Conference Paper

Ethno-Ecotourism in Kulon Progo, Indonesia: A Downstreaming Process of Natural Resources-Based Products with A Touch of Cultural Resources

Carlos Iban, Cisya Dewantara Nugraha, and Tuti Elfrida

Department of Foreign Languages, Arts, and Cultural Management, Vocational School, Universitas Gadjah Mada

Abstract

Kulon Progo is a regency in the Special Province of Yogyakarta, Indonesia, which has a remarkable potentials to be developed into tourist attractions due to its wealth of natural and cultural resources. The ethno-ecotourism in Kulon Progo is a new form of sustainable tourism development that combines ethno tourism and ecotourism activities. This concept was currently developed by the World Bank which aims to position indigenous communities as the primary stakeholder of tourism development. Downstreaming is a clustering concept to increase the added value of a product by avoiding the sale of primary forms of natural resources. This study aims to identify the potential tourism activities that will emerge in the process of developing natural resource-based products that are processed into new tourism products through the touch of cultural resources. This descriptive-analytical study using the grounded theory approach. There are a number of data collection methods utilised to undertaken this research. The primary data were collected through a systematic observation, key informants, and in-depth interviews. The secondary data were collected through literature study by using tourism and economic surveys in Kulon Progo Regency. Collected data sets were analyzed by employing interactive model analysis, triangulation, and downstream product approaches with three variables: upstream, midstream, and downstream clusters. The findings indicated that the apparent potentials lie on the processing of natural resource-based products such as cocoa, pennywort leaves, palm sugar, dragon fruit, coffee, and tea, which can be developed into various types of derivative tourism products. The first cluster is upstream or the exploration phase. The tourism activities formed in it, for instance, are the introduction of the type of vegetation, the methods of planting, and the process of farming. The second cluster is the middle stream or the processing phase. The tourism activities are in the form of a workshop on processing raw materials into finished goods. The last cluster is downstream or the packaging phase. The tourism activities are in the forms of the consumption and packaging as souvenirs of the finished products.

Keywords: Ethno-ecotourism; Downstreaming Process; Natural Resources; Cultural Resources; Tourism Product; and Kulon Progo
1. Introduction

The tourism sector is one of the catalysts for generating economic growth in the Special Province of Yogyakarta, Indonesia. This province is the main rival for Bali Province as a destination that attracts domestic and foreign tourists to visit Indonesia. The supply of attraction given by Yogyakarta as a tourist destination always dominates competition with other tourist destinations in Java. In recent years, there has been a shift in travel trends in Yogyakarta and in Indonesia in general. Consumers start looking for destinations that offer unique appeal with natural settings that carry modern themes with unique spot choices available for tourists to take pictures. This shifting behavior of tourism gave birth to many regions that rely on natural tourist attraction, most of which are managed directly by local community groups.

Of the vast variants of tourist forms that make natural resources as the main attraction, ecotourism is the most dominant type of travel practiced. Ecotourism is often highlighted as a way to diversify the local economy, especially in the area whose traditional economic base is weakening. The main characteristics of authentic ecotourism are the use of non-consumptive and non-extractive resources by and for tourists as well as minimizing negative impacts on the environment and society. Ecotourism is the unification of conservation, development of community life, and sustainable tourism. The ethno-ecotourism in Kulon Progo is a new form of sustainable tourism development that brings the idea of combining ecotourism and ethnical activities. This concept was developed by the World Bank which wants to place local communities as the main partners of tourism development activities. This new approach wants to develop tourism activities that involve local communities and rely on the potential of cultural resources in the community as well as the potential of natural resources and the environment.

As part of the province of the Special Region of Yogyakarta, the Kulon Progo regional government tried to strengthen the competitiveness of its tourism industry by making Regional Regulation No. 9, concerning the Master Plan for Regional Tourism Development in 2015–2025, with the implementation of the establishment of one Regional Tourism Development Zone (KPPD) and four Regional Tourism Strategic Areas (KSPD). Five areas were developed namely the first Suroloyo – Sendangsono KSPD with the theme of natural mountain culture and tourist villages, with special interest tourist segments. Both KSPD Sermo – Clereng – Wates are themed in nature, urban, tourist villages with special interest tourist segments. The third is the Pasir Mendit – Glagah – Trisik KSPD with the theme of natural, coastal and conservation tourism with the mass tourist segment. Fourth, Kiskendo – Kelir KSPD themed nature, culture, and tourist...
villages with special interest tourism segments, and fifth was KPPD Sentolo-Sidorejo themed village tourism and creative industry with special interest tourist segments. The five tourism areas are mostly projected to be sold to the tourist segment of special interest with natural resources and cultural resources as a driving force for attractiveness.

The central government and regional governments in collaboration with Bank Indonesia in 2017 held a Central and Regional Coordination Meeting (Rakorpusda) with the theme "Encouraging Diversified Policy Strategies for Sources of Regional Economic Growth to Maintain a National Economic Improvement Momentum". The results of the meeting agreed on the need for downstream energy production and tourism products to be strived to become a new source of economic growth. The Indonesian government through the Director General of Rural Area Development (PKP) of the Ministry of Trade continues to encourage rural communities to develop the potential of superior products in the village. The potential that is intended is the downstream distribution of rural production which previously yielded raw products to be ready for consumption. Thus, the potential for increased economic added value of the people in the village can rise. Vertical diversification is carried out through the downstreaming of the energy industry. While horizontal diversification is carried out with the development of other economic sectors such as the maritime sector and the tourism sector.

In 2018, the Ministry of Village, Disadvantaged Regions Development, and Transmigration of the Republic of Indonesia, plans to improve and facilitate 110 rural areas in order to increase the embryo of downstream activities as a tourism potential in the countryside with 40 locations that become national priorities. Some regions that continue to increase production and downstream are in the rural area of Pangalengan, South Bandung Regency, West Java. The superior production in the area is coffee plantation and processing. With the help of grinding machines, Pangalengan Village coffee farmers can produce roasted coffee with added value, so coffee farmers no longer sell raw coffee beans. Another example is Sigi Regency, Central Sulawesi, which is famous for the commodity-producing shallots which has increased its selling value. The increase was made by the Sigi community by avoiding the sale of raw shallots, but processed into fried onion products. In addition, the Lembah Asri Agro Tourism Region in Purbalingga, Central Java, has four villages, including Serang, Siwarak, Kutabawa, and Karangreja Villages, with the production of pineapple and strawberries processed into beverage and food products.

The tourism sector still does not have a significant role in the economic development process in Kulon Progo. When compared to other districts and cities in Yogyakarta, Kulon Progo has the lowest Regional Sub-Sector Tourism Revenue (PAD) or is at the
base of the five other administrative regions. In recent years, the contribution of the tourism sub-sector to the PAD has never touched the 2% figure. In 2016, the tourism sector only contributed a proportion of 1.1% of the total PAD of Kulon Progo, which amounted to 4 billion rupiah (Table 1). This is inversely proportional to the wealth of natural resource production in Kulon Progo, ranging from forest products, agricultural products, to fishery products, which always ranks first in recent years in turning the wheels of the economy in the area.

Economic growth can be seen as an increase in the number of goods and services produced by all fields of business economic activities that exist in an area for a period of a year. According to data from the Central Bureau of Statistics in 2017, in the past five years, the rate of economic growth in Kulon Progo has been increasingly stretched. One of them is seen from the value of Gross Regional Domestic Product (GRDP) which continues to experience an increase and economic growth which continues to show a positive trend. In 2016 Kulon Progo Regency experienced economic growth of 4.76%.

The economic structure of Kulon Progo Regency is still dominated by three business sector sectors, namely: 1. Agriculture, Forestry and Fisheries; 2. Wholesale and Retail Trade; and 3. Processing Industry. Based on data from the Central Bureau of Statistics in 2016, activities in the agriculture, forestry and fisheries sectors ranked first in contributing to the economy for this district with 19.96%, followed by the wholesale and retail sectors of 13.61%. The processing industry sector is third with 12.20% of the Gross Regional Domestic Product of Kulon Progo Regency. In the same year, the manufacturing sector experienced a growth of 5.28 percent, with added value reaching 1 trillion. This growth is more due to an increase in industrial production, although the number of industrial centers that are still operating has fluctuated.

Referring to Law No. 32 of 2004 concerning Regional Government and Law No. 33 of 2004 concerning Financial Balance between Central and Regional Governments, the Kulon Progo as a district has its own authority to manage the resources contained in its territory, including all forms of natural resources and cultural resources that have the potential to become valuable products. Economical through the tourism sector. Most of the tourist attractions that have been inventoried are in full control of the local government through the Tourism Office. That is, the management and development of attractiveness still relies on budget incentives and initiatives from local governments, while only a small portion of the management of tourist attraction is carried out by the private sector and the public. This proves that not many community groups in Kulonprogo use the tourism sector as a means of increasing economic growth.
**Table 1:** Development of the Total Regional Original Revenue (PAD) of the Tourism Sub-Sector in the Special Region of Yogyakarta (2014-2016).

<table>
<thead>
<tr>
<th>Nu</th>
<th>Region</th>
<th>2014</th>
<th></th>
<th>2015</th>
<th></th>
<th>2016</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total (IDR)</td>
<td>Percentage (%)</td>
<td>Jumlah (Rp)</td>
<td>Percentage (%)</td>
<td>Jumlah (Rp)</td>
<td>Percentage (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Proportion</td>
<td>Escalation</td>
<td>Proportion</td>
<td>Escalation</td>
<td>Proportion</td>
<td>Escalation</td>
</tr>
<tr>
<td>1</td>
<td>Yogyakarta City</td>
<td>116,146,936,925</td>
<td>49.0</td>
<td>22.5</td>
<td>116,146,936,925</td>
<td>49.0</td>
<td>0.0</td>
</tr>
<tr>
<td>2</td>
<td>Sleman</td>
<td>84,780,228,453</td>
<td>35.8</td>
<td>23.5</td>
<td>104,985,102,620</td>
<td>35.8</td>
<td>23.8</td>
</tr>
<tr>
<td>3</td>
<td>Bantul</td>
<td>16,046,012,057</td>
<td>6.80</td>
<td>10.4</td>
<td>18,281,328,042</td>
<td>6.80</td>
<td>13.9</td>
</tr>
<tr>
<td>4</td>
<td>Kulon Progo</td>
<td>2,544,115,778</td>
<td>110</td>
<td>-3.9</td>
<td>3,420,774,733</td>
<td>110</td>
<td>34.5</td>
</tr>
<tr>
<td>5</td>
<td>Gunungkidul</td>
<td>17,415,255,577</td>
<td>7.3</td>
<td>113.2</td>
<td>24,107,812,555</td>
<td>7.3</td>
<td>38.4</td>
</tr>
</tbody>
</table>

Source: Central Bureau of Statistics, 2017
Based on the background that has been prepared above, the following problems can be identified:

1. Original Regional Revenue (PAD) Kulon Progo in the tourism sub-sector occupies the lowest rank of the five regions in Yogyakarta.

2. The economic sector of Kulon Progo is dominated by the wealth of natural resources in the form of agriculture, forestry and fisheries that focus on selling primary products.

3. The processing industry sector is still not the main choice to improve the economic conditions of the Kulon Progo community.

From the problems that arise, a solution is needed in the form of a strategy to increase local revenue growth in the tourism sub-sector. This paper aims to make a draft strategy for increasing local revenue through collaboration between tourism businesses, agricultural and forestry businesses, and processing industry businesses. From the collaboration mix, it is expected that various tourism activities will emerge from the process of developing natural resource-based products that are processed into new tourism products through the touch of cultural resources. The strategies that are later found are expected to be a model for tourism planning and development in an area that has natural resource wealth but is weak in the field of tourism management.

2. Literature Review

2.1. Ethno-ecotourism

According to Gottlieb (2010: 112) in his book entitled "Religion and the Environment", ethno-ecotourism is described as the development of ecotourism which is specifically carried out by local communities by incorporating elements in the form of cultural expressions. Schluter (2001) says that ethno-ecotourism is linking natural areas with local culture for sustainable development, while Vera-Mendia (2001) explains that ethno-ecotourism is a concept that integrates physical, biological, and cultural diversity. Emphasizing not only the variety, but also the quality of the environment. From a practical point of view, ethno-ecotourism consists of different kinds of nature tourism in close association with culture of the place. From the above definitions, it can be concluded that ethno-ecotourism is a new concept in the development of sustainable tourism with the idea of uniting ecotourism activities with the potential of cultural resources in the community.
The Indonesian government through the Minister of Environment and issued Law No. 83 of 2016 concerning Social Forestry. This policy harmonizes the previous regulations into one regulation that is more simple, integrated and comprehensive. One of the considerations for the issuance of the new law is the urgency of efforts to accelerate poverty reduction, unemployment, and inequality in the management or utilization of forest areas. This policy is a resonance between a centralized implementation approach and initiatives that come from below, support from local governments and participation from civil society and other stakeholders. The social forestry program will make it easier for people in and around forests to manage forest resources from upstream to downstream starts from the legality of managing forest resources, on-farm forestry activities, among others in the form of nurseries and land management, off-farm forestry activities in the form of procurement of production equipment to packaging, in order to improve the quality and added value of forest products, up to marketing activities. One example is the Indonesian Conservation Community (KKI) Warsi which contributes to supporting Nagari Forest management in South Solok, West Sumatra; development of Community Forests and Community Forests in Kerinci, Jambi; and Customary Forest in Merangin, Jambi. KKI Warsi also develops non-wood forest products from agroforestry products such as durian, petai stinky bean, mangosteen, coffee, and rubber, develops edu-ethno-ecotourism, and builds a micro-hydro power plant that utilizes water from the forest environment.

2.2. Downstream Policy

The idea of industrial downstreaming emerged as a reaction to the booming export of natural resources in the primary form and the low increase in value added products. One method to achieve the above targets is to encourage the development of downstream industries with the concept of cluster or better known as the downstream industry. The downstream industry program is considered important because it is expected that the domestic industry is able to utilize the natural resources owned by increasing the value added of products and to avoid the export of natural resources in primary form.

According to Hartarto (2016), industry downstream policies are seen to be broader not only limited to the mineral sector, but also applied in various other natural resource sectors, such as the oil and gas, forestry, agriculture, plantation and fisheries sectors. The economic benefits received will be far greater compared to selling the extraction of natural resources in raw form. Downstreaming will also shift the development policy
paradigm that prioritizes the sale of natural resource extraction towards a policy of value-added natural resources.

Downstreaming is also often called diversification. By using the same raw material, an extraction of natural resources can be processed into different products. Examples are oil palm plantations that not only produce CPO (crude palm oil), but can be processed into various products in the food, energy and polymer sectors. Through the downstream policy there will be a process of increasing added value, encouraging investment, opening new jobs, absorbing labor for the processing industry.

2.3. Resource

Understanding of resources in economics has been known for several centuries. When Adam Smith, the father of world economics wrote a book with the title "Wealth of Nation" in 1776. According to Smith, resources are defined as all the factors of production needed to produce output, so that in classical economics resources are identified with production inputs. In this paper, the definition of resources will be limited to natural resources and cultural resources.

The first discussion is natural resources. According to Fauzi (2004), natural resources are all biological and non-biological resources that are used by humanity as a source of food, raw materials, and energy. There are two views used in understanding natural resources. The first view is a pessimistic or Malthusian view, that natural resources must be used carefully because of uncertainty about what will happen to natural resources for future generations. Limited natural resources are considered not able to support population growth. The rate of growth of natural resources will experience what is called diminishing return, where per capita output will experience a downward trend so that future generations will not get the proportion of natural resources as large as those of the present generation. The second counterpart is an exploitative or Ricardian view. In this view, natural resources are considered as the engine of growth which is transformed into man-made capital. Limited supply of natural resources can be substituted by measures of intensification (intensive exploitation) and extensification (utilization of natural resources that have not been exploited). If natural resources become scarce, the cost of extraction and output prices will increase. Rising prices will create incentives for extracting natural resources to try to increase supply.

The next discussion is cultural resources. According to McManamon (2017), cultural resources are physical symptoms, both natural and man-made that have cultural values resulting from the development of human creations that have been passed down from
one generation to the next and are unique and non-renewable. According to Schiffer and Gould (2014), cultural resources always experience a process obtained, created, and used in accordance with the purpose of their manufacture. All of these activities are in the context of the system, which means that these cultural resources still exist and function in the community. In the context of the system, cultural resources can be used repeatedly (reuse) according to the original function or can be recycled through the recycle process into something new. However, there are also cultural resources that are deemed unnecessary and then discarded, abandoned or lost, so that they enter into historical and archaeological contexts. Through Schiffer and Gould’s theory, it can be understood that the essence of the management of cultural resources is to preserve cultural resources so that they remain in the context of the system and are useful for people’s lives now. For this reason, often these cultural resources must be managed through a process of recycling and revitalization. Management of cultural resources is an attempt to give new meaning to a cultural resource. If there is no new meaning that can be felt by the people today, efforts to manage cultural resources will be difficult or even will not reach the target.

The new meaning that is attached to cultural resources can vary, among others, can be the identity of a community group (country, city, certain ethnic groups), as a tourist attraction, and as a study of science. The meaning given will depend on the desire and mutual agreement of all elements in the community system. In this context, there needs to be a study of significant value of a cultural resource, socialization of important values, seeking agreement in giving meaning to cultural resources, then establishing appropriate management measures.

2.4. Tourism Products

Kotler, Brown, and Makens (2009: 304) in his book “Marketing for Hospitality and Tourism” explained that tourism product is anything that can be marketed for attention, acquisition, use, or consumption that might satisfy a want or need. It includes physical objects, services, places, organizations, and ideas. The definition in question is that a product or item is created and offered to the market to meet market needs and from the product the market or consumer gets satisfaction. This includes physical objects, services, places, organizations and ideas. Whereas according to Middleton (2001: 122) the tourism products to be considered as an amalgam of three main components of attraction, facilities at the destination and accessibility of the destination, which means
that tourism products are a mixture of three main components namely tourist attractions, facilities in tourist destinations and accessibility.

Hall and Cooper (2008: 11–13) in his book “Contemporary Tourism: An International Approach” says that tourism products are a series of commodified tourism experiences. There are several forms of tourism products, namely: 1. The Trip Product or Tourism Product, which is the whole product in the form of the experience of tourism consumers from all tourism businesses, organizations, and the momentum of service from the beginning tourists are willing to buy until they return to their home regions; 2. The Destination Product, which is the experience gained by tourists as a result of meetings with tourism businesses, people they meet, local communities and the environment in tourist destinations; 3. The Tourism Business Product, which is a collection of travel experiences provided by an individual or tourism business agent at various stages in a tour; and 4. The Service Product, which is a collection of forms of service from a variety of individual service providers that become the experience of tourists when traveling in a destination.

3. Methods

This paper is based on research conducted in four Regional Tourism Strategic Areas (KSPD) and one Regional Tourism Development Zone (KPPD) in Kulon Progo Regency, D.I. Yogyakarta and has been held from March to August 2018.

3.1. Qualitative Research Methods

This research is a type of qualitative research. Researchers plunge into the field, learn a process or discovery that occurs naturally, record, analyze, interpret and report and draw conclusions from the process. Research findings in the form of concepts, principles, laws, theories are built and developed from the field not from existing theories (Moleong, 2010: 4-6). The Grounded Theory (GT) method is used as the basis of this research method. GT is a qualitative method for discovering new theories. This method was developed by Glaser and Straus and modified by Cobin. Research using GT is based on the assumption that there is no absolute truth, truth is only a result of interpretation. The object of research is a phenomenon that exists in a natural context and is understood after the data is obtained, either through observation or interview. According to Daymon and Holloway (2008), a grounded theory approach allows researchers to conduct processual research, which is research that focuses on
a series of individual and collective events, actions, and activities, which develop over time in a particular context.

3.2. Method of Collecting Data

The data in this study consists of two types, namely primary data and secondary data. Primary data is a source of data obtained directly from the original source without going through an intermediary medium. Primary data can be either individual or group subject opinions, observations of an object (physical), event or activity. In this study, primary data collection uses systematic observation methods, key informants, and in-depth interviews. Secondary data is a source of research data obtained indirectly through intermediary media or obtained and recorded by other parties. Secondary data is generally in the form of evidence, notes or reports that have been arranged in archives (documentary data) published and not published. In this study, secondary data collection was carried out by looking for tourism surveys and economic surveys in Kulon Progo Regency.

3.3. Data Analysis Method

Qualitative data analysis in this study uses Interactive Model Analysis according to Miles, Huberman and Saldana (2012: 16) and Triangulation according to Denzin and Lincoln (2011). In qualitative research, the process of collecting and analyzing data cannot be separated. Data collection is placed as a component that is an integral part of data analysis activities. Data analysis in qualitative research was carried out from the beginning of the research activity until the end of the study.

The collected data was then analyzed using Interactive Model Analysis, namely data reduction, data display, and conclusion drawing. In the data reduction stage, a data dialogue is carried out by grouping data with the product downstream approach which is divided into three theme variables: upstream, middle, and downstream clusters (Figure 1).

The triangulation process in this study uses observations and matching between various data derived from systemic observation, key informants, and in-depth interviews. To ensure data validity, systemic observations were carried out in four Regional Tourism Strategic Areas (KSPD) and one Regional Tourism Development Area (KPPD) in Kulon Progo Regency. The data is then matched by cross-checking the results of the interviews and some information from key informants to ensure that there is no conflicting
Figure 1: Interactive Model Analysis Process (Source: Adaptation from Miles, Huberman and Saldana, 2012).

After that, the results obtained need to be tested again with observation, informants, and other interviews until there are no more differences that need to be confirmed to the informant (Figure 2).

Figure 2: Triangulation Analysis (Source: Adaptation from Denzin dan Lincoln, 2011).
4. Results and Discussions

4.1. The Potentials Economic of Products Processing in Agricultural and Forestry Sectors in Kulon Progo

One of the business activities that contributed greatly to the economy of Kulon Progo Regency is the processing industry sector. The role of the processing industry sector in the Gross Regional Domestic Product of Kulon Progo Regency is at number three, after the agricultural sector and the trade sector. Based on 2016 data, the manufacturing sector speed up at a growth rate of 5.28 percent, with added value reaching 1 trillion (Table 2).

<table>
<thead>
<tr>
<th>No</th>
<th>Year</th>
<th>Gross Added Value (in Million Rupiah)</th>
<th>Contribution (%)</th>
<th>Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2014</td>
<td>871.87</td>
<td>12.36</td>
<td>8.55</td>
</tr>
<tr>
<td>2</td>
<td>2015</td>
<td>925.81</td>
<td>12.07</td>
<td>3.52</td>
</tr>
<tr>
<td>3</td>
<td>2016</td>
<td>1,014.20</td>
<td>12.20</td>
<td>5.28</td>
</tr>
</tbody>
</table>

Source: Central Bureau of Statistics, 2017

Of the various types of commodities from natural resources owned by Kulon Progo, the authors take several commodities that have been observed. These commodities are: cocoa, pennywort leaf, coconut brown sugar, dragon fruit, coffee and tea.

4.1.1. The Kalibawang Cocoa

The Kulon Progo government is currently developing a cocoa village in Banjarharjo Village and Banjaroya Village located in Kalibawang District. Government support was given to develop Kalibawang District as a tourist attraction in Menoreh Hill Region. Based on the results of an interview with Mrs. Dwi Martuti Rahayu, as Chair of the Women's Farmers Group (KWT) Pawon Gendis and observations in Banjaroya Village, the government is implementing a program to facilitate farmers and cocoa farmer groups in the extraction process from upstream to processing to produce more valuable downstream products. The old policy in the cocoa industry in Kulon Progo is still limited to being an industrial raw material in the form of dry cocoa, so the price at the farm level is still low. The policy began to be changed by innovating in the form of product diversification. This is done by the government so that the cocoa processing industry can support the growth of the regional tourism sector by improving the welfare
of cocoa farmers through products in the form of tour packages. The postharvest program is carried out with training and technical guidance related to cocoa processing which has the quality of the Indonesian National Standard (SNI). KWT Pawon Gendis receives assistance from dry cocoa processing equipment through the Ministry of Industry’s facilities. With the processing process, it is expected that there will be product diversification by fermenting postharvest cocoa into chocolate products.

4.1.2. The Pennywort of Pawon Gendis

Besides processing cocoa, KWT Pawon Gendis, which was founded by Mrs. Dwi Martuti Rahayu also processes other natural resources in the form of pennywort (*Centella asiatica*) to use the leaves as various culinary products and beauty products such as face masks. Through various pennywort leaf preparations, Mrs. Rahayu obtained the Adhikarya Pangan Nusantara Award in 2015, which is the highest award in the field of national food security. She is considered as a pioneer of food security through her invitation to the public in making processed food from pennywort leaves. In the processing phase, pennywort is used as a raw material and also as a mixture of ingredients. Some forms of processed starch products produced by KWT Pawon Gendis are chips, tea bag, ice cream, chocolate, and egg roll. Pennywort chocolate is a unique product, because the results of the combination between the extraction of cocoa and pennywort leaves. These products are packaged and sold in Toko Milik Rakyat or Shop of Community (Tomira) in Kulon Progo.

4.1.3. The Organic Granulated Palm Sugar

The organic granulated palm sugar is one of the special products of Kulon Progo, this is reinforced by recognition from the Ministry of Industry that has issued a decree that palm sugar is a geographical indication intellectual property rights as a superior commodity of Kulon Progo. Granulated palm sugar is a diversification of palm sugar wax products in the form of powder or small granules such as sands. The basic ingredients for making sugar in Kulon Progo are sap from coconut trees. The center of the palm sugar industry in Kulon Progo is in Kokap Subdistrict, especially in the villages of Hargotirto, Hargorejo and Hargowilis.

One of the community enterprises for coconut farmers and producers of granulated palm sugar in Kokap District is Jatirogo Multipurpose Cooperative (KSU). Based on an interview with Mr. Hendra, as the secretary of KSU Jatigoro, the granulated palm sugar
production reached 9 tons per day and more than 90 percent were thrown for export markets but in bulk form. Granulated palm sugar produced by KSU Jatigoro has received the best organic certification, its hygiene is guaranteed through processing standards and has been certified internationally as a condition to penetrate the export market.

4.1.4. The Kampung Naga Sanggrahan

Kampung Naga Sanggrahan is a tourist attraction located in Sanggrahan Hamlet, Banjarharjo Village, Kalibawang District. This village has the potential of agriculture in the form of dragon fruit plantations which is a superior product in Kalibawang District. The superiority of dragon fruit in Kalibawang Village is its production using organic systems. In one harvest season, farmers can pick up more than 1 ton. Red dragon fruit is sold at a price range of Rp. 15,000-18,000 per kilogram, while the white dragon fruit is priced at Rp. 13,000 to Rp. 15,000 per kilogram.

Kampung Naga Sanggrahan is one of the attractions of agrotourism that is managed by the youth of Karang Taruna, Sanggrahan Hamlet, Banjarharjo Village, Kalibawang District. Based on the interview with Mr. Didik Jatmiko, as the head of the Sanggrahan hamlet, the characteristic of this village is dragon fruit plants that are spread throughout the village and each year become the largest producer and seller of dragon fruit in Kalibawang. Some of the products sold are selling dragon fruit seeds and agrotourism education packages. At present, Kampung Naga Sanggrahan is implementing down-streaming by making product diversification in the form of organic dragon fruit noodles.

4.1.5. The Suroloyo and Menoreh Coffee

The area of coffee plantations in Kulon Progo reaches around 783 hectares, which are spread in Samigaluh, Girimulyo, Kalibawang, Kokap, and Compassionate Districts. Coffee production produced by community-owned plantations there reached 416.3 tons. The Government of Kulon Progo Regency is currently developing a tourist attraction of the coffee village with an agrotourism concept located in Samigaluh District. The coffee village is located in Madigondo Hamlet, Sidoharjo Village and in Keceme Hamlet, Gerbosari Village. The two hamlets are a development area for robusta type coffee which is facilitated by the Agriculture and Food Service with finished products named Kopi Suroloyo and Menoreh Coffee. Tourists who come can sip coffee while enjoying views of the plantation located on the edge of Menoreh Hill, in addition, tourists are also invited to see a coffee production workshop. In the future planning, houses of residents...
in Magigondo and Keceme Hamlet will open a community coffee shop business as part of the economic driving force and prosperity of the community.

4.1.6. The Sengit Tea of Nglinggo

The Menoreh Hills Region has the potential of tea plantations with an area of 136 hectares. The tea plantations are mostly located in Nglinggo Hamlet, Pagerharjo Village, Samigaluh District. Based on an interview with Mr. Sukohadi, one of the tea farmers in Nglinggo, they produced tea with various flavors such as pennywort leaves tea, fragrant tea, white tea, and the sangit tea. Of the various products produced, tea is fiercely the top seed. The uniqueness of this product is the processing roasted on the stove. Tea sangit has a bitter taste compared to smelling. This tea is served by brewing it with hot water until thick. The Nglinggo people use palm sugar as a friend to drink tea and to relieve the bitter taste. Tourism Area Development Nglinggo Tea Plantation is facilitated by three agencies, namely the Tourism, Trade, and Agriculture and Food Service Offices, to accelerate agro-based “Menoreh Surgery” programs and encourage all culinary ingredients to be made from tea. Tourists who come in this tea garden can enjoy the natural beauty of the incised hills and see tea farmers picking tea leaves when the harvest season arrives. In addition, tourists can enjoy a variety of drinks from tea, green tea fried rice, sweets under the green tea, and snacks combined with green tea or matcha powder.

4.2. The Clusters of Downstreaming Process

When compared to other industries such as agro-industry and processing industry, the tourism industry has a uniqueness that cannot be done by other industries. Tourism can sell intangible products that are in the middle of the downstream process. If the agro industry sells products extracted from natural resources and processing industries to sell finished products, the tourism industry can sell the middle part of extracts of natural resources processed into finished products through tour packages.

The tour package is not only presented in the middle part of the downstream processing, but from the upstream part where the natural resources are located downstream where the natural resources become new products. To see how tourism can reach the entire process, the researchers have made the cluster of findings. By classifying the products, three clusters will be obtained where each cluster represents a the activities
in each phase of natural resources from an extraction to a product that are ready for consumption.

The first cluster is upstream, the exploration phase. The tourism activities formed for example are the introduction of the type of vegetation, the method of planting, the process of farming. The second cluster is the middle current, the processing phase. The tourism activities are in the form of a workshop on processing raw materials into finished goods. The last cluster is downstream, the packaging phase. The tourism activities are in the form of the consumption of finished products and packaging them as souvenirs.

<table>
<thead>
<tr>
<th>No</th>
<th>Tourist Attractions</th>
<th>Downstreaming of Kulon Progo Destination Products</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>The Kalibawang Cocoa</td>
<td>The Potential of Upstream Tour Packages</td>
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<td>The Potentials of Midstream Tour Packages</td>
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<td></td>
<td></td>
<td>The Potentials of Downstream Tour Packages</td>
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<tr>
<td></td>
<td>1. Cocoa plantation exploration</td>
<td>1. Cocoa plantation exploration</td>
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<tr>
<td></td>
<td>2. Introduction to cocoa vegetation</td>
<td>2. Introduction to cocoa vegetation and variants</td>
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<td></td>
<td>3. Introduction to planting methods</td>
<td>3. Introduction to planting methods</td>
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<td></td>
<td>4. Workshop on cocoa plant maintenance</td>
<td>4. Workshop on cocoa plant maintenance</td>
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<td>5. Harvesting cocoa fruits</td>
<td>5. Harvesting cocoa fruits</td>
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<td></td>
<td>1. Cocoa fermentation and drying workshops</td>
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<td>2. Cocoa roasting, mashing, and grinding workshops</td>
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<td></td>
<td></td>
<td>1. Chocolate beverage variants</td>
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<td>2. Chocolate bars souvenirs</td>
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<td>2</td>
<td>The Pennywort of Pawon Gendis</td>
<td>Processing workshop of pennywort leaves into</td>
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<td>chip crackers</td>
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<td>Processing workshop of pennywort leaves extract into</td>
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<td>Processing workshop of pennywort extract into</td>
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<td>pennywort chocolate bars</td>
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<td></td>
<td>1. Introduction to pennywort vegetation</td>
<td>1. Processing workshop of pennywort leaves into</td>
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<td>and variants</td>
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<td>2. Introduction to planting methods</td>
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<td>3. Gathering pennywort leaves</td>
<td>into cosmetic masks</td>
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<td>3. Processing workshop of pennywort extract into</td>
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<td></td>
<td>pennywort chocolate bars</td>
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<td></td>
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<td>Pennywort chocolates, chips, and cosmetic masks</td>
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<td>souvenirs</td>
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<td>3</td>
<td>The Organic Granulated Palm Sugar</td>
<td>Cooking workshop of coconut palm sap, precipitate,</td>
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<td>and filter coconut sugar traditionally</td>
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<td>Processing workshop of crushing and sifting</td>
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<td>coconut sugar into crystals</td>
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<tr>
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<td>1. Coconut plantation exploration</td>
<td>1. Cooking workshop of coconut palm sap, precipitate,</td>
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<td>2. Watching the traditional process of</td>
<td>and filter coconut sugar traditionally</td>
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<td></td>
<td>taking coconut juice</td>
<td>2. Processing workshop of crushing and sifting</td>
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<td>coconut sugar into crystals</td>
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<td></td>
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<td>Organic granulated palm sugar products souvenirs</td>
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</table>
### Downstreaming of Kulon Progo Destination Products

<table>
<thead>
<tr>
<th>No</th>
<th>Tourist Attractions</th>
<th>Downstreaming of Kulon Progo Destination Products</th>
</tr>
</thead>
</table>
| 4  | The Kampung Naga Sanggrahan        | 1. Dragon fruit plantation exploration  
    2. Introduction to dragon fruit vegetation and variants  
    3. Observing the blossoms of dragon fruit flowers at night  
    4. Workshop of planting seeds and crossing dragon fruit vegetation  
    5. Harvesting the dragon fruits  
    6. Dragon fruit processing workshop into dragon fruit noodles  
    7. Eating Dragon fruit noodles in The Kampung Naga Sanggrahan |
| 5  | The Suroloyo and Menoreh Coffee    | 1. Coffee plantation exploration  
    2. Introduction to coffee vegetation and variants  
    3. Collecting the coffee beans  
    4. Workshop of fermentation and drying coffee beans  
    5. Watching and workshop of traditional methods of coffee bean roasting  
    6. Tourists enjoy Menoreh coffee  
    7. Menoreh and Suroloyo Suroloyo Coffee Beans Souvenirs |
| 6  | The Sangit Tea of Ngliggo          | 1. Paket wisata eksplorasi kebun teh Ngliggo  
    2. Paket wisata pengenalan vegetasi dan varian teh  
    3. Paket wisata memetik daun teh  
    4. Ngliggo tea plantation exploration  
    5. Introduction to tea vegetation and variants  
    6. Collecting the tea leaves  
    7. Workshop of tea leaves drying  
    8. Processing the various kinds of tea beverages  
    9. Making the green tea fried rice  
    10. Travelers enjoy Tea Sangit in Ngglinggo  
    11. Travelers enjoy fried green tea in Ngliggo  
    12. Tea Souvenir |

Source: Analysis, 2018

### 4.3. Ethno-Ecotourism: A Touch of Cultural Resource in Downstreaming Process

The traditional economic activities carried out in pre-modern times, even thousands of years ago. The activities of digging, planting, and gathering in plantation and agricultural products still practiced today. Extracting the natural resources is a daily activity of community in Kulon Progo. As a local product, natural resources and products are very close to the people or the local community. Local communities have a stake in processing the natural resources produced by their regions. They also usually have a unique way and system in processing these natural products.

The process of downstreaming products that promoted by some communities in Kulon Progo involves a touch of local culture. The cultural resources implicitly implies the
existence of a relationship between one previous generation and the next generation, so that in certain contexts the term cultural resource is also called the term 'cultural heritage'. The role of cultural resource of local communities can be seen starting from the planting process, the care of plants, and the harvest time of crops. In processing these natural products, people have their own methods and systems until they are ready for consumption. In fact, the equipment used tends to be traditional and simple. Furthermore, the packaging or presentation of the final product from these natural resources is carried out traditionally as a result of the creation, intention, and sense of the local community.

Nevertheless, the local community seems quite adaptive to the times and market demand. Local communities in Kulon Progo are able to combine conventional methods and modernity by creating creative products that have selling value to improve the economy. The creativity built by the community is also a way of life for the local community to meet the needs of life. With the touch of cultural resources, it is hoped that innovations and changes in the economic pattern of society will emerge, from traditional economies to into high-economic value products.

![Diagram showing Ethno-Ecotourism Approach of Local Economy](source)

**Figure 3:** Ethno-Ecotourism Approach of Local Economy (Source: Analysis, 2018).

### 5. Conclusion

Developing of new products in the agriculture and plantation sectors needs to be seen from a comprehensive perspective by looking at the role of other supporting sectors. The processing industry sector is one of the main supporters that has an important
role to increase the added value of a raw product from natural resources. Some of the findings that can be concluded from this study are:

1. The Original Regional Revenue (PAD) Kulon Progo in the tourism sub-sector has potentials to increase with collaboration of mix-sectors industry

2. The tourism activities in Kulon Progo could be emerge from the process of developing natural resource-based products through the touch of cultural resources

3. Ethno-ecotourism in Kulon Progo is a sustainable tourism development model that combines cultural resources-based tourism products and natural resource-based tourism products

4. Developing an ethno-ecotourism is potentials to increase the added value of products especially in the middle stage of downstreaming process

References


[8] Law No. 32 of 2004 Republic of Indonesia, Concerning the Regional Government

[9] Law No. 33 of 2004 Republic of Indonesia, Concerning the Financial Balance between Central and Regional Governments

[10] Law No. 83 of 2016 Republic of Indonesia, Concerning Social Forestry


