for reforming the realization of a digital society. This will strengthen cross-agency collaboration and execution capabilities for digitization initiatives that enhance public services. ICT adoption in Japan has significantly increased the tax revenue and taxpayers' activities in the Furusato Nozei Program (Fig 2). Similar results were observed in previous studies, where the effectiveness and efficiency of public administration increased while authorities improved the quality of digital public services

(Zhao *et al.* 2015), emphasizing the importance of promoting ICT diffusion for regional economic development. Additionally, the G20 should actively promote ICT adoption in public administrations globally, fostering knowledge exchange, technical assistance, and collaboration among member countries while monitoring progress toward digitalization goals.

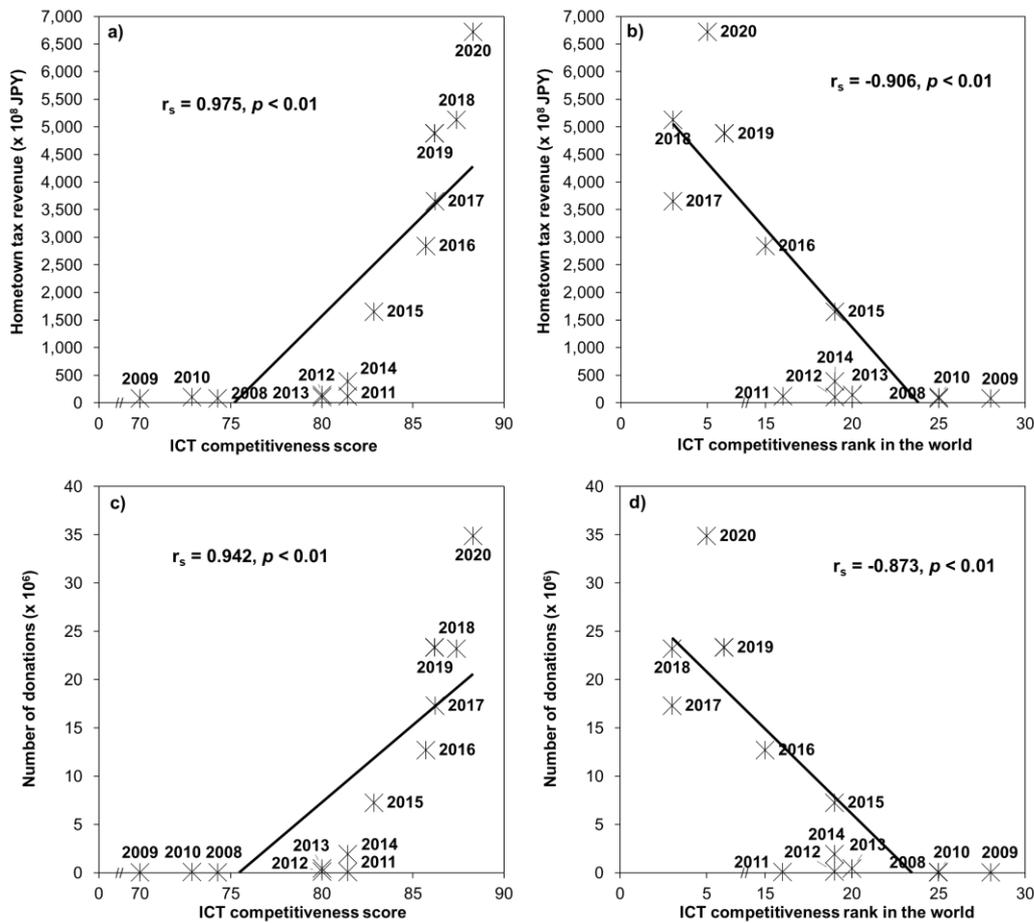


FIGURE 2. Spearman correlation coefficient (r_s) and linear regression line a) between ICT competitiveness score and hometown tax revenue; b) between ICT competitiveness rank in the world and hometown tax revenue; c) between ICT competitiveness score and number of donations; d) between ICT competitiveness rank in the world and number of donations.

2. Improve regional government quality

The quality of government (QoG)¹ is crucial for decentralization. Good governance is a cornerstone for effective decentralization, as decentralization depends on factors such as accountability, transparency, equitability, and efficiency (Boex *et al.* 2023). The QoG is also crucial to understanding the linkages between asymmetric decentralization and regional inequality. Higher QoG ensures that the execution of decentralization policies would be more successful through the provision of autonomy, capability, and capacity needed by regional or local governments to carry out their respective roles (Keping 2018; OECD 2019a). This would also result in better resource distribution.

The delivery of public services also depends on the QoG. With higher government quality, there is a higher capability of governing institutions to provide efficient and equitable services, reducing the occurrence of unequal access to these public services and regional disparities (OECD 2019b). Moreover, economic development can increase in the area with good governance. Through improvements in regulatory frameworks and their enforcement, protection of property rights, and the provision of a stable business environment, economic activity can increase through investments and entrepreneurship (OECD 2019b).

It is challenging to determine how the government's quality can affect decentralization and regional disparities without real-time data and indicators. Thus, further empirical research is needed to determine the underlying dynamics of asymmetrical decentralization and the relationships between these ideas (Kyriacou *et al.* 2015b; Muluk *et al.* 2015; Mendez and Bachtler 2022).

¹ Quality of Government: the state or condition of government institutions to deliver and provide effective and transparent public services (La Porta *et al.* 1999, p.223).

Knowledge-sharing can also address challenges in regional governance, encouraging capacity-building and improvement of resource distribution. These can be done through G20 since it serves as an avenue for countries to collaborate and develop partnerships via discussions and dialogues. Moreover, challenges regarding governance quality, decentralization, and lack of standardized indicators on regional disparity could be resolved through international collaboration among G20 countries. Given the G20's global influence, partner countries can use this as leverage to lead regional development programs and initiatives that would help improve and promote sustainable governance.

Scenario of Outcomes

The digital platform streamlines information in the Furusato Nozei Program, which offers a good example. Local municipalities and businesses can launch new initiatives by utilizing digital platforms, and digital platforms accept donations from taxpayers, procure gifts, respond to inquiries, and generate necessary tax documentation and a detailed breakdown (Fig 3). As a result, the community attracts more people interested in and supporting the region. Saga and Miyazaki prefectures ranked in the bottom ten in gross domestic product (GDP) but experienced a rapid increase in hometown tax revenue and entered the top ten among all 47 prefectures in Japan, with a received hometown tax-to-GDP ratio of 1.11% and 1.01% in 2020, respectively. Fig 4 presents hometown tax revenues as a share of the gross GDP of other prefectures. Taxes are distributed from urban areas with high population and tax burden to rural areas with low population and tax burden, aligning with the intended objectives of decentralization.

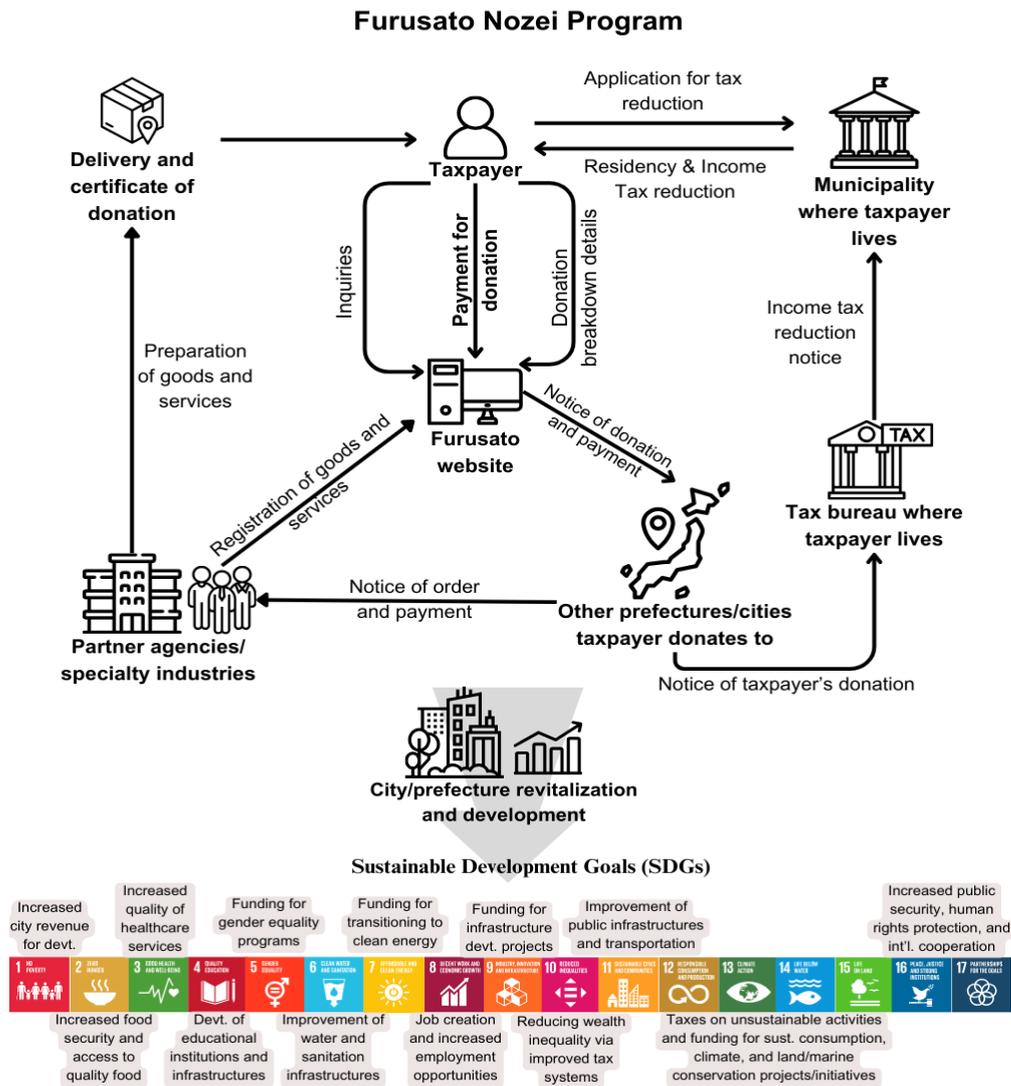


FIGURE 3. Structure of the Furusato Nozei Program



FIGURE 4. Hometown tax revenues as a share of gross domestic product (GDP), 2008–2020. Received hometown tax-to-GDP ratio was calculated from gross GDP and received

hometown tax donations of each prefecture in Japan. Gross GDP data were obtained from the Cabinet Office, Japan (Cabinet Office, Japan n.d.); data of received hometown tax donations were obtained from the Ministry of Internal Affairs and Communications, Japan (MIC, Japan n.d.c).

Contributions of digital transformation drive local economies, aiding all SDGs as local governments face challenges in generating tax revenue due to depopulation or the absence of major industries. “Children and childcare”, “Education and human development,” and “Health, medical care, and welfare” are the top three uses of donations (Fig 5), followed by other uses. These contribute to a diverse set of SDG targets (UN 2020), as shown in Fig 6. Besides taxes being a vital revenue stream for community development, the use of hometown tax donations would also address salient challenges of the area and boost overall development.

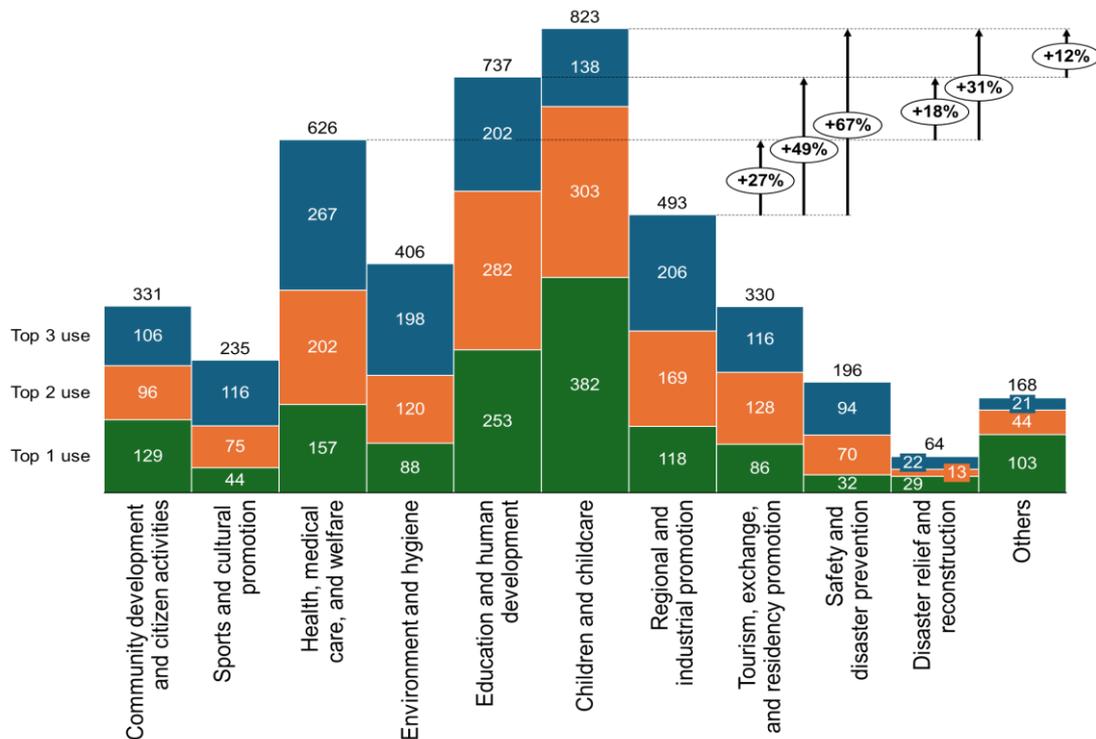


FIGURE 5. Top 6 uses of Furusato Nozei as a funding source in 1,788 municipalities, 2021

SDGs / Furusato Nozei contribution	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Community development and citizen activities	⊙	⊙	⊙	⊙	○	○	△	○	△	○	⊙	○	△	△	△	⊙	⊙
Sports and cultural promotion	○	△	○	○	△	△	△	○	△	△	○	○	△	○	○	○	△
Health, medical care, and welfare	○	△	⊙	○	○	○	△	△	△	⊙	○	△	△	△	△	○	△
Environment and hygiene	△	△	⊙	△	△	⊙	⊙	△	△	△	○	⊙	⊙	⊙	⊙	△	△
Education and human development	○	△	△	⊙	⊙	○	○	⊙	△	⊙	△	○	△	⊙	⊙	○	△
Children and childcare	○	○	○	△	○	△	△	△	△	⊙	○	△	△	△	△	△	△
Regional and industrial promotion	△	○	△	△	△	△	⊙	⊙	⊙	○	○	⊙	○	⊙	○	△	○
Tourism, exchange, and residency promotion	△	△	△	△	△	△	△	⊙	△	○	○	△	△	△	△	△	△
Safety and disaster prevention	⊙	△	○	○	△	△	○	○	⊙	○	○	⊙	⊙	△	△	○	△
Disaster relief and reconstruction	⊙	○	○	△	△	△	△	△	○	○	○	△	⊙	△	△	△	△

FIGURE 6. Mapping of the Furusato Nozei contribution to SDGs (⊙: Strong and direct contribution; ○: Direct contribution; △: Indirect contribution).

In summary, the digital transformation of the Furusato Nozei Program not only eases tax payments and enhances civic engagement in the process of tax decentralization but also leads to local revitalization and sustainability. Tax decentralization facilitated by the digitalized Furusato Nozei Program fosters regional economic growth and sustainable development. By establishing these positive chains, local government can address multiple issues simultaneously and progress towards achieving the SDGs.

However, taxpayer engagement in the program tends to be primarily motivated by tempting return gifts rather than their genuineness to contribute to regional development. Due to the competition, some municipalities with tax burden try to obtain more donations by raising their gift return rates, which could cause more disparities in rural regions (Rausch 2019). The Japanese government had to restrict the gift return rates (Fukasawa *et al.* 2020). Another drawback is that it is undesirable for local governments to pay fees to the platforms, as this should normally be their source of tax revenue (Hirata 2023). Portal sites charge a fee of approximately 10% of the donation amount (Nagasaki 2020; Takarazuka n.d.). Negotiations could happen between portal sites and some local

governments with significant transactions (Ohno and Sakata 2023), while those with small transactions have fewer choices.

Will digital technology again provide alternatives to solve the problems? The Ministry of Internal Affairs and Communications has launched crowdfunding activities through the Furusato Nozei Program, connecting project creators and taxpayers at digital platforms to facilitate the pooling of resources for various regional initiatives. Taxpayers could choose to donate with or without obtaining gifts. Further efforts to analyze the dynamics of tax donations and identify municipalities' budget needs have enormous potential through big data and artificial intelligence (AI). Deep insights into donation patterns, trends, and contributing factors can be gained through large datasets and advanced algorithms, which could help tailor region promotion plans. Introducing more digital platforms into the market for municipalities taking part in the Furusato Nozei Program may result in lower costs. As platforms compete with one another to draw in more contributors and local governments, service rates can go down.

Last but not least, although the digital transformation in tax decentralization helps to reduce regional imbalances, regional governments should also prioritize increasing own-source revenues to drive economic growth and prosperity in marginalized communities. This involves developing strategies to generate revenue within the region by investing in essential services like infrastructure and healthcare. Leveraging digital transformation in revenue generation can further support this goal.

References

- Bellofatto and Besfamilie. 2021. Tax decentralization and regional disparities.
- Boex, Williamson, and Yilmaz. 2023. Fiscal Decentralization Primer.
- Boucher. 2020. 2030 Citizen Engagement Agenda: Participation Framework. Accessed 2024-March-17.
- Cabinet Office, Japan. n.d. FY2011–FY2020 (2008SNA, 2015 baseline) & FY2006–FY2018 (2008SNA, 2011 baseline). Accessed 2024-March-17.
- Faguet. 2014. Decentralization and governance.
- Fukasawa, Fukasawa, and Ogawa. 2020. Intergovernmental Competition: Furusato Nozei Program, Japan.
- Hirata. 2023. Furusato Nozei: System Evolution and Issues. Accessed 2024-March-17.
- Keping. 2018. New framework for political analysis.
- Korwatanasakul, Sirivunnabood, and Majoe. 2021. Demographic Transition & Fiscal Sustainability.
- Kyriacou, Muínelo-Gallo, and Roca-Sagalés. 2015a. Fiscal decentralization and regional disparities: good governance.
- Kyriacou, Muínelo-Gallo, and Roca-Sagalés. 2015b. Regional inequalities, fiscal decentralization and government quality.
- La Porta, Lopez-de-Silanes, Shleifer, and Vishny. 1999. The quality of government.
- Mendez, and Bachtler. 2022. Government quality and administrative performance.
- MIC, Ministry of Internal Affairs and Communications, Japan, n.d.a. Hometown tax payments usage examples. Accessed 2024-March-17.
- MIC, n.d.b. Furusato Nozei Program Summary. Accessed 2024-March-17.
- MIC, n.d.c. Hometown Tax Survey 2023, 000894504 datasheet. Accessed 2024-March-17.

- Muluk. 2021. Systematic literature review: asymmetric decentralization.
- Nagasaki. 2020. 4th Proposal: FY2020 Nagasaki City Budget. Accessed 2024-March-17.
- OECD. 2019a. Colombia asymmetric decentralisation: Policy implications.
- OECD. 2019b. Making Decentralisation Work. OECD MLG Studies.
- Ohno and Sakata. 2023. NTT Data Management Institute, Inc Report: Optimize hometown tax payments. Accessed 2024-March-17.
- Rausch. 2019. Japan's Furusato Nozei Tax Program. Accessed 2024-March-17.
- Salemink, Strijker, and Bosworth. 2017. Rural development in the digital age.
- Samans, Blanke, Corrigan, and Drzeniek. 2015. Inclusive growth and development report 2015.
- Takarazuka. n.d. Hometown Tax Donation Project Costs Breakdown. Accessed 2024-March-17.
- UN. UN Secretary-General and IAEG-SDGs. 2016. IAEG Report: SDG Indicators. Accessed March 17, 2024.
- Zaslavsky and Jayaraman. 2015. Discovery in the internet of things.
- Zhao, Wallis, and Singh. 2015. E-government development and the digital economy.



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