SUMMARY REPORT

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OECD Co-operative Research Programme Fellowship 7855 - Governance of Satoyama in Japan

Host Institution: Kyoto University Graduate School of Agriculture, Laboratory of Landscape Architecture

Collaborating partner: Dr Katsue Fukamachi, Assistant Professor of Landscape Architecture

Dates of Fellowship: 26 June to 31 July 2017 and 21 September to 20 October 2017.

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Tamet Inge

OECD CRP Fellowship Report – studying Governance of 'Satoyama' in Japan

1. Fellowship aims

Seeking innovation in policy is critical to the future sustainable management of natural capital. In many areas of the developed and developing world, communities and nature have co-evolved, creating a complex inter-dependency supporting biodiverse and culturally-rich environments. Today, many of these areas are threatened by the parallel trends of industrialisation and of rural neglect, marginalisation and abandonment. This fellowship has sought to capture lessons and stimulate new thinking in how best to enable appropriate, active management of high-value natural and cultural landscapes into the future, via government policies.

As a visiting researcher in Japan, I was hosted by Assistant Professor Katsue Fukamachi whose career has long been dedicated to promoting better understanding of how people can 'live in harmony with nature', through research focused upon traditional cultures, practices and ecological interdependency. Her work has centred on local knowledge and networks in Satoyama, and deepening scientific understanding of the value of these relationships.

My interest was to investigate how the ideas and principles behind Japan's internationally-promoted 'Satoyama Initiative' were played out within its own policies and in particular, how they were affecting, or affected by, evolving agricultural and rural development policies. I hoped to see whether Japanese experience could offer new insights for promoting more sustainable agriculture and rural development in Europe and more specifically, the UK in the context of Brexit.

The research aims were four-fold:

- 1. to understand how policies at national, regional and local levels have supported or hindered the growth and development of Satoyama initiatives and actions across Japan,
- 2. to compare this experience with emerging contemporary UK landscape-scale experiments and understanding in policy, thus
- 3. to generate innovative approaches to sustainable land and natural resources management in high value cultural landscapes, to inform future UK, EU and Japanese policy
- 4. to contribute these findings to the growing international body of research on policies for sustainable management of land and nature and to develop and extend fruitful Anglo-Japanese research collaborations on this topic.

2. Were the objectives of the fellowship achieved?

During my fellowship, I met a wide range of agri-rural actors, from national policymakers and academics to local community groups, NGO activists and officials. I visited areas and communities in the Prefectures of Kyoto, Shiga and Fukui in Southern and Central Honshu (Japan's main island) with some of the longest-settled and most traditional Japanese landscapes. I also spent a week in Hokkaido, Japan's north Island, which was settled and developed for agriculture by Japanese colonists in the 19th and 20th centuries. Here, managed landscapes are newer, larger-scale and still developing. I also explored a wide range of policy and academic literature, aiming to deepen my understanding of contemporary issues and policy priorities, and I participated in seminars and discussions on relevant topics at Universities and research institutes in Kyoto and Tokyo.

During the two months between my two visits to Japan, I also co-hosted two major sessions at International Conferences in Europe on the themes underlying my fellowship and the ongoing PEGASUS project (www.ieep-pegasus.eu) in which I am still engaged, investigating similar challenges in the EU. Dr Fukamachi attended and presented at one of these – the IALE conference in

Ghent – and we were together able to begin to make valuable comparisons between European and Japanese experience in cultural landscape management and policy.

My research has, I believe, already proven relevant to the potential improvement of Japan's agricultural and food policies, as well as to international thinking and ongoing evolution of enhanced strategies for cultural landscapes more generally. My intention was also that it would enable the identification of innovative governance approaches through comparative analysis of Japanese and European experience. I have to admit that, with hindsight, this aim will take longer to be achieved, developing ideas via the collaborative links that I established during my fellowship. I saw positive and impressive local action in Japan but on the whole, I saw limited evidence of real policy innovation.

With hindsight, I believe that I have, in large part, achieved Objectives 1, 2 and 4 of the fellowship; while Objective 3 has proven more challenging than I had anticipated. I hope to be able to make some key suggestions concerning potential innovative approaches, but I don't believe that my experience in Japan translates quickly or simply into a recipe for innovation in UK or Japan, as yet.

3. Achievements

This section gives background and context, and then covers my main findings from the Fellowship.

Background – the Satoyama concept in Japanese policy

'Satoyama' – which literally means sato (里) - arable and habitable or home land, and yama (山) - hill or mountain, is a word used to encapsulate traditional cultural landscapes in Japan where centuries of agricultural and forest management have fostered biodiverse landscape mosaics. Satoyama was found originally at the interface between forested mountains and valley bottoms or plains, and was where small-scale subsistence farming in Japan was first developed. Since the late 1990s, Satoyama has become prominent in Japanese thinking about sustainable land management. In 2010 at the Tenth Conference of the Parties to the Convention on Biological Diversity, in Nagoya, the Japanese government launched its 'Satoyama Initiative' (SI), promoting a global ideal based upon conserving biodiversity by sustaining active management of 'Social-Ecological Production Landscapes' (SEPL), wherever they occur. The SI secretariat is based in Tokyo at the UN University (UNU) and supported by Japan's Environment Ministry. It promotes international networking and good practice via events and publications, and has a growing membership from all continents but particularly Asia and Africa.

The Satoyama concept: described as 'societies living in harmony with nature' and focused upon SEPL; was developed by Japan via a major national survey in 2007-2010. The survey's findings – that over 40% of Japan's biodiversity depends on SEPL and their continued management – fed directly into Japan's Biodiversity Strategy 2010, which calls for agriculture to 'utilise the circular function of nature, employing methods which put more importance on conservation of biodiversity', and to promote 'conservation-oriented agriculture, including organic farming'.

Since the launch of the Biodiversity Strategy in 2010, Japan has promoted networking and support for individual local initiatives to protect and enhance Satoyama. In parallel, effort has been invested in launching and developing the international SI. There has been ongoing work at UNU to advise and co-ordinate these activities but as yet, they appear to have had only marginal influence on wider government policies.

Selected key findings/achievements

3.1 Japanese 'mainstreaming' of the Satoyama concept and values within its agri-rural policies has not yet been achieved

I have developed an appreciation that Japan, like Europe, faces many challenges in seeking to 'mainstream' the aspirations of the SI within its own agricultural and rural economic policies. For the

most part, it appears that the key sectoral and economic policies are insufficiently cognisant of the value and potential of Satoyama to enable them to appreciate and genuinely pursue sustainable rural development. As a result, the majority of these cultural landscapes in Japan are threatened either by neglect / abandonment as an older generation of farmers retires or dies; or by loss to built development or industrial agriculture, over the next 20 years.

Farm policy has responded to external pressures to open Japanese markets to international trade, and is trying to cope with an aging and declining agri-rural population and a younger, urban generation adopting increasingly western-style diets, by increased dependence upon an agro-industrial production model imported from the USA, involving large indoor, intensive dairy, meat and horticulture sectors. The prospect of widespread abandonment of small family-based farming systems, as the current generation dies and protectionist policies are relaxed, is therefore a real one. Likewise, we can expect an increasing share of Japanese dietary supplies coming from intensive indoor production, as well as continuing Japanese dependence upon imports from other developed nations. These trends will not be significantly affected by the retention of targeted support to farmers in marginal areas – as this support is given at too low a level to materially affect those farming only very small areas (the average farm size in many Satoyama areas is well under 1ha).

Under the new Agriculture Plan (2015), moves:

- to remove price support for rice by 2018,
- to maintain support for other crops and support for hilly areas and
- to invest in new markets for rice including animal feed and processed products,

will not likely provide sufficient incentive to attract a new generation of part-time farmers to tend the small-scale mosaics that define extant Satoyama. If anything, the policy focus upon restructuring and freeing up the market for corporate farm management and technological innovation is likely to accelerate decline in these areas, as support becomes more concentrated upon larger-scale, 'certified' farm holdings.

Rural and local development policies certainly aspire to more bottom-up, innovative approaches echoing the Global Sustainable Development Goals, with a suite of regional regeneration projects across the territory. However, patchy performance which is linked to competitive and short-term funding packages seems insufficient to stem the degenerative cycles which continue to threaten the survival of active land management, in many rural areas. Citizen action, in the form of pioneering students, village communities and NGOs promoting organic farming and sustainable forest management, and local Councils investing in farmers' markets, cultural festivals, environmental education and green tourism, provide inspiring and locally-successful examples of how nature, culture and place can be fruitfully re-integrated. But there is also widespread evidence of local governments spending significant capital funding on buildings and infrastructure for rural community purposes, when these alone cannot stem the tide of depopulation or maintain community vitality.

The challenge now must be to identify how the good examples of positive local action and self-help in rural areas could become part of something bigger and more sustained, to present an attractive business and lifestyle model for a much larger proportion of Japan's younger generation, upon whom its future landscape management and biodiversity will ultimately depend. Japan's rural infrastructure is much more extensive than would be the case in many parts of rural UK: facilities are generally good and communications and transport adequate. What is missing, it seems, is widespread demand among younger people for a specifically rural quality of life, or even a rural domicile from which to commute daily into major towns and cities.

I therefore plan to spend more time developing some ideas for change in rural and agricultural policies with my collaborating partners in Kyoto, Hokkaido and Tokyo, writing papers and organising suitable events that could make a contribution towards addressing these challenges.

3.2 New possibilities exist for cultural landscape creation and valorisation within 'other-than-traditional' contexts

During my time in Japan, I made a point of seeking to identify how Japanese land managers, local communities, stakeholder bodies and academic researchers appreciated and responded to notions of landscape character and quality. I discovered that there are no widespread policies for landscape characterisation similar to those in place within the UK. Thus the explicit sense of 'landscape' as a valuable asset appears only tangibly and explicitly recognised in those parts of the country with a centuries-old established tradition of cultural landscape management —as epitomised by the classic image of 'Satoyama' and 'Satoumi' (coastal areas with similar properties). Possibly, it is also seen in the larger-scale context of the mountain massifs which run along the inland 'spine' of the country and which have shaped much of the religious thinking and focus of Japanese culture.

Nevertheless, it was very clear to me that in the 'new' landscapes in Hokkaido, northern Japan, particular features, patterns and textures were strongly characteristic of different places and the cultural practices associated with them, and were tacitly appreciated and valued by local people in many ways. Discussing Japan's response to the 2013 Fukushima earthquake and tsunami with colleagues in Kyoto also highlighted how, even in these severely damaged areas, new landscapes are emerging and with them, new potentially harmonious relationships between people and nature.

This raises the exciting prospect of developing a new appreciation of landscape character and its transformative value as a guiding principle in Japan's future land use and land management policies. For instance, celebrating the distinctive features of Hokkaido's 'bamboo hedgerows' and tree lines criss-crossing the farmed valleys and plains, also understanding their role in soil conservation, biodiversity protection and micro-climate regulation, would be valuable. Furthermore, considering how forest management and extraction, as well as commercial exploitation of the overly-high numbers of deer and wild boar in these areas, can be sensitively aligned with efforts to strengthen landscape character and (re)-build links between people and place, could help to enhance the sustainable evolution of these areas in the coming decades.

3.3 There is much common ground between UK/European and Japanese research on these topics, and co-learning by comparison suggests many areas for further investigation

There are many interesting points to note on this front: I give just a few illustrations, below.

One significant area of contrast between Japan and England is the scale of local government and its relationship with community cohesion and initiative. In England, a real scarcity of local government resources – both staff and funding – has meant that local communities have to rely very heavily upon voluntary effort, planning laws and limited private philanthropy to achieve positive development outcomes, whereas in Japan, local government has a pivotal role in facilitating both investment and ongoing action. It could be valuable for Japan and the UK to each learn something from the other's approach, in seeking more resilient and innovative institutions for the future. I would be keen to seek opportunities for further work to analyse the case for stronger local government, using examples from these two nations and perhaps working with UK NGOs such as the Rural Services Network, with whom CCRI (my Institute) already has a positive collaborative relationship. And as Japan comes under increasing pressure to reduce its public sector as a likely result of continuing liberalisation, it will most likely need to consider tactics to enhance non-governmental capacity to plan and act in these situations, which gives potential for learning from UK experience.

Another area which was highlighted during my time in Japan was that of animal welfare in modern agriculture – largely because it seems an almost completely unremarked aspect of the new industrial agriculture model which I saw being taken up increasingly, there. In the UK, concern for animal welfare has been a key driver of policy development in many spheres, including agriculture. In Japan, I learned that it was recognised and valued but almost exclusively in a domestic arena, confined to concerns about pets, and mainly among the younger generation of urban consumers whose knowledge

of agriculture was universally described to me as very limited. There could be latent potential here, it seems, for a cultural turn which could help to support the Satoyama agenda in a novel way – exploring what 'living in harmony with nature' could imply for our relationship with the food that we choose to eat. This is a well-developed concept in Europe; it would be something new for Japan but it could dovetail with the Agriculture Plan's exhortation for Japanese people to recognise and strengthen their appreciation of the traditional Japanese diet, based around rice, fish and vegetables rather than meat and dairy.

Making direct comparison between the variety of local initiatives that I saw in Japan, and those that have been studied in the PEGASUS project in Europe, there are strong similarities in respect of local action and awareness-raising, and the processes by which 'people and nature' linkages are strengthened. What is different is the overarching framework and its impact. Both Europe and Japan pursue multiple goals from their rural areas and in respect of food, farming and local development. Both face situations of increasing public demand but insufficient local resource to sustain provision to match this demand. And both need to do more to link bottom-up positive actions with top-down strategic planning and resourcing so that the shortfall can be addressed. However, whereas the EU policy concern for sustainable development and 'greening' of agriculture is supported by widespread citizen and consumer awareness (still evolving), I perceive that Japan does not yet have this. And although the EU has significant rural areas that are suffering decline, it also has others where what the Japanese term the 'U-turn', 'J-turn' or 'no-turn' phenomena of people returning to rural areas are well-established, and rural populations and economies are growing. In rural England, this phenomenon is particularly marked: it has generated new challenges in respect of rural equity and sustainability. In Japan, I suspect that this same pattern will develop, in the next few decades.

4. Follow up work

I am developing an action plan for co-authored papers, looking at different aspects of the findings.

- One paper would be co-authored with Takahisa Hinata (Hokkaido research institute) and Katsue Fuamachi, and reflect on the Satoyama concept and its relevance and meaning in the 'new landscapes' of Hokkaido.
- A second paper will be more a reflection on the need for a mainstreaming of policy for sustainable agriculture in Japan, drawing upon my visits, conversations and reflections with different people whilst I was there. The main co-author for this would be Prof Mikitaro Shobayashi, from Gakushuin Womens' College in Tokyo, with whom I also spent key Fellowship time.
- A third paper would centre on Satoyama, culture and the core focus of the Fellowship, making comparisons between landscape value and policies in Japan and the EU, drawing also upon the outputs of the PEGASUS project. This would be co-authored with Dr Katsue Fukamachi.

These papers would be written in English and targeted to key international journals.

In addition, Dr Fukamachi and I plan to identify and apply for future resources to continue to collaborate and exchange. We are looking at the ORA fund for a potential three-way collaborative research project also involving partners at AgroParisTech, France, examining agricultural landscapes; and I am currently investigating the options for funding the exchange of junior research staff between CCRI and Kyoto University, on secondments offered by UK sources.

We also plan to seek support to host an international conference in 2019 on some of the topics arising from this fellowship and the associated research of the main collaborating partners. We are considering whether this might be a suitable candidate for a further CRP application – this time, under the conference sponsorship strand.

5. How might the results of your research project be important for helping develop regional, national or international agro-food, fisheries or forestry policies and, or practices, or be beneficial for society?

I believe I have already outlined the response to these questions in my summary of findings, in section three. The research should be beneficial for society in both Japan and Europe by helping to promote better policy-making to recognise and support active management of cultural landscapes.

- 6. How was this research relevant to:
- o The objects of the CRP?
- o The CRP research theme?

As stated on the OECD website, "the Co-operative Research Programme (CRP): Biological Resource Management for Sustainable Agricultural Systems, established in 1979, aims to strengthen scientific knowledge and provide relevant scientific information to feed into future policy decisions related to the sustainable use of natural resources, in the areas of food, agriculture, forests and fisheries."

The OECD theme under which this fellowship was supported is 'managing natural capital for the future'. This title refers to the challenges faced by society in attempting to protect and enhance the natural capital upon which it depends, for the long-term benefit of current and future generations. As stated in my application, seeking innovation in policy is critical to the future sustainable management of natural capital.

This fellowship has identified lessons and stimulated my thinking in how best to enable appropriate and continuing active management of high-value natural and cultural landscapes through various developments in policy at national and more local levels. It has therefore directly focused upon the central aims of the CRP, and upon policies and practices that should assist in future management of natural capital. Via publication and promotion of these ideas in partnership with my key Japanese coauthors and fellowship collaborators, I will ensure that they are disseminated among scientific researchers and policy makers in Europe and Japan.

7. Satisfaction

The Fellowship met and exceeded my expectations as an opportunity to refresh my learning and broaden my understanding of internationally-shared challenges and values. I met a range of valuable potential future collaborators, became more familiar with new policy arenas and challenges, and was able to reflect usefully upon where the UK and EU have been distinctive and could add value to international policy debates and developments. I also think that splitting the fellowship into two periods with a gap in between, enabled me to make the most of the opportunity by facilitating 'midterm review' of my experience and remaining knowledge gaps, to be addressed in the second visit.

However, the Fellowship was resource-constrained. I spent about 10% over the allocated sum for my travel and accommodation costs. This was partly my own choice as I had been unable to set aside a single block of time in which to take the fellowship and so decided to split it into two shorter episodes. It was also partly as a result of unfavourable exchange rate trends during the period, caused by market volatility related to the Brexit process. Nevertheless, I also believe that the costings used by OECD may have been rather lower than actual costs for this period, especially for my accommodation in Kyoto and Hokkaido, my travel around Japan – to Tokyo, around Kyoto/Shiga and Hokkaido - during my fellowship, and my UK travel costs to and from London Heathrow.

Nevertheless, I remain extremely grateful to have had this fellowship opportunity, at this critical time in UK and EU policy-making. Looking ahead, the ability to set aside a significant chunk of time during the remainder of this academic year will be critical for me, in order to develop the outputs and further proposals for collaboration that I have set out, here.

I thank the OECD for this valuable and unique experience, and will recommend the CRP to many others, in future.

8. Advertising the Co-operative Research Programme

I heard about CRP Fellowships via academic colleagues who had benefited from them in previous years: Christine Watson from SRUC was the person who particularly recommended this to me. I already knew about CRP funding for conferences and seminars as a result of being an invited speaker at two such events in Copenhagen (Dk) and Nitra (Sk), within the past ten years.

I would recommend that the Programme could promote Fellowship opportunities more clearly at its own sponsored conferences and seminars. However as the number of sponsored fellows is limited, I recognise the need to manage demand and this may mean that strong promotion to a wider number of potential beneficiaries, beyond these events, could be inappropriate. Promotion via selected, relevant academic societies at their regular conferences might be a useful development, if those running the CRP are seeking to increase awareness of these opportunities.

Janet Dwyer, December 2017