**Keywords:** Satoyama, cultural landscape, rural communities, regional character, challenges, economic potential.

#### Abstract:

In Europe, environmental experts increasingly discuss how to deal with cultural landscape. Similar debates also started in Japan. At the same time, in daily life, rural communities are increasingly facing depopulation and economic challenges. In view of this serious problem, it is vital to focus on what such communities have to offer. Locals might think of their landscape as nothing special or take it just for granted. However, in Japan, relics of splendid natural landscape (原風景) and traditional cultural landscape (里山) are offering a treasure for sustainable usage and remarkable image-building of a local community — if "reading" and identifying their potential. By providing examples from both Europe and Japan, the author focuses on this potential, and gives hints for the future development of such rural areas.

### 1. A definition and explanation of cultural landscape and Satoyama

What is cultural landscape? How can we understand, keep, develop and use traditional rural areas in a sustainable way? Such questions are increasingly a topic of discussion among in the field experts geography, regional planning, landscape planning and cultural conservation. In heritage addition, such questions are related to both cultural tourism



Figure 1 Hilly landscape with hedged grassland in Somerset,
England (photo by © National Trust Images/Nick Meers)

and eco-tourism, trends with a considerable potential for development.

While there is no universal definition of cultural landscape, the majority of experts regard it as a predominantly rural area, shaped by traditional forestry and farming (Konold 2012, Edani 2012). Landform, scenery, long-lasting agricultural practices as well as a regional building stock, handicraft and lifestyle result in a regional and unique character. Examples are farming villages with grassland surrounded by hedges called "hedgerows" in England (figure 1), or terraced vineyard landscapes in Germany, Austria, Italy and France. To notice, read, analyse and develop such a regional character is the goal of this paper (Poggendorf 2015). Main elements of cultural landscape and Satoyama are shown in figure 2.

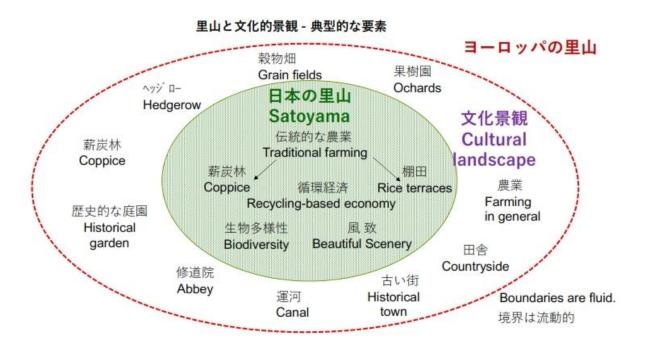


Figure 2 Landscape elements and structures of cultural landscape and Satoyama (made by author)

The inner oval of figure 2 shows Satoyama in Japan (里山), literally meaning "community forest". Typically, it is a rural area at the foot of a mountain, traditionally used and shaped by agriculture (mainly wet rice cultivation) and forestry (coppice). The key point has been the relationship and interplay of forestry and farming on a recycling based economy. For instance, reed along rivers and lakes was used for thatched roofs of farmhouses. Rice straw was used for making ropes or as a natural packaging for

fermented soybeans (納豆). Until the late 1960s, natural fertilizer for the rice paddy fields was mainly drawn out of the community forest, using its fallen leaves and mild

humus. Firewood and charcoal also came from such coppice (薪 炭林), which were partly cut down every 20 years and then reforested. This cycle created bright euphotic forests, including the use of mountain vegetables and shiitake mushroom cultivation. It also led to various habitats with a rich fauna and flora. The overall result was a well maintained environment and a beautiful scenery (風 致), as can be seen in figure 3.



Figure 3 Traditional Satoyama landscape on Awaji Island,
Western Japan (photo by author)

However, today natural fertilizers have been replaced by chemical ones, thatched roofs are rarely build any longer, and fermented soybeans are now usually packaged in plastics. In short, the economic basis for maintaining the traditional landscape described above nearly vanished. Consequences are discussed in the second section.

The outer oval of figure 2 shows cultural landscape in Europe. Cultural landscape has a similar meaning as Satoyama, but also includes various land uses as well as historic sites and settlements<sup>1</sup>. As for agriculture, for the most part there is no wet rice cultivation in Europe. Yet other traditional land use fulfils similar functions. For example, vineyard and vineyard terraces of South Germany, Austria and Italia have shaped its hilly landscapes for centuries (figure 4). The skilfully man-made stone terraces enable vine production on steep slopes, while at the same time, they stabilize the slope against

<sup>&</sup>lt;sup>1</sup> Not only in Europe, but also in Japan, cultural landscape is used as the wider term. Edani (2012) describes a range of cultural landscapes, including lakeside landscapes, fishing village landscapes, tea field landscapes and castle town landscapes. These cultural landscapes and its concepts go far beyond what is described as "Satoyama" (里山) in this paper. For this reason, the outer oval of figure 2 contains various other aspects.

landslides and provide a special habitat for small animals, such as lizards, and for flowers and grasses of a dry and warm climate.

Yet, vine production on steep slopes is very hard work, since big machines cannot be used here. Thus less and less young winegrowers are willing to continue. In addition, high



Figure 4 Traditional vineyard terraces in Esslingen am Neckar,
South Germany (photo by Werner Konold)

production costs make the cultivation also economically unattractive. What is more, as a result, the skills of the older generation how to construct such natural stone walls and terraces without using any cement, is gradually lost.

#### 2. Challenges faced for the management and preservation of cultural landscape

Cultural landscape and its physical condition reflects contemporary social and economic relations and processes (Konold 2012). Such economic relations are the key to understand the loss of cultural landscape in general and Satoyama in particular.

The first challenge for preservation of cultural landscape is a high degree of agricultural mechanization. After World War II, since agricultural technology quickly developed, traditional land use has been in decline. In general, for a farmer in nowadays Japan, it is not profitable to obtain gently shaped, picturesque rice terraces. The same is true for vineyards on steep slopes or traditional orchards in Europe<sup>2</sup>. Rectangular, large fields that are easy to manage with modern machines, are economically attractive. For

 $<sup>^2</sup>$  Orchards (果樹園): Extensively used grassland with fruit trees, such as apple, apricot or cherry trees. Unlike in modern plantations operated by machine and exposed to high amounts of chemical fertilizer and pesticides, in orchards, large trees are unevenly distributed, providing habitats for various insects and birds. Often there exist regional fruit varieties that are not used in mass production. Such beautiful orchards are recently protected by programmes on local and European level, e.g. EU policy for the protection of biodiversity & traditional countryside (生物多様性と伝統的な農村景観の保護のための対策).

the most part, land consolidation since the 1970s led to homogeneous landscapes without regional peculiarity (see figure 5). This is a fact to be mentioned for both Japan and Europe.

second challenge is The depopulation of rural areas. Especially in Japan, but also in parts of Germany, Italy, France and Spain, rural communities suffer from migration into cities. Children of many farmers seek a career in the city rather than hard labour in the village. For Japan, Kieninger et.al (2012:2) describe the situation as follows: "... high costs of farm labor, and thus high production costs in combination with falling rice consumption, result in a decrease of agricultural income, and consequently in the



Figure 5 The difference of traditional Satoyama above (伝統的 水田の景観 (大分 "田染荘")) and allocated farmland below (農業構造改善事業の例 (茨城)県内) (Source: Ryohei Ono)

migration of the younger population to the cities. This, in turn, leads to 'retirement farming' ... and finally to the abandonment of agriculture and farmland and to depopulation of the rural areas". Such depopulation often sets a vicious circle, because it leads to a decrease of the population's purchasing power, and with less passengers, public transportation, such as the local bus service, is also going down.

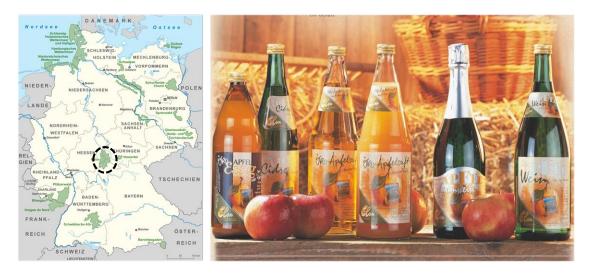
# 3. Potential for rural development

In such a nearly hopeless situation, where traditional forms of land use (that shaped Satoyama) have largely lost their economic base, what could be done? In Europe, to find

a common ground about what kind of landscape should be preserved, the European Landscape Convention has been adopted in 2000. In Japan, in 2005, the Japanese government established its own cultural landscape conservation system. In addition, it has established a Satoyama Inititiative, which spread internationally since 2010 (IPSI, the International Partnership for the Satoyama Initiative). While these steps are helpful to provide administrative support, it is a good idea to learn from unconventional but successful projects and models. In the following, two such projects, which have potential for rural development and landscape preservation, are briefly introduced.

### a) Europe (Germany)

In central Germany, after reunification of the country, a formerly poor rural area called "Die Rhön" became a UNESCO Biosphere Reserve in 1991 (生物圈保護区). This lovely lower mountainous countryside started a regional cooperation between local communities in order to develop rural tourism and organic farming. Die "Rhöner Apfelinitiative" is a programme to foster organic fruit production in traditional orchards (see footnote 2). Apples, apple juice, apple wine, apple vinegar and other products are now successfully sold to locals and tourists. By this, both cultural landscape and beautiful scenery is preserved. It is the combination of a legally protected area (Biosphere Reserve) and local entrepreneur initiatives that led to sustainable development.



**Figure 6** Location and regional fruit products of the UNESCO Biosphere Reserve Rhön in Germany (Source: http://www.rhoenapfel.de/)

## b) Japan

In rural Chiba Prefecture not far from Tokyo, since 1997, there exists a successful project for the re-activation and maintenance of traditional rice terraces called the *Oyamasenmaida* Tanada Ownership:

"The Ownership System can be regarded as an urbanrural coalition, where nonfarmers (predominantly citydwellers) engage in farming activities. Against payment of a participation fee, they rent their own agricultural land, cultivate it and thus contribute to the revitalization of the rural society and preservation of traditional the cultural landscape" (Kieninger et al. 2011:2).



Figure 7 Traditional tanada rice terraces "Oyamasenmaida" in Chiba Prefecture, near Kamogawa-city, managed by the Tanada Ownership (photo by Kamogawa-shi)

It's not mistaken to say that this is a new form of agri-tourism or rural tourism (Vafadari 2013). Apart from urban participants (tenants), local supporter groups are further stakeholders in the project. The local supporter groups play a fundamental role because the landowners are often too old for field work, while the mostly inexperienced tenants need their guidance. Moreover, tenants participate only in some special occasions a year, as for example, sowing, transplanting rice, weeding or harvesting (Kieninger et al. 2011:2). So the city-dwellers visit their rice-paddy fields just a few times a year, but they receive and enjoy eating a part of the harvested rice.

#### 4. Conclusion

In conclusion, despite the problems faced, it can be said that cultural landscape is still an underestimated treasure. While we cannot go back to the old days, as an idea, we can learn from their sustainable life practice. In order to make full use of rural

landscape, we have to understand what society actually needs and open up for new trends, such as high-class local farming products and new forms of tourism. To appeal visitors, we need a smart combination of locally engaged people and a professional marketing concept for such areas. This is a road to success of rural development and the preservation of cultural landscape and Satoyama.

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