研究ノート

Food self-sufficiency and food sovereignty: Examining the fallacy of the ‘change in taste and preferences’ mantra in the evolution of the Japanese rice system.

Rangarirai Gavin Muchetu

Background and context to Japanese agriculture

Following the end of the Second World War (WWII) and its eventual occupation by the Supreme Command of the Allied Powers (SCAP), Japan carried out a land reform which drastically reconfigured its agricultural sector (Dore, 2012). By 1955, agriculture was contributing approximately 18% to the GDP while employing approximately 41% of the working population (Teruoka, 2008). This was achieved even though only 16% of the total surface area of Japan comprises agricultural land, and between 1950-1955, approximately six million households held an average of 2acres of arable land. Approximately 59% of this land was put under intensive rice production during that period, fertilizers and irrigation facilities were utilised (*ibid*). Wheat and some horticultural crops were also grown but in smaller quantities, and livestock production was limited, mainly because Japan has low-quality pastures. Up until the 1970s, Japan was food self-sufficient.

The Japanese agricultural sector has undergone various changes ever since. As Japan industrialised, the gap between urban and rural incomes resulted in mass migration (Teruoka, 2008; Dore, 2012). The situation was worsened by the complex agrarian structure and the progress of productive industrial sector which drew most of the populations from rural areas. As the number of people relying on agricultural production (rice) declined, so did the population of rural areas. Currently, agriculture accounts for less than 2.6% of the GDP (MAFF, 2018) and Japan is no longer food self-sufficient (self-sufficiency stands at 36%;

see section on page 9). Given the volatility of international food markets on which it heavily relies, it is at risk of waking up one day as a food insecure nation. Thus, government and policymakers should bring food security (within the food sovereignty framework) to the fore of discussion.

While most of the literature on self-sufficiency is in Japanese language, the few strands available in English have avoided using a political economy approach to understand food self-sufficiency in developed countries. Furthermore, very few studies have conceptualised food self-sufficiency within the concepts of food sovereignty and the political economy of food regimes. This note adds to the food sovereignty debate, but unlike most studies, we present the political economy of food sovereignty for a developed country like Japan. We enter this discussion fully aware of the overwhelming rate of globalisation and the difficulties involved in pursuing self-sufficiency in agriculture when global agricultural prices are falling. The main argument that we push is that every nation-territory should be able to produce a significant amount of food through its local farmers and locally obtained resources.

This note exposes the potential of food insecurity when a country over-relies on international trade for its food. We also go deeper and discuss the need to maintain a significant level of domestic food production. We do this using the food regime and food sovereignty framework and show how the issues in the Japanese agricultural sector are not isolated. We discuss various periods in food production and superimpose them on the geopolitical power relations and forms of agricultural production and consumption. In that respect, the note begins by discussing the evolution of Japanese agriculture, food security, and the relationship with food sovereignty. The discussion of food regimes and food sovereignty explores the change of taste and preferences arguments and how they are affected by Japan's food culture.

Food security in Japan

Food security debates are popular in the developing countries. However, in the aftermath of the food crisis of 2007-08, it has become a serious concern for the entire world. Japan encountered a food security scare in the 1993 nationwide cold winter which drastically reduced rice yield quantities forcing the country to rely on imports the following year and until now. In addition to the challenges

of food production on a global scale (production in one locality followed by redistribution to the rest of the world), climate change issues and unstable geopolitical landscapes have increased the volatility of food security worldwide. Land grabs, land markets, monopolisation of agricultural marketing as well as agricultural technology and GMOs can be read as signs of the need to revisit the concept (McMichael, 2014). Shocks such as the 1993 poor harvest in Japan or the 2007/8 food crisis should justify food self-sufficiency-oriented debates. Although Japan has low arable land (12-16% of total land mass), it should strive for food sovereignty or at least a higher level than is currently the case. The debate has developed from food security to a more political-economy-appealing 'food sovereignty'.

Classical food sovereignty is a system that recognises the peasant/farmer as the central subject in the current food regime crisis and who can develop a progmatic approach to restore the viability of the countryside (McMichael, 2009). It entails a struggle against unequal economic relations and dispossession through land grabbing as well as promoting agro-ecological production. Although the debate has traditionally been pushed by developing countries in reaction to the structural adjustment economics in the 1990s and liberalised markets, developed countries can no longer ignore it. It varies in form/scope between developed and developing countries. If any of the nationalistic oriented policies pursued by the USA are to go by, it will be too risky for a nation to rely on food markets dominated by just a few players. In July 1973, the USA imposed an embargo on soybean exports, and this greatly affected Japanese food markets which, at that time, imported 93% of their soybeans from the USA. Given that Japan is conscious of the negative consequences of over relying on the USA for its soybeans, it is expected that they would support the food sovereignty debate.

Japan is a small island with limited resources but exports a lot of cars, vehicle spares, and IT products. This may justify its continued over-reliance on trade and food imports to sustain itself. Moreover, with the 'change in consumer preferences' towards foods that it does not actually produce, Japan is poised for a major problem. In later sections, we describe how this change in taste and preferences can be explained through the analogy of a drug dealer and drug user. The drug dealer hooks a drug user on a drug by providing it at a very cheap price, but later begins to increase the price of the drug. Food is provided

at cheap prices such that a country itself stops producing it and predominantly relies on markets or puts itself entirely at the mercy of the markets. This is the same argument as made by McMichael (2014) who says that the global food regime results in the suppression of agricultural product prices in rural areas followed by a shock-increase once the regime is in control of the food markets. The 2007/8 global food crisis can be cited as an example in this case. The food regime theory pushed by McMichael and Freedman (1989) contends that there were deliberate efforts to centralise food production even before World War I.

The Food Control System

A discussion of Japan's food security would not be complete without a brief conversation of the Food Control System established in 1942; and how food sovereignty, cultural preservation, small rice community culture, traditional landscape, and symbolic food crop principles were at the centre of farmers' resistance (Francks, 1998, p. 13). Legally, all rice supplies were organised through the government up to 1968. In 1969, a proportion rice production could be sold directly by the licenced organisations to the wholesalers. This began the convergence towards neo-liberal agricultural markets. Government-marketed rice (GM) was that rice sold exclusively through the government: farmers would sell rice to the government through their cooperatives or provincial organisations, before the government sold it on to retailers and consumers. There was also Voluntarily Marketed (VM) rice, which was any rice that was marketed to retailers and consumers through government-approved dealers. From 1969, the accredited rice handlers, comprising cooperatives at prefectural and district levels, could now sell rice to the retailers as well as consumers. The price of VM was based on the price of GM. However, as the neo-liberal agenda took root, Free Market rice (FM) emerged, in this case comprising anyone with rice to sell, from producers to cooperatives, and any company could sell their rice to retailers or consumers. It is vital to note that rice took prominence in the 'Food Control System' to such an extent that it would not be nonsensical to call the regime the 'rice control system'. This signifies the importance of rice in Japan and hence the need for a stronger stand when it comes to its production (Mishima, 1992, p. 43).

Although the law stabilised the rice markets, there were outcries inside and

outside Japan at the disbanding of the law since Japan had joined the General Agreements on Trade and Tariffs (GATT) in 1955, and hence had to abide by the rules to maintain unfettered markets. Francks (1998) supports this, writing that much of the pressure to open rice markets emanated from the outside. Disputes with the USA over trade in beef and oranges are well documented examples (Francks, 1998, p. 11). She reports that the US Rice Millers Association was one of the largest companies outside Japan to push for free movement of rice between the US and Japan. The politicians were considering it while facing much domestic resistance, mainly from the farmers through their cooperatives. The government ultimately accepted the gradual opening of the markets. When the law was eventually passed, the farmers were the greatest losers since the cooperatives were representatives of the farmers' voices.

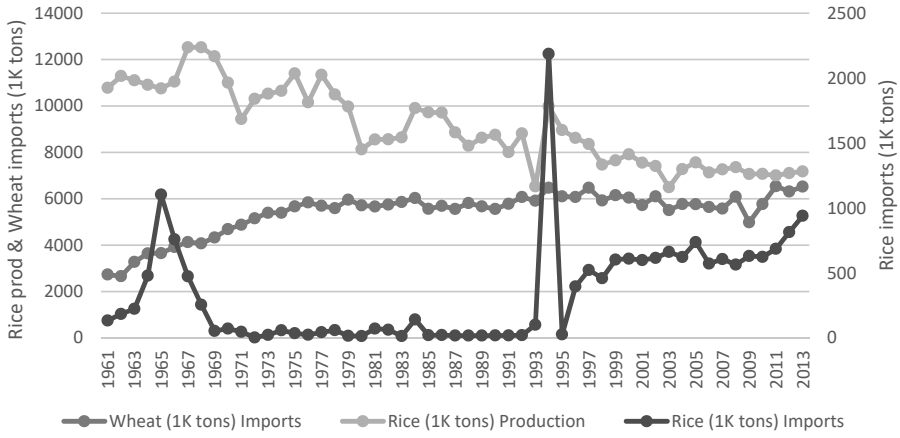
The new law simply removed the need to sell rice to the government; thus, government control of supply and demand and thereby of prices, as well as control of the channels through which rice could be marketed, ceased. This resembled more the FM rice during the food control system era. Although the cooperatives had lost out when the old law was disbanded, they continued to play an important role in the new food law in which they became the major private channels through which rice was sold. The new law gave more work to the cooperatives as they could make their own decisions regarding the amounts and timing of offloading their rice on the market. This, however, had a negative effect on the rice markets as they became highly unstable, thus increasing the chances of food insecurity and infringement of food sovereignty. Cooperatives, who were now at the forefront of these markets, faced greater marketing risk which they had formerly shared with the government. Additionally, with unfettered markets came large-scale commercial farmers who had the power to drive out 'less efficient' rice producers. The rate was accelerated by increasing competition and lack of price control. The new law greatly disadvantaged those farmers who were represented by the cooperative and an increasing number were driven out of rice production, hence affecting rice food security and food sovereignty.

The food sovereignty debate

Food sovereignty is a relatively new term in relation to food security. Food security describes a situation in which a group of people have access to sufficient, safe, and nutritious food in a specified period. Food sovereignty broadens this concept, it is concerned with all the issues in food security, but also requires that the same group of people should have the right to produce that food and access food-producing resources. The former requires that a nation disregard the source and price of food as well as the knowledge of who paid for it, while the latter focuses on the superiority of own-food production over trade (La Via Campesina, 2007). Originally, food sovereignty debates were premised on a drive to re-establish the peasantry. This makes it more difficult to discuss food sovereignty in the context of a developed country such as Japan where the peasantry is said to have disappeared (Bernstein, 2003). However, the rural farmers in Japan, regardless of relative advancements in technology and the use of machinery for agricultural production, can still be argued to possess various other characteristics of peasants. The establishment of La Via Campesina by farmers from Europe, North America, and other developed countries seems to support the persistence of the peasantry in developed countries. Japanese farmers possess several peasant-like characteristics such as a heavy reliance on family labour; small land sizes; and a low participation rate in the rice marketing system. In this note, we think of them as *mechanised peasants*.

As highlighted above, rice production has significantly decreased over the last 50 years, not just due to lack of farmers capacity, but due to the higher cost of producing rice, high land costs, and over-investment in farm machinery (Kako, Gemma, & Ito, 1997). Moreover, as stipulated by free market principles, if rice imports are cheaper than locally produced rice, then more rice will be imported (see Figure 1). Although rice consumption has slightly decreased over the years, its importation has balanced local production and ensured food security for the Japanese. The opening up of the rice market in 1992 under the name '*The Basic Direction of New Policies for Food Agriculture and Rural Areas*' marked a turning point as the government withdrew its efforts to stabilise the rice markets through such instruments as the *rice diversion policy, rice distribution policy*, and *structural improvement policy* (ibid). There are several other factors

Figure 1: Production and importation of rice and wheat in Japan (1960-2014)



Source: FAOstats (2018)

that had significant effects on the decrease in rice demand, such as women's increased participation in society, strategies by food companies in promotion through media (e.g. TV). However, the effect of opening up of the rice market cannot be ignored as it marked the point at which the Japanese rice markets surrendered to the wills of the global *food regime*.

Friedmann coined the term *food regime* to refer to the global food production system and argued that it resembles a government of its own, with global rules, policies, and governors whose power transcends nationalistic boundaries (Friedmann, 1993; McMichael, 2009). In the discussion of food regimes, food crisis and the need for food sovereignty, it is important to note the continued concentration of power within the food regime towards the USA and Europe. There used to be a clash between the global north and global south, but the power relations have reconfigured within the global-north itself as observed in the case of Japan (McMichael, 2014). It can be argued that the need for food sovereignty was necessitated by the World Trade Organisation's (WTO) push for transnational agribusinesses (McMichael, 2014, p. 2). La Via Campesina (2000) calls the WTO rules '*an imposition that has negatively affected rural livelihoods, cultural norms and the environment*'. The concept of food sovereignty contests David Ricardo's theory of comparative advantage which is the fulcrum or pith of international trade and globalisation.

The food security movement is not a plea to re-establish the peasantry, but it

is about reducing the commodification of food which eventually threatens food security. Of concern for Japan, as addressed by this note, is not necessarily the increase in the amount of rice being imported (instead of being produced locally), but the need to thoroughly peruse the supposed change in consumer preference in favour of Western foods such as wheat products. As shown in Figure 1, a decrease in rice production has been offset by a steady increase in wheat imports since the 1960s. The data presented asks three questions of whether it is a case of cheaper imports ahead of expensive local production; or a case of rational consumer behaviour as they attempt to maximise utility; or alternatively, is it a global adjustment within the food regime system? The data shown in Figure 1 play well into the food regime and food sovereignty debate.

Debunking the change in taste and preference rhetoric

The conventional microeconomic theory provides that consumer taste and preference are a function of demand for a good. In this sense, several contemporary scholars on Japan have partly attributed the decrease in rice production and consumption to changes in the taste, preferences, and eating habits of Japanese society. However, how does a society change in this respect? Is it a natural process? What are the drivers of these changes? In general, food demand takes two forms, demand for nutrition or demand for taste, and most micro-economic analyses focus on the latter (Becker, 1965). The demand for taste is affected by the income, household size, age of household head, culture, and rate of urbanisation, amongst other factors (Drichoutis & Lazaridis, 2008). This means that a Japanese consumer chooses between consuming rice or (for example) wheat depending on the above factors. Given the rapid rural-urban migration and massive improvements in disposable income during the 1960s, it is easier to understand how consumers would change their tastes from inferior goods (whose demand declines with rise in income, like rice or wheat) towards normal goods (whose demand increases with income, like meat products) (Kako, Gemma, & Ito, 1997, p. 194). However, this does not adequately explain the change from rice to wheat consumption since both are essentially inferior goods.

McMichael and Friedmann provide some answers through their work on the food regime theory. This theory explains the global agricultural system and

how it fits within the global capitalist economy through the control and manipulation of national agricultural sectors (Friedmann & McMichael, 1989). It argues that the way food is produced and distributed worldwide does not entirely depend on the supply and demand of those products but rather on laws, governments, and global policies that exist to govern this regime. There are basically three distinguishable food regimes (1870s-1930s, 1940s-1970s, and 1980s-present), and the supposed beginning of the Japanese change (1960s) in taste and preferences coincides with the second. The second food regime was characterised by massive outflows of surplus food from the USA to selected formal and informal empires in post-colonial states where they supported developing countries in exchange for cooperation against communism (McMichael, 2009, pp. 141-147; Friedmann, 1993). In the aftermath of World War II, Japan became a vantage point for the USA's fight against communism in Asia. By 1952, the SCAP's presence in Japan had brought massive changes to the economy (tax reforms, destruction of the Zaibatsu, liberalisation); politics (new constitution, demilitarisation); society, and culture. With income rising and rural-urban migration at its peak, Japan was encouraged to internalise the model of national agro-industrialisation, instituting land reform to dampen peasant revolt since the land reform was inevitable (see McMichael (2009, p. 141); Dore (2012)). The rationale for this was very simple: the New Deal Farm Programs in the USA were very successful and were producing a surplus that needed to be disposed off somewhere (even by mercantile means) (Friedmann, 1993, pp. 31-32). The second food regime was formulated between 1945 and 1949, and in this period the General Agreement on Trade and Tariffs (GATT, now known as the World Trade Organisation-WTO) was established. Following WWII, a rapid shift occurred in the food order, and grains from the USA began to flow towards formerly self-sufficient countries (*ibid*).

Examination of these factors leads us to interrogate the simple narrative that changes in consumer tastes and preferences account for the rise in consumption of foreign foods. Scholars seem to overlook the works of Friedmann and McMichael (1989) on food regimes and the existence of a 'food government' which has specified rules and laws on how food should be produced and distributed on a global scale. The contemporary issues within the food regime and sovereignty discourse also include i) food price inflations, ii) dumping of food and the fall of farm prices, and iii) ecological issues. Other scholars have

proposed the international/global convergence of tastes theory, in which one culture affects other cultures and *vice versa*, and hence taste and preferences are affected by an equal exchange of world cultures. This theory seems to overlook the presence of dominant cultures. The truth is that some cultures are so aggressive that they not only dominate others but even impose their products on the less dominant one (which becomes a market for the products of the dominant culture). La Via Campesina also argues that the GATT/WTO's policies provide to local consumers cheap, low-quality food products produced under environmentally and labour unfriendly conditions. Thus, the change in taste and preference is involuntary and works as a culturally destructive movement (La Via Campensino, 2000). Indeed, people and their culture are embedded in the food they eat, and as such, a Japanese society that does not consume its locally produced rice would seem to have lost part of its culture.

Food Culture in Japan

Around the Meiji period (after the seclusion period of Edo), through its interaction with the outside world such as China and Korea, Japan developed its own special cuisine which set its food culture (and its culture in general) apart from other Asian countries. The food that came to be known as Japanese included rice and fish because these were the readily available foods that could be locally produced. Such meals were called *ichiju-san-sai* because they comprised one bowl of rice, one bowl of vegetables, one bowl of soup, and one bowl of protein (usually fish). This formed the basis of Japanese food culture which can still be observed in contemporary Japanese restaurants countrywide. Japanese cuisine (particularly the *koshihikari* rice and *sake*) were added to the UNESCO list of intangible cultural heritages in 2013 (Pons, 2015).

Both food preparation and consumption were not merely a means to replenish the body, but it was also an art and a science. The care and detail that went into the preparation, the utensils used to cook, and the cutlery used when eating were immaculate. Meals were carefully planned so that each meal contained the right amounts of important nutrients and minerals to form a balanced diet. A balanced diet meant a healthy society with very low instances of obesity and less strain on the health system and economy. This affected the whole of Japanese culture. However, with the entry of Western foods, much of this is

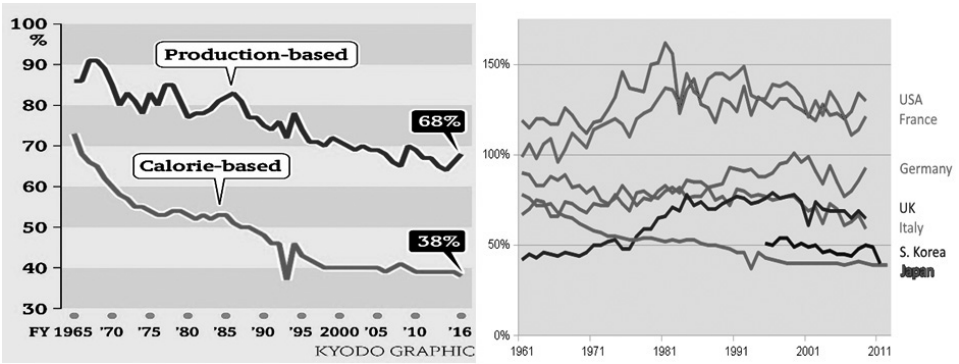
changing (one might argue for the worse). Food was a definite and appropriate channel for understanding Japanese life. Cooked rice is called *gohan* in Japanese, a word which may be used to refer to the whole meal, thus signifying the importance of rice. The same goes for the wine (*sake*); although this type of beverage is brewed across Asia, in Japan rice wine is called *nihonshu*, meaning Japanese wine and hence signifying the uniqueness of the culture in a beverage (Pons, 2015). The various international deals and free trade negotiations which shifted taste and preferences have come as a threat, not only to food security, but to the unique Japanese food culture and festivals, rituals, the environment, and the Shinto religion. Food also affects politics as evidenced in the keen government interest in agriculture and food-related policies.

Japan's food self-sufficiency ratio

The MAFF has been attempting to promote food self-sufficiency as testified by the last 20 annual reports on food, agriculture, and rural areas. This reflects how government efforts towards food sovereignty despite presenting the policy as food self-sufficiency throughout its various policy documents. The food self-sufficiency index, which is a ratio of total domestic supply to the total domestic consumption, can be calculated on a production basis or a calorie level basis. The calorie-based index is (expressed as a percentage) the amount of daily calorie supply from locally produced food over the calorie supply from all food sources. The higher the value, the more self-sufficient the country is. The production-based index is a ratio of the value of national output in relation to the value of the requirements of the country. Most of the MAFF report underscored the accuracy of the calorie value (which stood at 36% in 2012) since the production-based index (which stood at 66% in 2012) depends on the market conditions where price fluctuates exist (Godo, 2013). In the 1970s, this calorie-based index exceeded 70%, and then fluctuated at around 40% in the 1990s and 2000s (Figure 2a).

Until the 1980s, the Japanese government had confidence and trust in the strength of the global markets, and it made more sense to apply David Ricardo's theory of 'comparative advantage' which encourages countries which had an advantage in food production to engage in trade with Japan through such channels as the Trans-Pacific Partnerships. The 2007/8 world food crisis

Figure 2: (a) Production/calorie-based food self-sufficiency rates in Japan
(b) Food self-sufficiency rates of developed countries (1960-2016)



Source: (Japan Times, 2017)

brought the need to be analytical of open markets and also the need for more self-sufficiency efforts by the year 2020. Increasingly, people consumed Western foods (洋食 *yoshoku*) which affected Japanese traditional food (和食 *washoku*). Godo (2013) further argues that changes in land-use patterns had a huge effect on rice production and calculation of the calorie-based value. A considerable number of farmers began rearing cattle, initially using own grown stock-feeds, but they later had to rely on cheaper stock-feeds from the USA, Canada, and Australia. Almost all the stock-feeds used by one of the farmers we interviewed in Osaka prefecture were either from the USA or Canada. Furthermore, none of the livestock produced using imported stock feeds are included in the calculation of the calorie-based value. Thus, the increasing use of imported stock feeds translates to a lower calorie-based self-sufficiency index. Currently, Japan can produce 36% of its food requirements while importing up to 60% (Nishikawa, 2014). This simply means that Japan's food sovereignty index is the lowest among the developed countries (Figure 2b).

Although the MAFF (with the help of the Japanese Agricultural Cooperatives-JA) has been trying to encourage farmers to produce more local rice, wheat, and soybean, their policies are yet to bear meaningful fruit. They specifically targeted these three crops because they have a high-calorie value, and since the sufficiency index is calorie-based, targeting these three would have a higher impact on the self-sufficiency ratio. While good policies have been implemented, such as double cropping, regulating imports to encourage local

production, subsidies, and research & development into alternative uses of rice, the greatest challenge has been the high cost of producing rice (or wheat and soybean) in Japan (Godo, 2013). Thus, given the neo-liberal economic model pursued by the state, it would always make sense to import cheaper rice and wheat. The government also needs to go beyond the state-cooperative relationships and include the local government authorities. Agricultural productivity varies according to prefectural, municipal and local community conditions. Information about these conditions is known in greater detail by the local governments and hence the national government needs to acknowledge and utilize them. Topical Japanese rural issues such as the aging farmers and younger farmers; full time and part-time farmers; family farming and commercial farming can best be solved through massive decreases in information asymmetries. The use of the local government authorities throughout the 47 prefectures can solve a significant number of asymmetries (MHRI, 2017, p. 6).

The MAFF has also attempted to influence consumer behaviour by conducting several '*buy Japanese rice*' campaigns. Locally produced rice has been marketed as better tasting with by-products of a higher quality than imported ones. Additionally, funding has been allocated to promotions such as the *Kokupo* project, in which points were given to consumers who purchased Japanese rice (Godo, 2013). Documentaries, TV programmes, and leaflets (Figure 3) are some of the ways in which the government is trying to promote a 'buy Japanese food' campaign.

Figure 3: MAFF brochure encouraging consumption of more domestic products

Source: MAFF (2018, p. 15)

The effect of these programs is yet to be substantial. Approximately 90% of all the wheat consumed in Japan is imported. This wheat is mainly used to make bread and (Chinese) noodles while Japanese-produced noodles such as *udon* use 70% of the locally produced wheat. This reflects the heavy dependence on the international/global market for food in Japan which is particularly dangerous if any global shocks such as the 2008 food crisis should occur. These shocks will occur more frequently as the neo-liberal production progresses (Amin, 2018).

Conclusion

We conclude that the opening of the rice market had a negative effect on local rice production as demand for it dropped. Hence, the overall demand for rice has decreased as people eat cheaper imported rice as well as favouring more Westernised meals. We have argued that the more Japanese society relies on international markets, the more they risk food insecurity, environmental degradation, and cultural decay. Most importantly, using the political economy approach, this article played down the 'changes in taste and preferences theory' and, concludes that it is not a natural phenomenon whereby consumers voluntarily choose wheat over rice, but is, rather, part of the bigger global political economy of the food regimes movement. The roots of this global movement rest in the occupation of Japan after WWII and the subsequent introduction of Western culture (food products and lifestyle). The government, the JA, the local government authorities and all stakeholders need to discuss/acknowledge food sovereignty issues within the framework of food regimes.

References

Amin, S. (2018, May 3). There is a structural crisis of contemporary capitalism. (J. Jipson, & P. M. Jitheesh, Interviewers) Retrieved from https://portside.org/2018-05-03/there-structural-crisis-capitalism

Becker, G. (1965). A theory of the allocation of time. *The Economic Journal, 75*(299), 493-517.

Bernstein, H. (2003). Farewell to the peasantry. *African e-Journals, 52*, 1-19. Retrieved from http://digital.lib.msu.edu/projects/africanjournals/

Dore, R. (2012). *Land reform in Japan*. London: The Athlone Press Ltd.

Drichoutis, A. C., & Lazaridis, P. (2008). What influences tastes? An analysis f the determinants of consumers' demand for tastes in Food. *Agricultural economic review, 9*(1), 55-69. Retrieved from http://www.eng.auth.gr/mattas/9_1_4.pdf

FAOstats. (2016). *FAO*. Retrieved August 14, 2018

Francks, P. (1998). Agriculture and the state in industrial East Asia: the rise and fall of the food control system in Japan. *Japan Fourm, 10*(1), 1-16. doi:10.1080/09555809808721600

Friedmann, H. (1993). The political economy of food: A global crisis. *New left review, 1*(197), 29-57. Retrieved from https://newleftreview.org/I/197/harriet-friedmann-the-political-economy-of-food-a-global-crisis

Friedmann, H., & McMichael, P. (1989). Agriculture and the State System: the Rise and Decline of National Agricultures, 1870 to the Present. *Sociologica Ruralis, 29*(2), 93-117.

Godo, Y. (2013). *Japan's food self-sufficiency ratio*. Taipei: Food and Fertilizer Technology Center- Asian Pacific (FFTC-AP). Retrieved from http://ap.fftc.agnet.org/

Japan Times. (2017, August). *Nation's food self-sufficiency rate hits 23-year low as rice consumption decline continues*. Retrieved August 12, 2018, from https://www.japantimes.co.jp/news/2017/08/10/business/japans-food-self-sufficiency-rate-hits-23-year-low-rice-consumption-decline-continues/#.W5ua_HVMSwc

Kako, T., Gemma, M., & Ito, S. (1997). Implication of the minimum access rice import on supply and demand balance of rice in Japan. *Agricultural Economics, 16*, 193-204.

La Via Campensino. (2000). Bangalore Declaration Of The Via Campesina. Bingalore: La Via Campesina. Retrieved from https://viacampesina.org/en/bangalore-declaration-of-the-via-campesina/

La Via Campesina. (2007, February 27). *The 2007 Declaration of Nyeleni*. Retrieved Septermber 21, 2018, from Nyeleni.org: https://nyeleni.org/spip.php?article290

MAFF. (2018). *2017 Summary of the annual report on food, agriculture and rural areas in Japan*. Tokyo: Government of Japan.

McMichael, P. (2009). Food sovereignty, social reproduction and the agrarian question. In A. H. Akram-Lodhi, & C. Kay, *Peasants and globalization: political economy, rural* (pp. 288–312). London: Routledge.

McMichael, P. (2009). The food regime genealogy. *The Journal of Peasant studies, 36*(1), 139-169. doi:10.1080/03066150902820354

McMichael, P. (2014). Historicizing food sovereignty,. *The Journal of Peasant Studies*, 1-27. doi:10.1080/03066150.2013.876999

MHRI. (2017). *Mizuho economic outlook and analysis: Regional characteristics of Japanese agriculture as revealed by data*. Tokyo: Mizuho Research Institute.

Mishima, T. (1992). Changes of the rice distribution and the functions of the food control

system. *Agricultural Economics, 7*, 39-54.
Nishikawa, K. (2014). *Japanese agricultural policy reforms after FY 2014 (Part 1 & 2)*. Taipei: FFTC.
Pons, P. (2015). *Japan's changing food tastes are hard to swallow for rice and sake enthusiasts*. Retrieved September 02, 2018, from https://www.theguardian.com/lifeandstyle/2015/jun/05/japan-changing-food-tastes-rice-sake
Tang, J., & MacLeod, C. (2006, May). Labour Force Ageing and Productivity Performance in Canada. *The Canadian Journal of Economics / Revue canadienne d'Economique, 39*(2), 582-603. Retrieved from http://www.jstor.org/stable/3696170
Teruoka, S. (2008). *Agriculture in the Modernizaion of Japan 1850-2000*. New Delhi: Manohar Publishers & Distributors.

Abstract

Food self-sufficiency and food sovereignty: Examining the fallacy of the 'change in taste and preferences' mantra in the evolution of the Japanese rice system.

Rangarirai Gavin Muchetu

Although agricultural contribution to the Japanese national output has been under 3% in the last decade, it remains a vital basis for rural reproduction (food sovereignty), cultural symbolism, and national environmental preservation. Despite the recent diversification of people's diet, rice - grown on approximately 40% of the cultivated land - remains a major source of carbohydrates. However, rice production has been decreasing due to trade reforms that saw more imports from abroad from the late 1980s, inciting food sovereignty debates among scholars. On the other hand, food sovereignty inspired efforts have been made by the Ministry of Agriculture, Forestry and Fisheries. Several policy reform propositions aim to increase rice production to 50% self-sufficiency levels by 2020 (Godo, 2013). Consumer economics place the change in taste and presences at the fore of the fall in the consumption of rice in Japan. However, we argue that this narrative ignores the omnipresent hegemony of the food regime. This research note examines and discusses the evolution of the rice production, consumption and exchange within the food sovereignty thus providing an alternative view on the change in tastes and preferences discourse as a chief factor of decreases in rice consumption.

Key words

Food sovereignty, food security, self-sufficiency, rice production, taste and preferences