

## **A Model-Ecotourism Development Based on Regional Strategic Potential: A Case Study in Rote Ndao East Nusa Tenggara**

**Frans Gana**

### **Abstract**

The aim of development policies adopted by various countries is to more focused on environment and sustainability. This concept should be necessarily wisely addressed by the Government of Rote Ndao especially in tourism development policies. In fact, Rote Ndao has a wealth of biological and non-biological abundances, however those assets are not fully able to boost the regional economy that people live there are still generally remained below the poverty line. This situation is exacerbated by the degradation of natural resources, decreasing in agricultural outputs, poor cooperation network between the government and other stakeholders, the lack of knowledge and information of stakeholders in managing and utilizing the leading sector of tourism. Concerning on those facts, this research is developed to analyze and develop a model of the potential of ecotourism based on regional strategic potential in Rote Ndao. The purposes of this research are to:

- (1) Identify and verify the productivity of various commodities in integrated horticulture farming systems;
- (2) Create effective and efficient Lontar palm production system and production of farm animals (cow and buffalo) that affect the business community groups;
- (3) Foster effective and efficient management of the marine and terrestrial natural areas in order to maintain and preserve the uniqueness and richness of existing ecosystems;
- (4) Conduct workshops about ecotourism corridor preparation to improve the understanding of stakeholders and local communities in order to have the same concern, responsibility and commitment to the preservation of the environment and culture.

To accomplish the goals, this research uses qualitative analysis to analyses the prospective strategy, which consists of regional strategic potential the profile of potential regional strategy, analysis of efficiency, ecotourism analysis and promotion analysis, while, SWOT method is used to create the model of

ecotourism development. The results show that the Rote Ndao has various commodities in the development of eco-tourism corridor, such as in the field of Agriculture: paddy fields, palm and vegetable gardens; Forestry: teak forests and Gmelina forest; Fisheries: seaweed and aquaculture; Livestock: cattle, buffaloes and horses. Rote Ndao also has a land area of marine, unique and rich ecosystem, and interesting local culture that can delight tourists. In addition, other tourist attractions such as beaches, nature and culture are very interesting and varied that can be managed into sustainable tourism package. The adjustment between product and market demand, through promotion and publicity, still needs to be improved because of the various tourism products offered in the market. In order to transform economic resources from less productive areas (agriculture) to more productive areas (tourism sector), increasing the effectiveness and efficiency of the outputs, openly continuous communication between stakeholders and government is needed to build understanding and consensus among them.. Therefore, the government should devise and establish appropriate tourism regulation, accompanied by transparency and public participation in the development of ecotourism in Rote Ndao. Furthermore, the government needs to establish ecotourism development strategy through the promotion and publicity of ecotourism which can increase local revenues through high number of tourist arrivals yet enhances incomes. Finally, the government needs to establish an institution to accommodate the work of innovation and creativity in tourism industry to put on traditional, national and international markets.

**Keywords:** Ecotourism, Regional Strategic Potential

### **Introduction**

Rote Ndao is an archipelago district with uninhabited 90 islands and six inhabited islands.. Administratively it consists of 8 sub-districts, with a population of 120,861 inhabitants, including 61,805 men, and 59 056 women. Its biodiversity consists of: (1) Flora (the vast grasslands, palm trees, pine trees and mother-of-pearl); (2) Fauna (big and small mammals: birds and other); (3) The forest included protected forest 1.207ha, 799ha of production forest, limited production forest 240ha, 987ha of forest conversion and wildlife 434,95ha. Production forest area is more dominated with a Rote Ndao's native plant called Lontar Palm which is a kind of *Borassus Flabellifer* (*Borassus sundaicus* Beccari) that produces sugar. This plant has a very high economic value because of various benefits (Fox: 1996: 45). From its midrib stem, leaf, nira can be processed for the needs of building materials, craft, ingredients and food and beverage. There are 20 668 Lontar Palm trees in Rote Ndao with the production output of 8,688 tons / year (BPS Rote Ndao 2010); (4) For Agriculture: production every year as follows: 48 861 tons of rice, 2,052 tons of corn, 551 tons of peanuts, 340 tons of green beans, 174 tons of sorghum, as well as fruits and vegetables; (5) The sea and natural attractions of this region has always been the scene of national and international competition such as: fishing, snorkeling, skiing,

surfing (every September / October) and the cultural arts performances (August) as well as non-biological natural potential that can be enjoyed by visitors in the form of a stretch of white sand beach.

A survey revealed that there has been a decline in the growth of agricultural crops, plantations, livestock and fisheries as a result of low production and community productivity. Low productivity is resulted from a combination of lack of cooperation between the government, community and stakeholders, poor knowledge and information of stakeholders in the region to manage and utilize the wealth of tourism as a leading sector, and degradation of natural resources. Recognizing the gap between the wealth of biodiversity and poor management and productivity that result in poverty, then it becomes an important point to be studied for Rote Ndao stakeholders, NGOs and academics to solve the problem. One of the efforts is the development based on Ecotourism Corridor considering the Potential Strategy in the of Rote Ndao.

### **Research Objectives**

Based on the above description, the objectives of this study are:

1. To identify and verify the productivity of how which various commodities and integrated horticulture farming system have impacts on ecotourism sustainability variables.
2. To simplify the palm production system and production of cattle / buffalo and assess on how which those approaches influence on small business processes.
3. To streamline the marine and terrestrial natural areas in order to maintain and preserve the uniqueness and richness of existing ecosystems.
4. To increase the understanding of stakeholders and local communities in order to have a concern, responsibility and commitment to the preservation of the environment and culture by conducting regular workshops as preparation for the development of eco-tourism corridor in Rote Ndao.

### **The Research Urgency**

The most main reason of this reason is more because of the higher number of poverty in the land that actually is considerably potential to be managed to have significantly prospective ecotourism industry.

Poverty can be caused by inequality opportunity to accumulate social power sources such as:

- 1). Productive capital or assets (land, housing, equipment, health;
- 2). Financial resources (income and adequate credit);
- 3). Social and political organization that can be used to achieve common interest;
- 4). Social networks to obtain vocation and goods;
- 5). Adequate knowledge and skills;
- 6). Useful information to have progress life.

Poverty is not only seen as common poverty that easily can be traced from the non fulfillment of economic needs, but also the real picture of how people are mentally very pleased to be considered as poor people in order to easily have access on government program for poor people.

This irony picture is the main reason of this research which brings the attention of the researchers to tackle the poverty in Rote Ndao through **the development of eco-tourism corridor**.

Ecotourism is responsible nature tourism activities in one area that give highly attention to the elements of education, understanding and supporting the efforts of conservation of natural resources, as well as increasing the income of local communities (Regulation of Ministry of Home Affairs number 33 in 2009).

Conceptually ecotourism is viewed from three perspectives (TIES, 2000). Firstly, ecotourism is seen as a product (prosperity of natural and cultural assets). Secondly, ecotourism is a market which is considered as a journey that is intended as environmentally conservation efforts. Thirdly, ecotourism is a development approach which is a method of resource utilization and environmentally friendly tourism management.

### **The Expected Research Outputs**

- 1). A mapping of strategically potential areas as a basis for the development of sustainable ecotourism corridor.
- 2). Production of palm (palm sugar, sugar plate, sugar water, musical instruments Sasando) and milk cows / buffaloes as a souvenir,
- 3). the agreement of stakeholders containing commitment of the development of sustainable eco-tourism corridor.

### **Theoretical Review**

#### **Conception and Poverty Reduction Strategy**

Commonly people consider poverty as economically deficiency which a person being poor if "not able to meet the minimum standard for the basic needs to live in decent life by having good food and non-food needs". Central Bureau of Statistics as an official data provider uses this definition which defines the poor generally is characterized by powerlessness in following condition:

- 1). Meeting the basic needs such as food and nutrition, clothing, housing, education and health (Basic Need Deprivation);
- 2). Perform productive activities,
- 3). Reaching access to social and economic resources
- 4). Determine their own fate and constantly discriminated, have feelings of fear, apathy and fatalistic;
- 5). Leave poor minded culture and always have no dignity and low self-esteem (no freedom for the poor).

Essentially poverty in Indonesia is caused by four (4) main factors, namely: a. lack of opportunity, b. low ability, c. lack of collateral, and d. Helplessness. Literally poverty comes from a word "poor", which means "not affluent objects".

According Koenrad in Sarosa (2006), that overstating poverty will tend to forget what they (the poor) have. Poor people are not people who "do not have". From an economic standpoint, they are the ones who have "little" but on the other hand they also are rich of culture and social capital. Experts say that the country or region where poverty. Experts state that the country or region where poverty rates are high, generally trapped in a cycle of poverty. The cycle is a row of circular forces and interacts with one another in such a way, which puts a country / region which has a high poverty rate to remain left behind. The cycle of poverty occurs from the fact that the total productivity in poor countries or regions is very low as a result of capital limitation, market imperfections and economic backwardness.

Martawang (2006) suggests four strategies in the context of poverty reduction, namely:

- 1) Strategy of increasing the income of the poor through the development of economically productive activities.
- 2) Empowerment of the poor.
- 3) Development of the capacity of the poor and
- 4) Social protection of the poor.

Sumodiningrat (2003) adds three aspects must be done as a strategy to empower the communities, namely:

- 1) Creating an atmosphere to develop potential values of the community.
- 2) Strengthening the potential power of the community.
- 3) The provision of protection in the process of empowerment

In the context of poverty, community is not only approached as an object but rather as subjects or actors that are grouped in low-income groups.

### **Ecotourism as Potential Travel Market**

Ecotourism is tourism activity that gives considerable attention to the sustainability of the tourism resources. Ecotourism is defined as responsibly natural trips which are strengthening environment conservation and improving the welfare of local communities (TIES, 2000). From this definition of ecotourism is viewed from three perspectives which are ecotourism as a product (wealth of natural and cultural property) meaning that ecotourism is all the attractions based on natural resources. Next, ecotourism seen as a market is a journey focused on environmental conservation efforts. Finally, ecotourism perceived as a development approach is a method of resource utilization and environmentally friendly tourism management.

At the global level, the growth of ecotourism market is recorded much higher than the overall travel market. Based on the analysis of TIES (2000) ecotourism

growth ranges between 10-30 percent annually, while the growth of tourists is overall just 4 percent.

This statistics indicates that there has been a shifting behavior of the travel market and thus, ecotourism is expected to be highly prospective tourism market in the future. In this picture, then ecotourism is defined as follows a new form of responsible travel to natural areas and adventure that can create tourism industry. Thus, based on those pictures, it is understandable that world ecotourism has grown very rapidly.

### **Ecotourism Management Approach**

Ecotourism is a form of tourism that is managed by conservation approach. Ecotourism management approach is more stressed on nature and culture that ensures the preservation and well-being, while conservation is an effort to sustain the utilization of natural resources in the long run. This definition is also in accordance with the definition made by the International Union for Conservation of Nature and Natural Resources (1980) that conservation is human effort to take advantage of the biosphere by trying to give great results and sustainability for current and future generation. Meanwhile, the interesting destination of ecotourism tourist is a natural area. Protected areas as an object of tourist attraction can be National Parks, Forest Parks, Nature Reserves, Wildlife, Parks and Tourism Hunting Parks. Other forest areas such as protected forest and production forest of natural objects as if it potentially interesting for ecotourism can be used also for the development of ecotourism. This concept should be implemented as the same as other natural areas of the ecosystem such as rivers, lakes, swamps, peat, areas upstream or estuaries. The important point of this approach is to keep the nature of the area

To develop ecotourism, it needs to develop the tourism concept in general. There are two aspects to be considered which are the destination and the market. For the aspect of tourism development is conceded with the concept of product driven, while the aspect of the market need to consider but the type, nature and behavior of the objects and natural attractions and for culture needs to preserve its existence. In essence ecotourism that preserve and utilize the natural and community culture, much more stringent than just sustainability. Ecotourism development with environmental focus produces much more reliable results in preserving nature than the sustainability of development. Because ecotourism is not the exploitation of nature, but only using natural and community services to meet the needs of knowledge, physical / psychological and tourists. Even in the various aspects of ecotourism is leads to metatourism, meaning it is not selling the destination but selling philosophy. Thus, at this value, ecotourism will not ever meet the market saturation

### **Principles of Ecotourism**

Ecotourism development in forest areas can assure the unity and sustainability of the forest ecosystem which is highly required by the Ecotraveler. Therefore, to develop the ecotourism, there is some important points of the development must be fulfilled. If

all following principles can be implemented, ecotourism might have successfully create a ecological friendly development in the form of a community-based development. The Ecotourism Society (Eplerwood / 1999) states there are following eight principles have to be implemented:

- 1). Prevent and mitigate the impact of tourist activity against nature and culture, prevention and control should be tailored to the nature and character of local nature and culture.
- 2). Establish environmental conservation education to educate tourists and the local community of the importance of conservation. This education process can be carried out directly in nature.
- 3). The revenue from the ecotourism goes into direct revenue of the region. It should be managed responsibly with the intention that the management of the area can receive direct income. The retribution and conservation tax levy can be used directly to build, preserve and improve the quality of the conservation area.
- 4). Public participation in ecotourism planning and supervision by which the community is invited to plan the development and it is expected to participate actively in the supervision process.
- 5). Creating income for the community which is significantly advantageous to the community economy and thus encourage people to preserve natural areas
- 6). Maintain the harmony with nature. All development efforts, including the development of facilities and utilities must maintain the harmony with nature. If there is an attempt to disharmonize with nature, it will destroy the ecological tourism product. It is highly required to avoid the use of oil, but it is more to conserve flora and fauna while maintaining the original culture
- 7). Building the environmental capacity. In general, the natural environment has a lower carrying capacity with the carrying capacity of artificial area, yet, in reality, there is higher demand on natural environment than the artificial area.
- 8). Creating more national income opportunities on a large portion. If a conservation area is developed for ecotourism, it is surely believed that it will positively have impacts on the foreign exchange and tourist expenditure which profusely enjoyed by the state or any local government.

The development of ecotourism has to be based on the main purpose that initially, it encourages preservation of the environment, so that ecotourism should be planned to integrate the conservation management systems approach by using conservation design.

It starts with area conservation planning process which is to identify the ecological systems and the diversity of the community, identifying ecological integrity (biodiversity health), examining the health status of biodiversity, and developing conservation objectives expected by the region. After the planning process, the next phase is to identify the threat or barrier and the sources or potential threats that may disrupt the conservation purposes. Based on the type and source of the threat or barrier is then drawn up a strategy for the management and restoration and eliminate or minimize of the source of the threat.

### **Tourism Sector Development as the Booster (Impending sector)**

The development of tourism object should be designed based on the available sources of potential attraction that referred to successful development criteria that contains the variety of eligibility as follow:

- a. Financial feasibility, referring to commercial calculation of the construction of a tourist attraction. This estimates costs and benefits that indicate profit / loss had to be taken into account from the initial development, including the period of time required for capital return.
- b. Regional socio-economy feasibility, identifying the socio-economic impact on a regional basis of the investment of tourist attraction construction. This contains the analysis of which it can create jobs and business opportunities that can increase foreign exchange earnings and amplify the acceptance in other sectors such as: taxation, industry, commerce, agriculture that all gives additional income for the community.
- c. Technical feasibility; analyzing on how which the attraction development should be technically responsible regarding to the existing carrying capacity. A tourist attraction place may not need to be forced to be built if it has low carrying capacity that because the place may endanger the safety of tourists, resulting in the reduction of the attractiveness.
- d. Environmental feasibility; analyzing the environmental impact assessment which can be used as a reference for the development activities of the tourist attraction. In fact, the development attraction that may devastate the environment should be stopped.

### **Research Method**

This research is applied research aimed to practically solve the problems which are classified into research development or action (action research) (Indriantoro, et al, 1999) between the researchers and other interested stakeholders, particularly the community. Thus study will describe the action, interpret and explain the various commodities of horticulture integrated farming systems and convey the preservation of the uniqueness and the richness of marine ecosystems and the buffer zone of ecotourism corridor. There are following six main actions to be implemented in this study:

1. Strategic Potential areas as a basis for the sustainable development of ecotourism corridor (sustainability).
2. The production of Lontar (palm) product and milk cow / buffalo as souvenirs
3. The agreement of stakeholders in the development of sustainable eco-tourism corridor
4. The model of ecotourism development based on the strategic potential areas in the of the buffer zone area.
5. Promotion through leaflets / brochures and guidebooks
6. Model of Lontar Museum Development in Rote Ndao



### **Data Collection Techniques**

To obtain the data there are various data collection techniques, namely:

1. Research Field: aiming to obtain data on the problems studied by using observation, questionnaires, interviews and focus group discussions to stakeholders, local communities, NGOs and other concerned parties.
2. Library study: reading, studying and reviewing the literature, text books, scientific journals, magazines and relevant previous studies.
3. Workshop: collecting data through the delivery of content, exchange opinions, questions and answers, discussion and final stage of the perception.

### **Data Analysis**

This is action Research which is done through a process, including planning as an input, core transformation, action and the outputs by emphasizing of the reflection of the results of activities. Furthermore, after the data is collected and tabulated, the analyzing process is done by using qualitative descriptive analysis consisting of regional strategic potential profile analysis, efficiency analysis, analysis of ecotourism and promotion analysis. In addition, to formulate the corridor development model, SWOT analysis (Strength, Weakness, Opportunity, treat) based on ecotourism potential regional strategy, is used. Futher explanation of research can be seen on the study result.

### **Result**

#### **The History of Rote Ndao**

Rote Island, also called Roti Island, is an island located in East Nusa Tenggara Province, Indonesia. Rote is the southernmost region of Indonesia. The island is famous for its distinctiveness of Lontar palm cultivation, natural beach attraction, Sasandom music, and its traditional hat called Ti'i Langga. Rote along with small islands surrounding got the status as a district with name Rote Ndao through the Law Number 9 in year 2002. Rote Island consists of 96 islands where 6 of them are inhabited. This area is very dry influenced by monsoon which the rainy season is relatively short (3-4 months). The north and south are in the form of the low-lying coast, while the central part is more dominated by valley and hills. This island can be travelled in relatively short period of time.

In the beginning, before the colonial period, the name of this island was called Kale (Rote Island first name). Other Rotenese community calls this island with the name "Lolo Deo Do Tenu Hatu" which means island of the Dark. There is also a mention of "Nes Do Male" which means island of the Withered / Dry and another mention of the "Lino Do Nes" meaning island of Island of silence. In the Portuguese documents in the 16th century and the 17<sup>th</sup>, it was listed in various name which one of them was known as the "Rotes". In the map of the Netherlands, this island called "Rotthe", which by the experts quoted in the wrong map then becomes "Rotto". But in one map from the early 17th century, the island was called by the native name "Noessa Dahena" (Nusa Dahena) derived from Rote eastern dialect literally means

'Man Island'. In the mid 17th century, the Dutch East Indies Trade Unions in its documents using the name "Rotti" with three different spellings of "Rotti", "Rotty", and "Rotij".

These official names continue to be used until the 20th century and converted into a "Roti", even somehow the Rotenese still admit that their island's name is the name given by the Portuguese. Similarly, the name "Roti" is the Malay language change from "Rote" a change raising from a meaningless word and already using the word "Roti", which Bahasa Indonesia means food made from wheat flour (English is the bread). This name is used in the maps of the world, and seems more acceptable in broad circles (Fox, 1996: 25-26). Other naming version of Rote Island, according to data of De Clercq in 1878, the name of the island actually comes from the word bread from the Malay language meaning flour confectionary. Initially at the east end of the island of Rote there is a place called *Pantai Rote* (locally called *Pante Lote*) included in *nusak* Land. First landing on the island of Rote was on the spot, causing misunderstanding of the crew who heard that it is bread, so that the island they named Roti.

### **Potential Areas of Rote Ndao**

Rote Ndao has five mainstay sectors, which are Agriculture, Plantation, Livestock, Fisheries and Tourism. The explanation of each sector as follow

#### **1. Agriculture:**

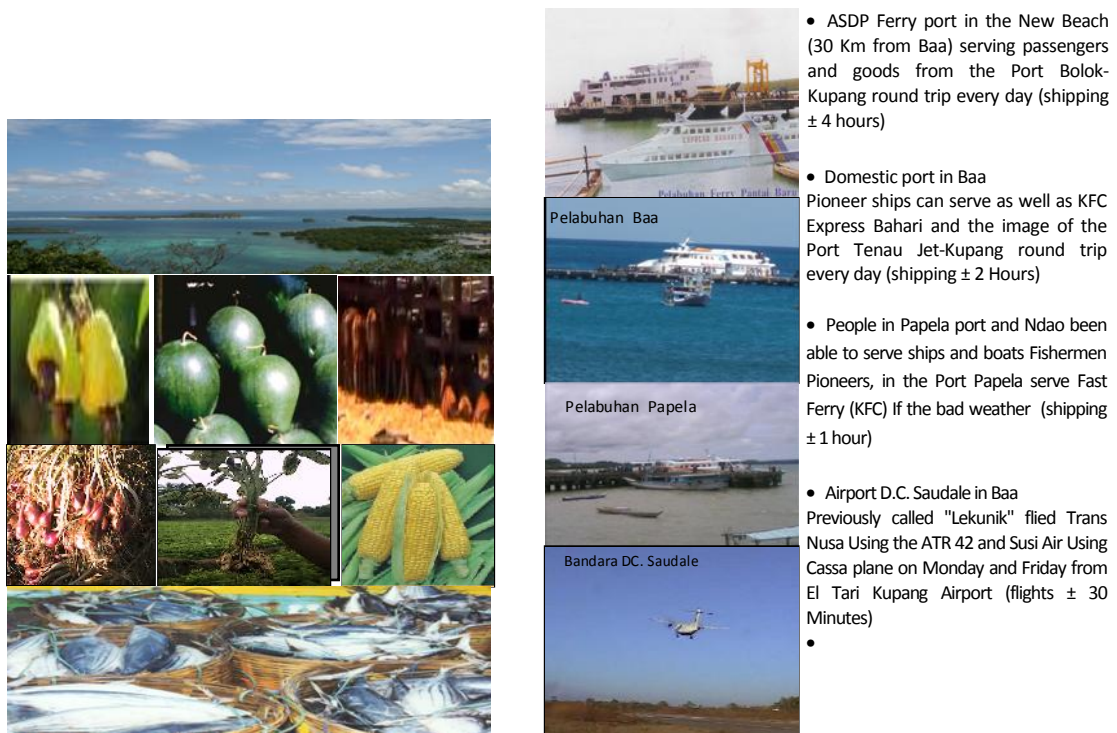
The agricultural sector plays a strategic role in Rote Ndao development structure. However, this sector is still not getting the attention from the government. This can be seen from:

- (a) small-scale operation,
- (b) limited capital,
- (c) the use of conventional technology in the operation,
- (d) is significantly influenced by the season,
- (e) focused on only local market area,
- (f) generally work with family labor, thus causing agricultural involution (hidden unemployment),
- (g) low access to credit, technology and the market,
- (h) the agricultural commodity markets that are mono / oligopolistic controlled by wholesalers resulting in exploitation rates that are detrimental to farmers.

Other problems also hamper the development of agriculture such as agrarian reform (the conversion of agricultural land into non-agricultural land) that is increasingly out of control, lack of supply of qualified seeds for farmers, shortages of fertilizer during the growing season, self-sufficiency in rice that does not improve the welfare of farmers and rights violations cases of the farmers. However, agricultural sector is still favored, because this sector is a sector that significantly accommodates the overflow of labor and most of the population depends on agriculture. In fact,

Agricultural Land of 82626.75 ha, exploited For Rice irrigation / Gora: 17 151 ha and produces 68 604 tonnes / Th, Sleeping area: 22,000 Ha.

The “top” commodities are Rice, Peanut, Onion, Red, Watermelon, Lombok, Corn, and Sorghum. The production is: Peanut (393 Ha) = 358 tons / year, Shallots (514 Ha) = 6.210 tons / year and Corn (2293 Ha) = 6,879 tons / year.



**Figure 1. Potential Sectors and Transportation in Rote Ndao**

## 2. Livestock

Behind its remoteness, Rote has a land area of 20 512 ha of grazing cattle, or about 16% of the area. It's not including 40,000 ha of degraded land could be used for farming activities. Most of the natural pastures, especially the type of Andropogon, being on vacant land is a natural grass and dry land with scrub vegetation. Cows, buffalo, and many horses bred in Rote East, Central, and Northwest and for goats, sheep, pigs, and poultry-chicken and duck bred more evenly throughout the district. Livestock population until the year of 2012: Cattle: 28 805, buffalo: 14 070, horses, 2,993, goats: 55 158, sheep: 23 311, pig: 42 043, chickens: 74 705 and duck: 1,272. The population of cows, buffaloes and horses become commodities sold to Jakarta and Makassar via Kupang. Until February 2012, the "export" 1,336 beef cattle, buffalo 1,000 and 350 horsel. For the Java market, horses required for towing animals, while in Makassar as a transportation tool in the areas not reached by ground transportation.

Livestock commodities apparently experienced some problems due to the pattern of maintenance and the natural condition particularly in dry season making the decreasing of supply of feed and water. Generally there is a river in the lower reaches. Discharge of water in the dry season is very small, even many rivers are dry because of especially in non-forested river. Another obstacle is the loss due to outbreaks of animal diseases such as septihemia epizootica (SE) which attacks cattle and buffalo and hog cholera in pigs. Due to very poor transportation infrastructure, the cost of transportation from the district to the port becomes high. Another sea transport (for cattle) to Kupang to solely relies on ferry. Additionally, theft, limited capital breeders, and the threat of locusts and *acasia nilotika* grass (grass lethal nature) are also a problem.

### **3. Fishing**

The number of fishermen in Rote Ndao is in total 4914 households or 13 209 inhabitants. Seaweed farmers are 7149 people within 2,691 households. Each year seaweed farmers produce as much as 1512.5 tons of dry seaweed (2009) and in 2010, in the month of June, 41.4 tons of dry seaweed. This declining production is due to the pollution that enters the Indonesian Exclusive Economic Zone covering 16 420 km<sup>2</sup> waters in Timor Sea because of oil leak in the the Montara Well Head Platform West Atlas-Timor Sea Water Australia, on August 21, 2009. This pollution has impacts on:

- The decreasing revenue of and Seaweed Farmers and Fishermen
- The decline in local revenue in the sectors of Marine and Fisheries
- Damaging the whole ecosystem

### **4. Transportation**

Inter Island Cargo crossings with Passenger, Goods Vehicles entry and exit Rote Ndao plays an important role in the Regional Economy. Seen in figure 3; Transportation from Kupang, the capital of East Nusa Tenggara to Rote Island can be reached by using sea transportation and aircraft. The traffic of goods and services generally relies on the ferry (ASDP) which every day serves with line Kupang-Pantai B within approximately four hours and line Kupang-East Rote use sailboat with travel time of 3-4 hours. Another alternative transportation is using express ferry Bahari with 1.5-2 hours drive. Other routes, such as Makassar and Surabaya, served by Awu Ship, boats and motor boats from local ports/ *Pelabuhan Rakyat (PELRA)* in Papela (Rote East), Oelaba (Rote Northwest), Batutua (Rote Southwestern), and Ndaonese (Island Ndaonese). Air line is only once a week served by Susi Air and Transnusa.

### **5. Tourism**

Rote Ndao has relatively potential sale value of tourism if it is managed optimally. There are 21 natural attraction, beaches, maritime and culture as follow:



**Figure 2: Tourism Attraction in Rote Ndao**

**1. The object of Marine Tourism**

Rote Ndao is known as a district consisting of 96 islands, of which 6 of them uninhabited island. The islands are very beautiful with natural scenery, beaches and marine parks that can be developed into marine tourism.

**2. The object of nature**

Ndana Island located in the Southwestern District of Rote is a very beautiful island and rich with its natural reserve, located at the end of surf beaches called Bo'a-Nembrala where can be reached by boat / speed boat approximately 20 minutes. The island is surrounded by beautiful white sand and the beautiful waves where are very interesting for surfing.

In the middle of Rote island, there is a red lake which is one of the most superstitious attraction which is forbidden to be visited by a menstruating woman. Another attracting place is Pantai Mulut Seribu in the sub district of East Rote, very beautiful for its marine parks and pearl cultivation. The myth is for people / tourists need to ask permission from the “owner” of the place, if not after visiting this place, they always have trouble or get lost on the way out as this place has very complicated paths.

There are other interesting beaches such as Beach Oeseli, Tongga, Sanama, Batutua, Oenggae, Tesabela, Nusakdale, Leli and Papela. In fact, Oeseli beach has a very beautiful white sand and great waves roll in which the tourists can surf and enjoy the beauty. The distance from the district town is 27 km.

**3. The Tourism Object of Culture**

The object of Culture Tourism is in the form of various traditional dances, such as: makamusu, teorenda, Taebenu, teotana, Lenda Ndao, Kebelai, Sasando and gong. Sasando is a rotenese string produced music instrument that has been well known since the 7th of century as traditional music instrument which has a 9-string stuck on a bamboo tube. On another part, there is a semicircle Lontar leaf as a resonator. The way to play sasando is by lapping and plucking, the fingers of both hands which is almost the same as playing guitar.

Other music instruments are gongs and drums which are used to escort traditional dance played by local residents. The more beautiful and attracted tourist

destination is rotenese culture attractions such as: Ndeo Traditional Ceremony (HUS) in the village of Boni in Northwestern Rote. Another ceremony is race riding skill and dexterity tests conducted every year in July to September for the worship of Almighty God and the ancestors who contributed to invoke blessings of the rain in Rote Ndao. Next attraction is folktale of Stone Termanu located in Rote Central which consists of two pieces of stone, on stone is believed as a man directly on the beach Leli and another one is a woman where lies a few hundred meters of the right hand of the man stone. It is called Termanu ast the stone can move from one place to another and it was from Maluku, Ambon and settled in Rote till now, when it arrived from Maluku. Rotenese people consider as a Sacred Stone where at particular time, the indigenous elders often pray at the foot of the rock to invoke rain.

#### 4. **The Tourism Object of Beach**

The first attraction is Bo'a Beach located in Southwestern Rote, which is very popular not only for Australian tourists but also widely known by tourists from America and Europe. Specifically it +30 KM from the capital town Ba'a and can be reached by using bus or microbus that are quite comfortable with good road condition. The privilege and the beauty of Nemberala beach-Bo'a as ocean is the wave, which is very exciting for Surfing (surfing). This beach is also famous with its beautiful white sand and very high and interesting waves up to 8 rolls at one time which are very challenging for surfers.

Local Government of Rote Ndao, in collaboration with the Balinese organization every year organizes an international surfing competition in the month of September to October in Bo'a. This place has very natural and beautiful scenery across the coast which can be seen in its traditional houses using woven fiber (wood of lontar trees) with Alang roof reeds.

#### 5. **The Tourism Object of History**

There are several sites serving as historical sites in Rote Ndao. The first site is Flagpole which is a monument on large rocks built by the Dutch government in 1942. Other attracted objects are 300 stairs / Mando Hill, Termanu Stone, Sophalean Cave, anchor ships of Magellan, carcass of World War II fighter aircraft, some of the Rotenese king's houses, diamond stone cave, an ancient cannon, cannon mashed, Musu city castle, king grave of Detak, VOC cannon, Rotenese traditional houses and fortifications of lusak lelenuk.

#### 6. **The Religious Tourism Object**

There are old churches and old mosques which reflect the rotenese religious developments history. The site of the old church called Menggelama is 102 years old and has its own history and built in the Dutch era. The following is a Luaholu church which has its own history for Christians. Next is the An Nur Mosque which is the oldest mosque in Rote where has a historical story for Muslims in Rote.

### **7. Tourism Object Particular Interest**

There is also an object of particular interest in Rote Ndao such as craft-making sasando, Ti'ilangga and other handicrafts.

In addition to that, there is also an annual tourism agenda held in Rote Ndao namely:

- a. Jamboree Tourism is to promote the Culture, Arts, dance, and traditional ceremonies (in October)
- b. Surfing: Tournament / International surfing competitions called Rote Open in Bo'a in Sub District of West Rote (60 km from the city) held in third week on September.
- c. HUS Oehandi: Traditional Ceremony / Ritual pleaded yields housed in Oehandi District of Southwestern Rote (20 km from the city) held on August
- d. Indonesia Sail: Indonesian sail stopover in the Sub District of Lobalain, Bo'a held the first week of August
- e. HUS Oebole: Traditional Ceremony held at the village Oebole, Northwest Rote sub District (28 miles from the city) held in the third week of July in Ba'a in the District of Lobalain.
- f. Sasando Festival: President Cup held at Ba'a, subdistrict of Lobalain held the first week of November
- g. Fishing Contest: President trophy held in the Ndao Nuse strait (54 km from the city) held in the second week of November.
- h. Rally Motor Ita Ray: competition of Regent trophy in East and west Rote subdistricts (90 miles from the city), held on the second week of November
- i. HUS Oebou: Traditional Ceremony takes place in the village Oebou, subdistrict of Southwestern Rote (28 km from the city) and held in the third week of October.
- j. Cultura and Arts Festival: competition of Rote Ndao Regent trophy held in Ba'a, sub district of Lobalain held the second week of August.
- k. Tapping Lontar: livelihood of people Rote Rote held in Oebafuk village, Southwestern Rote Sub District held in the second week of September.

## **DATA ANALYSIS**

### **Productivity Identification and Verification of Various Commodities as sustainable Ecotourism variables**

Ecotourism is responsible tourism activities in natural places or areas which are based on the rules of nature. It specifically aims to conserve the environment (nature and culture) to increase local community prosperity. Ecotourism consists of environmental conservation components (nature and culture), increasing community participation, and improve local economic growth. This development is always in line with the two basic principles of ecotourism, which provide direct economic benefits to the local community and contribute to the preservation of nature.

Rote Ndao has sights and the nature reserve with beautiful natural scenery, and flora and fauna diversity and for this reason; it should be the main concern of government, private sector and local communities in developing ecotourism. It will

attract the tourists who are sensitive and caring for the environment, who have the motivation and interest especially in nature conservation activities. Potential commodities that should be developed in ecotourism developing areas are agriculture, forestry, animal husbandry, fisheries and natural ecotourism. Those commodities are follow.

**Tabel 2. Potential Agriculture Product in Rote Ndao**

Region	Agriculture	Forestry	Fisheries	Livestock
East Rote	-Lontar Palm: 4.087 trees	- Critical Land: 447M3	Seaweed: 2.433 tons	-Buffalo and Cattle: 8.963
Pantai Baru	Lontar: 2.594 trees			
Central Rote	Farming Area: 1.957 ha	Gmelina Forest: 1,95ha		-Cattle: 4.397
Lobalain	Lontar Palm: 2.439 trees	Teak forest: 6,76 ha		- Cattle: 5.240 - Buffalo: 2.586
Northwest Rote	Farming Area: 2.476 ha - Lontar Palm: 3.694 - Vegetable Garden	Teak forest: 1,92 Ha	- Fishing: 65 ton - Seaweed: 1.243 ton	Buffalo: 2.420 ekor
West Rote			Seaweed: 2.385 ton	
Southwestern Rote	Palm Lontar: 4.229 trees			- Buffalo: 4.438 - horses: 657 ekor

Source: Primary Data Processed, 2014



**Figure 4. Farming Areas Operating for Vegetable Plantation**



**Tabel 3. Potential Natural Atraction and Locally Cultural Products in Rote Ndao**

Region	Natural Beaches	Attracted	Natural Mountains	Attracted	Culture Attraction
East Rote	- Oemaspoko Leko	Dead Sea in Landu	-	-	-
Central Rote	- in Leli beach	Termanu Stone	-	-	-
Lobalain	- Ba'adale Beach	Flagpole in	- Bukit Mando'o Oemau Pool	300 Stair in	- Boat Rowing Competition in Tulandale Beach - Rotenese King House danthe Grave of Rotenese King - Horse Racing in Holoama
Northwest Rote	-	-	-	-	- Hus Ndeo in Boni Village
Southwestern Rote	- Marine Park in island - Nembrala Beach	Do'o	- Ndana Island	Red lake in	Traditional Marriage Ceremony in Oehand

Source: Primary Data Processed, 2014



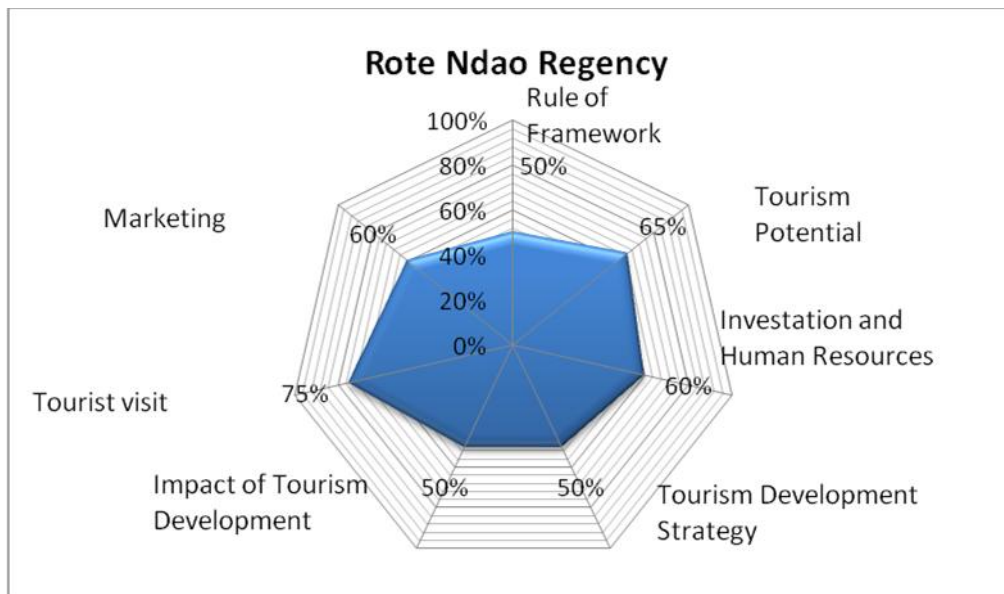
**Figure 5. Nembralla white sand beach with sea grass plant variation**

**DISCUSSION**

**Regional Strategic Potential as the basis for Sustainable Ecotourism Corridor Development.**

In the era of globalization, it is forcing the government, entrepreneurs and local communities to develop the regions based on local potential and superior products. For an agricultural area with rich of natural resources and human resources will easily determine the local potential products but it not as easy as the areas where are dry,

arid and local potential development depending on the season. It is difficult to determine the potential. To answer the difficulties, government plays the important role to determine the potential of what is feasible to be developed arid areas. Similarly, in Rote Ndao district, Agriculture and fisheries incredibly depend on season. Plantation and forestry sectors are very low potential for local development because of dryness. This situation is the reason revealed from the research analysis that the government of Rote Ndao should relatively promote the tourism sector as a leading sector and locomotive for the welfare and improvement of local revenues and local communities.



Tourism potential, human resources and the tourists variables are in a very good position with a percentage of 60-75%. This means that human resources as a local (indigenous people) who live in the area of tourism has demonstrated its role as one of the key players in the development of ecotourism. For example by providing land as an object to be visited, relatively having interesting cultural hospitality, safe, and applying knowledge of the traditions and local knowledge to tourists. While variables of government regulation and the impact of tourism development strategy of tourism development are in the position of 50%, meaning that the government of Rote Ndao has regulatory authority, the provision and designation of various tourism related infrastructure needs not demonstrating serious responsibility and determining the rigorous direction of development. That is why, the government need to play a strategic role in planning and implementation of sustainable ecotourism.

**Table 3. SWOT ANALYSIS  
Regional Strategic Potential as the basis for Sustainable Ecotourism Corridor Development.**

	<p><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>▪ Potential natural attractions, beaches and culture and variety of customs</li> <li>▪ Local Agency Support</li> <li>▪ Community attitude, behavior and hospitality in DTW</li> <li>▪ The availability of human resources</li> </ul>	<p><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>• Management of tourism that has not been focused on the formation of clusters</li> <li>• Not attracting packaging of the tourism product in the form of promotion and publicity</li> <li>• Application of tourism marketing strategy does not satisfy travelers</li> <li>• Facilities and Accessibility are still limited to a few areas</li> <li>• Inadequate transport facilities</li> <li>• Lack of commitment and government regulations that support the development of tourism in Rote Ndao</li> </ul>
<p><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>• Development of tourism and culture attractions</li> <li>• Development of tourism facilities and accessibility</li> <li>• Strong local Institution</li> <li>• Organizing events</li> <li>• Encouraging thd capacity through price competitiveness, after-sales service, continuity of production and satisfactory service.</li> </ul>	<p><b>SO STRATEGY</b></p> <ul style="list-style-type: none"> <li>• The expansion of market share by conducting market segmentation for some types of products</li> <li>• Improving the quality of human resources</li> <li>• Maintaining the product quality and service quality</li> <li>• Developing the infrastructure and facilities for particular interest tourism and marine tourism</li> </ul>	<p><b>WO STRATEGY</b></p> <ul style="list-style-type: none"> <li>• Government commitment and the establishment of regulatory standards in developing tourism</li> <li>• Creating investment climate</li> <li>• Improve cost efficiency</li> <li>• Develop a more attractive tourism packages in the form of promotion and publicity</li> <li>• Improving access to the tourists attractions and improving transportation infrastructure</li> <li>• Improving marketing strategy</li> </ul>

THREATS	ST STRATEGY:	WT STRATEGY:
<ul style="list-style-type: none"> <li>• Instability of national economy</li> <li>• Competing with global markets</li> <li>• Low product quality</li> <li>• Weak Partnership Relations</li> <li>• Expansion of free trade</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborated with the airlines to promote the tourism</li> <li>• Improve the quality of goods and services</li> <li>• Setting a pricing strategy</li> <li>• Developing characteristics of new products</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborated with the competitors through benchmarking</li> <li>• Improving the image/image of tourism as a safe destination for tourists by more focussing on the natural and cultural aspects</li> </ul>

### TOURISM POLICY

Government policies to be followed in order to develop the tourism are:

1. Supporting the efforts of preservation, studies and research related to the culture aspects including cultural values, traditional values, language and literature, art and history and archeology;
2. Encouraging the implementation of performing arts and cultural activities as a form of appreciation of local culture;
3. Mapping the potential tourist areas to design leading destinations for both the district and sub-district, cultural events as a potential tourist attraction, and establishing scale of events (core, major and supporting) at the district and sub district levels, and village;
4. Promoting effective administrative services and tourism business development in order to create conducive business climate
5. Organizing and procuring a model for the development of tourism businesses;
6. Establishing promotion activities by utilizing advanced information and communication technology in addition to the conventional implementation of promotion strategy;
7. Structuring the system and the provision of more comprehensive tourism information;
8. Improving coordination between partnerships, inter-regional and cross-sectors as an effort to build the local culture and tourism;
9. Encouraging and allowing community participation in tourism development activities;
10. Applying community empowerment, especially for the people around tourist attraction;
11. Building the professional tourism sector workforce in providing excellent service for tourists;
12. Planning and managing public service mechanism in culture and tourism sectors

### **THE COMMITMENT OF STAKEHOLDERS IN BUILDING SUSTAINABLE ECOTOURISM CORRIDOR**

The commitment was obtained through workshop held on 19 Oktober 2014 with the theme “Ecotourism Development Corridor Based on the Local Potential in Rote Ndao”. This activity aims to get the agreement from stakeholders for the development of sustainable eco-tourism corridor. The workshop results as follows:



**Figure 6. The Workshop of Ecotourism Development Corridor in Rote Ndao & Kupang**

The activity was attended by the faculties and students of tourism departments from several universities, Hotel and Travel Agents, relevant government agencies including the Department of Cooperatives and SMEs, the Department of Industry and Commerce and the Department of Tourism. The event was also supported by the presence of community leaders, indigenous tribes, religious leaders and micro businesses (handicraft and local food businesses). The results of the workshop are:

1. The entrepreneurs, Governments, Privates, Local Communities, Academics, and NGOs strongly support that the tourism sector in Rote Ndao should be managed as a leading sector (locomotive) to build the community's economy in Rote Ndao through developing the ecotourism corridor based on regional strategy potential.

2. It is significantly needed to transform economic resources from less productive areas (agriculture) to more productive areas (tourism sector) to enhance the effectiveness and efficiency to have greater results.
3. To promote economic development with a balanced growth, it is expected that tourism plays a decisive and can be used as a multiplier to foster development of other sectors gradually, in which the policy have direct and indirect impacts on other sectors.
4. The role of government in developing tourism in the outline are providing infrastructure (not only in physical form), extending various forms of facilities, organizing activities between government officials and the private sectors, promoting the tourism abroad. It is inevitably that almost all regions in Indonesia there is tourism potential, to develop it, the government need to provide good transportation, the infrastructure and tourism facilities.
5. Increasing tourism competitiveness in Rote Ndao through promotion and publicity policy Rote Ndao.

By distributing tourism products to the market in the form of tourism image, the prospective tourists are not just going to buy the quantity but also the product has been adapted to market demand. Between suitability of products and the market demand is still to be continually adjusted because of the various tourism products offering in the market, therefore each product must have competitive values. Increasing tourism competitiveness needs to be improved through the promotion and publication policies in Rote Ndao.

Direct promotion is done by all agencies in marketing industries such as: tourism manufacturers, general travel agencies and their branches. Promotion is an intensive activity in relatively short time. Promotion activities organize effort to increase the attractiveness of the product to potential customers. Consumers and demand are not directly produced but the products are more tailored to consumer demand. To conduct proper promotion should be realized that the market is often not distributed the finished product but sometimes only its components. For example: hotel, attractions, conveyance. These components still need to be mixed into a complete tourism product. Usually tourists arrange their own journey.

Below is the explanation of direct and indirect promotion:

#### **a.1. Direct promotion (consumer promotion)**

Final target of all marketing and promotional activities are for the ones who end up spending money to hold a tour (the potential tourists or the tourist candidates). Common type for direct promotion as follow:

- Demonstration (display) for example: custom home, traditional dresses, and pictures.
- Printed materials (prospectus, leaflets, folders, booklets or brochures), distributed to the market. Various information and calls may be included in them.

- The special exhibition in the form of cultural objects, performing arts, and so on that can be upgraded to "tourism week or month" which can be held in the local market as well as in tourist destinations.
- Providing a "gift" for a particular period of promotion to consumers, such as travel bags, free tickets for attractions in the area of tourism.

### **a.2. Indirect promotion (dealer promotion)**

Indirect promotion is first directed to the distributor of tourism products, such as general travel agency and its branches, travel agencies, travel organizations, etc.

Promotion has several roles that gradually should be done, as follows:

- Making the consumer who does not know with the products, will be familiar with the tourism products and services displayed in term of its hospitality, comfort and safety.
- Profounding the process of consumer recognition towards products and tourism services through photos, brochures and documentaries.
- Building consumers understanding of the benefits of tourism products they will enjoy.
- Displaying products and services through photos, brochures and documentaries, consumers will make consumers to purchase by visiting the attractions that exist in the destination area.

## **B. Publication**

There are three main stages in publication, namely:

- 1) dissemination of information,
- 2) Fostering trust and confidence,
- 3) sales.

Publication ultimately aims to sell a product that is why the information must be submitted in such a way so that potential tourists believe and ensure that they will be able to enjoy the product informed. Reliable and convincing information will lead to potential tourist motivation, and this strong motivation will end with product purchasing. However, the information given should not be exaggerated, causing inaccurate picture to prospective tourists.

## **6. The role of stakeholders in the field of tourism business:**

### **a. The roles of government and local government:**

- Establishing nonprofit oriented investment
- Creating a conducive business climate
- Provide legal protection
- Develop and conserve natural tourist attraction
- Controlling tourism activities
- Develop partnership with other regions.



**b. The role of entrepreneur:**

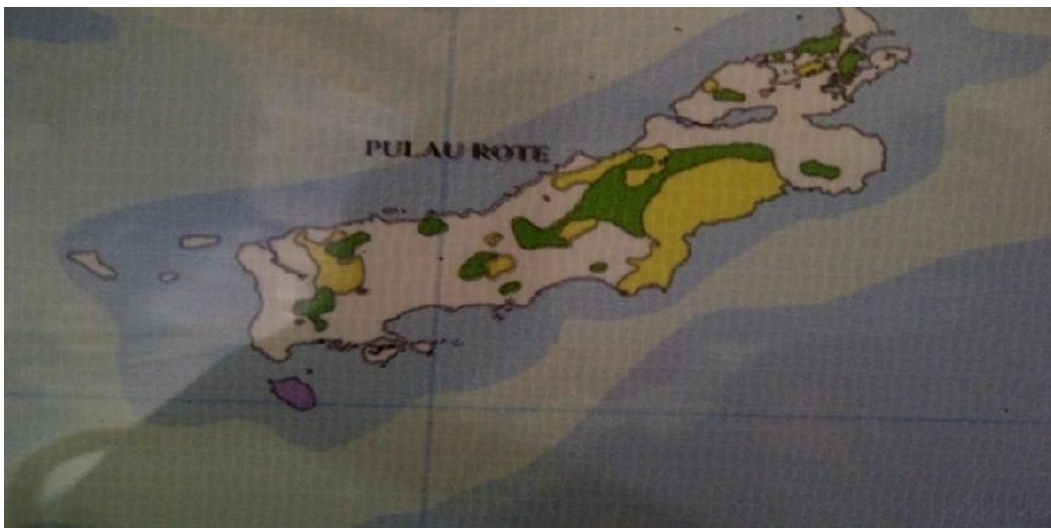
- Establishing profit oriented investment
- Managing natural tourist attraction
- Marketing and promoting tourism products and services
- Providing services the best hospitality
- Provide tourist protection
- Fostering business partnerships with micro, small, medium and cooperative
- Maintaining and respecting the religious norms and cultural values
- Maintaining the preservation of natural resources and the environment
- Running a tourism business ethically and responsibly
- Improving tourism human resource competencies

**c. The role of the community as a tourist:**

- Respecting and obeying religious norms and cultural values
- Complying with the ethics, moral and legal norms
- Maintaining and preserving the natural tourist attractions and cultural tourism

In addition to the above main points, there are some important points that particularly need to be concerned for Small Micro Entrepreneur:

1. There should be an institution / organization of cooperatives that can accommodate innovation and work of creativity to be marketed at traditional, national and international markets.
2. There should be a government policy that promotes conducive condition to the development of obsessive and dynamic micro-enterprises.

**6.3.3. Determining the Mapping of Ecotourism Buffer Zone in Rote Ndao**

**Figure 7. Ecotourism Buffer Zone Map**



1. **East Rote**
2. **Baa/Lobalain**
3. **Southwestern Rote / Nembralla**

## **CONCLUSION**

Based on the analysis, it can be concluded that:

1. Rote Ndao has a variety of commodities that can be started in the development of ecotourism corridor such as: Agriculture for paddy fields, Lontar palm and vegetable gardens; Forestry for critical forest, teak forests and Gmelina forest; Fisheries for seaweed and aquaculture; Livestock for cattle, buffaloes and horses. Rote Ndao also has natural sea and land in order to maintain and preserve the distinctiveness and the richness of the current ecosystems. It has an interesting local culture which can be studied by tourists. In addition, the other tourist attractions such as beaches, nature and culture are very interesting and varied to be packed into a package of sustainable tourism.
2. There should have a correspondence between the product and the market demand and it should be continually improved because of the various tourism products offered in the market. Indeed, each product must have competitive values. This conformity is done through promotion and publicity.
3. The agreement of stakeholders is necessary in the context of economic resources transfer from less productive areas (agriculture) to more productive areas (tourism sector) to enhance the effectiveness and efficiency with greater results.

## **RECOMMENDATION**

1. Governments must design and establish tourism regulation with transparent management and encouraging public participation in the development of ecotourism in Rote Ndao.
2. The government needs to develop ecotourism strategy through the ecotourism promotion and publication which increase local community revenues
3. The cooperation between the entrepreneurs (Governments, Privates, Local Communities, Academics, and NGOs) need to be improved.
4. There should have an institution / organization of cooperatives that can accommodate innovation and creativity to be marketed at traditional, national and international markets.

## **References**

1. Anonimous (2005). *Strategi Nasional Penanggulangan Kemiskinan*, KPK Jakarta

2. Apriana Fanggalda (2005), *Pengaruh Atraksi, Fasilitas dan Aksesibilitas Objek Wisata Terhadap Tingkat Kunjungan Wisatawan, Studi Kasus (Persepsi Wisatawan mengenai 30 Objek Wisata di Daratan Timor dan Rote Ndao)*. Tesis.
4. Apriana Fanggalda (2010), *Survey Pengelolaan Keuangan Daerah/Public Financial Management (PFM) di Kabupaten Rote Ndao*. (Hasil penelitian)
5. Astia Dendi (2006). *Strategi dan Pengalaman Pengembangan Rantai Nilai Rumput Laut Di Desa Kwangko*. GLG Conference & Seminars.
6. \_\_\_\_\_ (2006). *Pedoman Umum dan Kelompok Kerja Tim Koordinasi Penanggulangan Kemiskinan*, TKPK Jakarta.
8. Cooper, (1997). *Tourism Development Environmental and Community Issues*, Wiley., New York.
9. Damanik,dkk. (2006). *Perencanaan Ekowisata. Dari Teori Ke Aplikasi*. Penerbit Andi.
10. Davison, R., Martinsons, M.,&Kock, N.2004. *Principles of Canonical Action Research*. Information Systems Journal, 14(1), 65-86.
11. Drumm,A dan Moore,A. (2002). *Ecotourism Development: An Introduction to Ecotourism Planing*. The Nature Conservancy, Arlington, Virginia, USA.
12. Gamal Suwanto., (1997). *Dasar-dasar Pariwisata*. Penerbit ANDI Yogyakarta.
13. Fox, J. James, 1996. *Panen lontar; Perubahan Ekonomi Dalam Kehidupan Masyarakat Pulau Rote Dan Sawu*, Jakarta; Pustaka Sinar Harapan.
14. Freddy Rangkuti (2000). *Analisis SWOT Teknik Membedah Kasus Bisnis*. Penerbit PT. Gramedia Pustaka Utama, Jakarta
15. Hunger, etc; (2003). *Manajemen Strategis*. Penerbit ANDI Yogyakarta.
16. Lindberg,K dan Hawkins,D.E. (1995). *Ekowisata: Petunjuk untuk perencanaan dan pengelolaan*. Yayasan Alami Mitra Indonesia. Jakarta.
17. Lumsdon, Les., (1997). *Tourism Marketing*, London: International Thomson Business Press.
18. Martawang (2006). *Realita, Tantangan dan Inovasi dalam Meningkatkan Pelayanan yang Pro Masyarakat Miskin Di Kota Mataram*. GTZ Lembaga Transform Mataram.
19. Roger, Anthea and Judy Slinn (1993), *Tourism Management of Facilities*. London Pitman Publishing.
20. Sarosa, Dj (2006). *Kebijakan Pengembangan Ekonomi Daerah Melalui Inovasi Kemitraan Dalam penanggulangan kemiskinan*. GTZ Lembaga Transform Mataram.
21. Sumodiningrat, G (2003). *Komite Penanggulangan Kemiskinan: Tinjauan Dari Sisi Kelambagaan*, KPK Jakarta.
22. The International Ecotourism Society (TIES),2000. *Ecotourism Statistical Fact Shee*.
23. Yoeti, O.A (2008). *Ekowisata: Pariwisata berwawasan Lingkungan Hidup* PT Pertja.Jakarta.