

## Identifying and Assessing Spice and Herbs Resources for Tourism Attractions: A Case Study from Banyuwangi, East Java

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### ABSTRACT

The aim of the study was to analyze the potentiality of spices and herbs in agroforestry garden in Banyuwangi, Indonesia, for further rural tourism development. Fields study was set up at villages in Banyuwangi. The floristic survey, ethnobotanical studies, and focus group discussions were performed to evaluate the value of spices and herbs in agroforestry gardens and its potentiality to develop as tourism products. This study found that at least 60 species of spice and herbs with its special value, in which these species has opportunities to conceived as a tourism attraction in agroforestry garden. There is something to see, something to buy and something to do has been described by group discussion participant. It is ranging from farm tourism product, culinary tourism product, and heath-wellness tourism product.

**Keyword:** Rural Tourism, Agroforestry, Tourism Product Development

### INTRODUCTION

The emerging discussion about rural areas among scholar, planners and decision makers indicates its importance in the recent development of world society in order to meet sustainability of biosphere system. Nowadays, rural still closes to the issues of undeveloped areas, high illiteracy, lack of capital, worse health, sanitation system, poor and low economic growth and

less of human development index (Golley & Bellot, 1999). In particular, a rural area in Asian developing countries receives many attentions from international bodies and agencies, scholars and academicians after the economic crisis in 1997 because rural is the most affected and led number of poor dramatically increases. It has been reported to have a close relationship to the increases in socio-environmental problems (Dauvergne, 1999). The impact of the crisis on environments destruction has been widely reported, and Indonesia is one of the countries was faced serious challenges of natural resources depletion, social clash related to resources uses, and increasing incident of rural dweller threats to forested areas (Sani & Hanum, 2005; Wulan et al., 2004).

The past perspectives views that agricultural and farm activities are the main source to generate rural economic and development. To increase agricultural yield, green revolution has been adopted, and modern techniques replaced traditional approach to managing land. Nevertheless, recent evidence suggests that rural agricultural productivities are facing serious problems caused by intensive uses of the pesticide, soil degradation, water pollution, low productivities and environmental degradations. The decrease in farmer's income led to poor society, and in many cases, such situation resulted in forest disturbance, illegal logging, illegal poaching

and unsustainable practices of resources uses. As a result, numerous biodiversity under the dangerous situation and it is a threat to the sustainability of rural dwellers. It is also reported that numerous fertile areas have been changed into settlements, and changes the rural environment characteristics. The reasons for agricultural conservation are numerous (Golley & Bellot, 1999; Tild et al., 2007), and therefore, proposing a strategy for sustainable rural development is needed.

Recently, a strategy for rural sustainable development has accepted tourism as one of the tools to meets rural development. Rural tourism is a viable tool to support rural development under many limitations of development. Demand for rural tourism continuously grows in America, Africa, Europe, and recently in Southeast Asia countries. The advantages are rural provide scenery, peace and quiet, fresh water and air, traditional life and culture entertain, heritages and numerous attractions (Golley & Bellot, 1999; Holland et al., 2003). Recent discussion of tourism in rural area addressing to meet strategic objectives to meet biodiversity conservation, combating rural poverty, promoting rural culture and tradition (WTO, 2002) and preserving heritages (Holland et al., 2003). The study of rural tourism has been implemented in every corner of the world and concluded that such tourism is significant in regional development. Nowadays, Tourism in rural area become the target of numerous scholar, encompasses geographers, conservationist, ethnobotanist, economics, politicians, planner, developers and urban designers and many scholars.

Rural tourism is the tourism activities based on rural environment. Some authors argue that such tourism is a form of agricultural diversification into the tourism

business. It has been extensively grown in European countries, and it has reported contribute significantly to regional developments in Spain, Cyprus, England, Slovenia and other European countries. In Asian countries, tourism in rural areas has been examined in Japan, Thailand, and Malaysia. Indonesian government argues that rural tourism is a significant strategy for rural development, but there are few examples are available.

The environment and biodiversity of rural is considered as one of the last magnetism for tourism. Spices are primary sources of revenue for many rural families in developing countries. The involvement of spice and herbs in tourism development was rarely discussed. The aims of the research were to evaluate and to describe the potentiality of spice and herbs as a tourism attraction in rural tourism program.

## **MATERIAL AND METHODS**

### **Study Sites.**

The study was focused at Banyuwangi Regency, one of the regencies of East Java. The area covered an area about 5,782.50 km<sup>2</sup> and located in the eastern part of Java Island. This regency dominated by the countryside and forested areas, encompasses forest and protected area (31%), plantations (17%), and paddy field (12%) which totally build 60% of the regency area. There are 189 villages recorded, and agricultural sectors are dominant (45.42%). The settlements area encompasses 22% of the regency areas, and population density is recorded 269 per km<sup>2</sup>. Such figures conclude Banyuwangi is the countryside areas (BPS Banyuwangi, 2004; Tild et al., 2007). Banyuwangi is the home of the Osing community, the sub-ethnic of Javanese who are living in traditional ways in rural areas. Banyuwangi endowed by luxurious tropical forest and abundance biodiversity that led

nature-based tourism grows significantly. This is receive a lot of tourists, and become the most attracting site for tourism in East Java regions. As far, protected areas has been given a lot of tourists, but rural rarely to visit. Rural area were particularly rich in term of biodiversity, especially spice and herbs

### **Methods**

Field works were conducted at some villages in Banyuwangi Regency. Spices and herbs inventory was done through direct observation in selected gardens. Fields identification was based on the morphological observation. Specimen verification was done following standard taxonomical book, i.e. Flora of Java by Van Steenis. In each species and herbs and spices, a cultural and social aspect of plant usage was asked to the local community. In such a case, ethnobotanical study to identify the importance species in the perspectives of local culture and tradition was evaluated. The information generated from local people was listed and analyzed descriptively.

In order to identify the garden design for tourism product development, a Focus Group Discussion (FGD) was set up by involving expert and local tourism stakeholder to assess and identify the opportunities of tourism product development, especially using spices and herbs as the main attraction. FGD was set up two times and the consensus was summarized as models of rural tourism product development.

### **RESULT AND DISCUSSION**

The nature of Banyuwangi area led various rural environments was found. According to altitude, there is coastal, lowland, and highland rural. In coastal areas, rural economic based on coastal and marine product, while the other rural ultimately based

on agricultural goods. In the perspectives of rural tourism development, the coastal environments seem to become the advantages for rural tourism development. Banyuwangi has 175.8 km coastal length. The southern coastal areas dominated by long white sandy beaches and several islands were found on the southern coast. Sandi Beach has not yet developed, and traditional uses close to the areas uses as poor rural villages.

### **Spice and herbs diversity and its implication for planning**

The agricultural biodiversity of Banyuwangi rarely studied, leading comprehensive information are available. However, the prior assessment argues that rural has high values of biodiversity. Home garden of rural area consist perform agroforestry system, leading number of tree species and wildlife found. Following the representative survey, a home garden composed multilayered canopy and composed from numerous plant species. The spices species in which area from trees are encompassing Nutmeg, cinnamon, and clove.

Identification of spices and herbs diversity is the first step towards establishing tourism product development. About 60 spices and herbs which proper usage was identified grows in home gardens of local people, indicated that home gardens in a hot spot for spice and herbs. These spices and herbs have various values, ranging from economical to cultural aspect. The most species cultivated as an economic earning includes nutmeg and clove. The number and richness of garden in term of spices and herbs species depend upon the farmer perspectives and motivation in garden management.

The critical of such species in the perspectives of local culture and tradition as given in Table 1.

**Table 1. The Critical Value of Spices in the Perspective of Local Culture and Tradition**

| No | Spices             | RFC  | Uvs  | Notes  |
|----|--------------------|------|------|--|
| 1  | Nutmeg             | 0.50 | 0.50 | Cultivated for economic value  |
| 2  | Cinnamon           | 0.33 | 0.20 | Important but few cultivated in home garden  |
| 3  | Clove              | 0.56 | 0.40 | Cultivated for economic value  |
| 4  | Galanggal          | 0.30 | 0.20 | Cultivated and grows wild as understory vegetation. Intensive cultivation was not found, and |
| 5  | Ginger             | 0.40 | 0.20 | population was maintain in garden for medical and cullinary purposes                         |
| 6  | Kaempferia galanga | 0.25 | 0.15 |  |
| 7  | Turmeric           | 0.40 | 0.20 |  |
| 8  | Piper              | 0.56 | 0.50 |  |
| 9  | Lemon grass        | 0.25 | 0.20 |  |
| 10 | Vanilla            | 0.10 | 0.10 | Recently few cultivated  |

Nutmeg (*Myristica fragrans*) Houtt was believed native to the Indonesian archipelago, especially from the Moluccas. Nutmeg is important to plant species in home garden agroforestry because nutmeg provides significant value for household's earnings. In some area, however, nutmeg is absent in the garden. Nutmeg rarely found the front of the yard. In many gardens, nutmeg grows with coffee and clove. In garden where nutmeg abundance, usually there is no optimum coffee production. Clove (*Syzygium aromaticum*) was planted as a great spice in agroforestry system. There is often clove tree near the house. The huge number of population was found in home gardens in Licin, Kalipuro, Songon, Glenmore and Kalibaru.

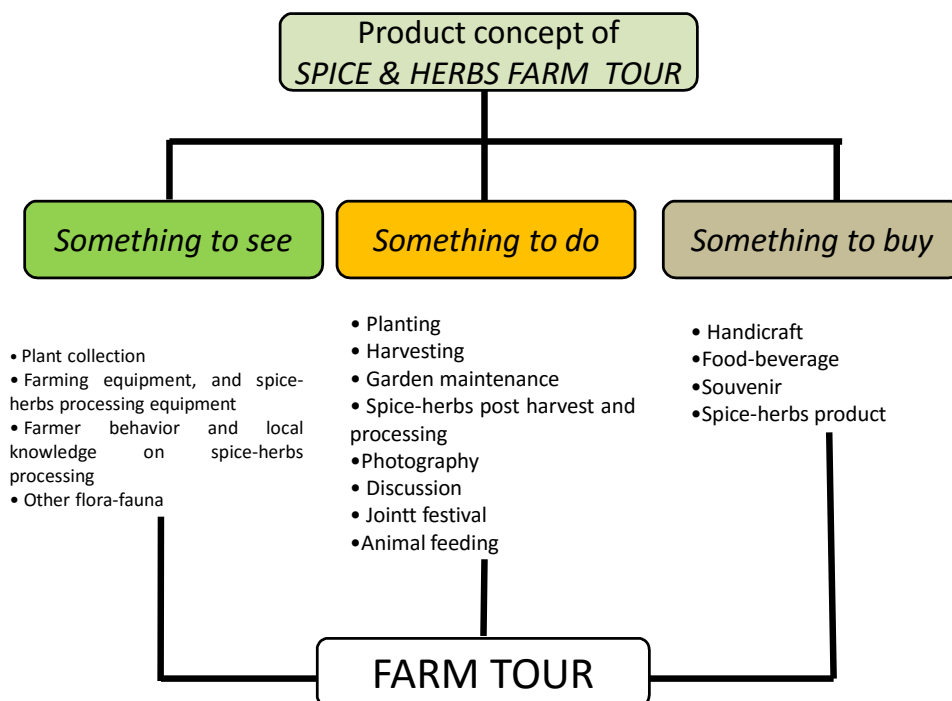
The information of spices diversity and its use is necessary for tourism development. From these data and information, the participant of FGD identify three potential products which are able to develop (Table 2).

**Table 2. The Potential Spice-Herbs Based Tourism Product in Banyuwangi Home Garden**

| Product                      | Ideal available time  | Attraction and activities  |
|------------------------------|---|--|
| Farm tour<br>(Edu-tourism)   | <ul style="list-style-type: none"> <li>✓ Short visit (2-3 hours)</li> <li>✓ Half days</li> <li>✓ Full one days</li> <li>✓ Several days</li> </ul> | Walking around garden to explore garden's biodiversity, value, biological-ecological aspect of plant, processing |
| Culinary tourism             | <ul style="list-style-type: none"> <li>✓ Short visit (2-3 hours)</li> <li>✓ Half days</li> <li>✓ Full one days</li> <li>✓ Several days</li> </ul> | Consuming food-beverages which area processing using spice and herbs material.                                   |
| Health &<br>wellness tourism | <ul style="list-style-type: none"> <li>✓ Scheduled programs</li> <li>✓ Full one days</li> <li>✓ Several days</li> </ul>                           | Activity related to health therapy.  |

### Models of Tourism Product Development

The model of tourism product development was derived from Focus Group Discussion. Gardens may provide a potential attraction for the visitor, but the gardens resources should be transformed into tourism product. Opportunities also exist for gardens with indigenous knowledge or local tradition which are still practiced. Scholar argues that tourism product can develop these following three aspects, namely something to see, something to do and something to buy (Figure 1).



**Figure 1.** Concept Tourism Product of Tourism Development in Spice-Herbs Gardens

It is now accepted that tourism product with its uniqueness and naturalness plays a major role in recent tourism development. Spice and herbs perhaps provide significant role for numerous potential tourism program. Spice and herbs generally have a long history and story which area crucial for tourism program and interpretation. For an asset to be sustainable, the conservation of its habitat the agroforestry system must be encouraged systematically.

### CONCLUSION

In general, it is clear that resources for rural tourism development at Banyuwangi regency are abundance, but as far not developed. Spices and herbs offer

numerous potential attraction to be developed. In addition to that, it clear that vast spices and herbs diversity content of Banyuwangi should be optimized for sustainable uses throughout tourism, particularly tourism based on the rural setting. The preservation of local tradition to home gardens as a habitat for spices and herbs that produce numerous potential tourism attraction are among the significant activities need to be protected.

### REFERENCES

- BPS Banyuwangi, 2004. Kabupaten Banyuwangi Dalam Angka 2004. BAPPEDA Banyuwangi-Badan Pusat Statistik Kabupaten Banyuwangi.

- Dauvergne, P. 1999. The environment in the time of crisis: Asian and donors after the 1997 financial crisis. AusAID.
- Fyall, A., Garrod B. & Leask, A. (2005). Managing visitors attractions: New directions. Elsevier Butterworth-Heinemann.
- Garrod, B., Wornell R. & Youell. R. (2006). Re-conceptualizing rural resources as countryside capital: the case of rural tourism. *Journal of Rural Studies* 22,117-128.
- Golley, F.B & Bellot, J. (1999). Planning as away of achieving sustainable development. In F.B. Golley and J. Bellot (eds.) *Rural Planning from and Environmental systems perspectives* (pp. 3-17). Springer.
- Holland, J., Burian, M. & Dixey. L. (2003). Tourism in poor rural areas: diversifying the product and expanding the benefits in rural Uganda and the Czech Republic. *Pro Poor Tourism Working Paper No.12*.
- Parveen, S., Nakagoshi, N & A. Kimura. 2003. Perceptions and pesticides use practices of rice farmers in Hiroshima Prefecture, Japan. *Journal of Sustainable Agriculture*. 22(4), 5-30.
- Platchter, H & Rossler, M. (1996). Cultural landscape: reconnecting culture and nature in Van Droste, B., Plachter H. and Rossler M. (eds). *Cultural Landscapes of Universal Value: Components of a Global Strategy* (pp. 15-49). Gustav Fischer Vch. Publishing.
- Sani, R.R & Hanum, S.A. 2005. *Status Lingkungan Hidup Indonesia 2004 (State of the Environment in Indonesia 2004)*. Kementrian Negara Lingkungan Hidup Republik Indonesia, Jakarta.
- Swarkbrooke, J. (2006). The development and management of visitor's attractions. Elsevier Butterworth-Heinemann.
- Tild, J. H., Kearney, A.R & Bradley, G. (2007). Understanding rural character: Cognitive and visual perceptions. *Landscape and Urban Planning* 81, 14-26.
- WTO. (2002). Rural tourism in Europe: experiences and perspectives. *World Tourism Organization seminar*. Belgrade Yugoslavia, 24 and 25 June, 2002.
- Wulan, Y.C., Yasmi, Y., Purba C. & Wollenberg. E. (2004). *Analisa konflik kehutanan di Indonesia 1997-2003*. Center for International Forestry Research.