

Satoyama: Conservation and Revival

Anne McDonald, director for the Operating Unit Ishikawa/Kanazawa at the United Nations University Institute of Advanced Studies, offers a personal and professional take on some of the agricultural and environmental issues facing Japan from the perspective of satoyama and satoumi.

The Operating Unit Ishikawa/Kanazawa, which opened in April this year, is a community-based research institute under the direct supervision of the United Nations University Institute of Advanced Studies. There are another five programs around the world, but this is the first one to be set up in Asia.

At present, the United Nations has embarked on a survey of the world's ecosystems, the aim being an ecosystems version of the Intergovernmental Panel on Climate Change (IPCC), which sounded the alarm bells after conducting a comprehensive survey of global warming. As a part of this research, the Operating Units exist to sound out global issues from a community-based viewpoint. The overriding theme is sustainability, but since it is not possible to accomplish everything in one go, the plan for the time being is to conduct full-scale surveys and research of Japan's *satoyama* and *satoumi* [loosely, human interaction with traditional rural landscapes in the "mountains" and "coastal areas"] in order to present a sub-global assessment that pulls together the current status and an analysis of the satoyama and satoumi at the 10th session of the Conference of the Parties to the Convention on Biological Diversity (COP 10) planned for 2010 in Nagoya.

I have been fascinated by the rural culture in Japan and done fieldwork here for twenty years now. The position at the Operating Unit is an ideal opportunity that enables me to convey the wonderful rural culture of Japan to the wider world. So when I was tapped for director, I could only say yes.

Degrees of Intervention

The satoyama that we will be studying constitute a secondary natural environment where there has been intervention by human beings. The classic example is rice paddy landscapes. We are trying to explore whether human intervention makes it possible to conserve a richer natural landscape, and whether it is possible to both exploit and preserve resources.

In the existing environmental debate in Europe and North America, human intervention in the natural world leads to overuse which has been linked to the destruction of nature, but from my perspective, it is not the fact of human intervention itself that is the problem, but the degree of intervention, and there are times when a richer natural environment is sustained thanks to human intervention.

It is thought that satoyama account for about 40% of land in Japan, but we have now come to a turning point. For example, if we look at Noto peninsula, nature is not overused but underused in most of the satoyama because of the aging population and depopulation. Surely, this is also linked to the decline of the natural environment. So far, the debate about

the environment has been solely based on the viewpoint of overuse, but we will study the changes that are due to underuse, and present scientific evidence of the attendant potential for a decline in the riches that human beings obtain from the ecosystem.

So far, it would seem that emotional arguments have taken precedence with regards to the preservation of satoyama. But it is definitely not possible to protect the natural environment in this way nor is it possible to create ties with policymaking on the protection and usage of satoyama. I believe it is important to research the environmental economics and to make



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connections with the policies to protect the satoyama. Starting with the sub-global assessment at the COP 10 in two years time, we will continue with a first, second, third assessment report and so on, along the lines of the IPCC, and if, as a result, definite scientific evidence emerges, I think it

will connect to major trends.

In September this year, Dr. Ahmed Djoghlaflaf, executive secretary of the Convention on Biological Diversity at the United Nations, visited Japan and saw the satoyama landscape on Noto peninsula. At the time, he commented that not only is it possible to preserve nature by means of human intervention in the natural environment, but that a culture emerges where this happens and that there is a need to draw attention to its importance. Japan is a developed nation but since there still remains a characteristic ideology and culture that is rooted in nature and a perspective on nature,

main strong in Japan, but growth was tremendous here in the latter half of the twentieth century. For everything gained, something was lost and I believe that what was lost and what is still being lost constitute the greater part.


Plotting the Revival

In the fall of 1992, I thought I would go out into the field to see for myself the people that would support Japan's agricultural society in the future and setting myself the goal of "looking at the agricultural context, place by place, in all prefectures and municipalities," I started the life of a traveler

with us. By creating networks of young researchers, I believe that no matter what organization they join in the future, they will carry with them the intent of the Operating Unit. It is, of course, the young people who are responsible for the next generation so it is absolutely necessary for adults to form partnerships with them. I think it is an important issue to consider how to create networks with young people, and not just look in the direction of the top ranks of public administration or professors at universities.

There is a lot more that we have to do. A definition of "satoyama" already exists but "satoumi" is still to be done. To create the definition we must start from square one. Since Ishikawa Prefecture plans to announce policies for a strategic vision for the satoyama and satoumi at COP 10, we want to make sure they do a good job of it. The Operating Unit also has a partnership with the city and not only with the prefecture. As a matter of fact, there are also plans to hold a summit on cities and biodiversity concurrent with COP 10, so we are making preparations and attending international conferences together in order to create indicators together with Kanazawa city next year.

There are many other related things but I think one of my main roles is to create a place for dialog by mediating between researchers and public administration. Just like dialog is necessary in the home, dialog is also necessary in society. I believe a lot can be done if we can get administrators and specialists together to deal with one thing. Even though I just said that I think the agricultural villages in Japan have been lost, it may be possible to recover them. It's not a matter of forcing the revival of things that have been lost, but if there is something that can be recovered, I would like to revive it.

A lot of people with excellent talent have now come together in Ishikawa Prefecture. Together with them, I would like to do my best to create a sustainable society. 

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Japan has the potential to become a good role model for the developing nations in Asia by demonstrating how to successfully connect a cultural heritage with building a modern society, and he also said that it is significant to tell the outside world about the satoyama in Japan.

He is absolutely right to say that we receive spiritual and educational benefits from the natural world. Among the ecosystem services that we receive from the natural world, this is referred to as "cultural services" but there are also "provisioning services" that supply us with food, water, timber and fuel, "regulating services" that control floods and the climate, and "supporting services" such as nutrient cycling and soil formation. We will investigate what impact changes to these four ecosystem services have on human beings.

In Dr. Djoghlaflaf's assessment, the characteristic culture and ideology re-

when I should have been looking for employment. As I saw it at the time, agriculture in Japan was beset by an aging population, a decreasing population of farmers, and an increase in fallow land and wasteland. Moreover, farmers were farming without thinking for themselves about how much pesticide and chemical fertilizer to use on how much land, and there was hardly anyone able to turn over in their minds what impact this would have on the water and the soil and what results this would lead to. When I saw this, I felt strongly that there was a need to train "thinking farmers" in order to create an agriculture that is connected to and connects with future generations.

The same holds for my present job since a part of the job with the UN is to develop human resources. We have introduced an intern system at the Operating Unit Ishikawa/Kanazawa and we now have about six people

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