

## Green Entrepreneurship Development Strategy Based on Local Characteristic to Support Power Eco-Tourism Continuous at Lombok

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### Abstract

The development of ecotourism can not be separated from the empowerment of local communities and small and medium enterprises (SMEs). The purpose of this research is to develop ecotourism development and planning model, especially the relationship between ecotourism and sustainable community development through green entrepreneurship development strategy by highlighting local uniqueness as the main weapon to enhance the attractiveness of ecotourism destination in NTB Province.

This research activity is planned to be done in 3 (three) stages with a period of 3 years. Results of primary and secondary data collection have obtained SWOT picture which is useful to make the draft of village tourism policy in Lombok NTB.

Green Village based tourism entrepreneurship and local wisdom to enhance tourist attraction to Lombok NTB: Output, governance system of green entrepreneur development and Tourism Village in NTB province, consisting of (a) Policy of developing green entrepreneur and tourism village for ecotourism destination development (b) Action Plan green entrepreneur and green product (c) Planning Indicators and (d) Monitoring and evaluation system. Other outputs are accredited and internationally accredited international scientific journals as well as teaching materials for the Faculty of Economics and Business and Tourism Vocational Program at Universitas SebelasMaret (UNS) and Yogyakarta State University; Outcome, in the form of governance and development of green entrepreneur development policy, green product for weaving and pearl, green labeling and tourism village so that the realization of ecotourism based on sustainable community empowerment in NTB province.

**Keywords:** Green entrepreneurship; Local wisdom; Eco-tourism; Nusa tenggara barat

### Introduction

#### Background

The development of tourism in Indonesia has been regulated in Law number 10, 2009, furthermore Regulation of the Minister of Home Affairs. 33 of 2009 on the guidelines of ecotourism development in the region into a policy and guidance for the province of West Nusa Tenggara to develop the uniqueness and potential of the region owned. This Regulation of the Minister of Home Affairs clearly states that ecotourism is a potential of natural resources, environment, and uniqueness of nature and culture, which can be one of the leading sectors of the region that have not been developed optimally. In order to develop ecotourism in the region optimally, it is necessary to develop strategies for planning, utilization, controlling, institutional strengthening, and community empowerment by taking into account social, economic, ecological and involving stakeholders.

The province of West Nusa Tenggara (NTB) consists of two large islands, namely Lombok Island and Sumbawa Island and hundreds of other small islands totaling 280 islands. Of these, as many as 32 islands are already inhabited. The total area of NTB reaches 20,153.15 km<sup>2</sup> and lies between 115 ° 46' - 119 ° 5' East Longitude and 8 ° 10' - 9 ° 5' South Latitude. The province is adjacent to the Java Sea and Flores Sea in the north, the Indonesian Ocean to the south, the Lombok Strait (Bali Province) in the west, and the Sape Strait (NTT Province).

NTB Provincial Government Center is located in Mataram City, Lombok Island. Lombok Island has the seven highest mountains is Mount Rinjani with an altitude of 3726 m above sea level, while Sumbawa Island is nine mountains highest is Mount Tomboka with a height of 2851 m above sea level. The natural beauty that has made the

province of NTB has a very high tourism potential. In 2013, Culture & Tourism Instance NTB noted there are 1,357,602 tourists who come to the island of Lombok and Sumbawa, consisting of 565,944 foreign tourists and 791,658 domestic tourists. Based on data reported by Statistic Center Bureau (BPS), the number of travel agencies and travel agents NTB province, has increased from 2003 to 2012.

Various development programs developed NTB province in various sectors. In addition to agriculture, the tourism sector becomes one of the mainstay of its economy. With diverse natural and cultural conditions, NTB province has a very potential tourist destination spot. Some of the natural attractions are able to be a rival to other provinces, such as Senggigi Beach in the west of Lombok Island, Kuta Beach (south coast of Lombok Island), and Gili (Island) Terawangan which has beautiful white sand. Many hotels and other accommodation facilities are built in these attractions that have international standards. NTB province also has a well-known cultural tourist destinations such as the oldest temple in NTB, tourist villages, and various other places.

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Sustainable tourism development is an important issue in the tourism industry today. A very deep discussion of the area has involved many academics, government and private companies. Tourism and the creative economy play an important role in supporting Indonesia's development. This is seen through its contribution to the Gross Domestic Product (GDP) and the availability of employment, either directly or indirectly. In line with that, the tourism sector and the creative economy contributed 11.8% to Indonesia's GDP and 14.66% of total employment.

With the availability of abundant natural resources and diverse cultures and supported by significant domestic and international market potential, Indonesia is faced with the challenge of using these assets to maximally benefit the country and society. Sustainable development has been established within the legal framework, but its practical implementation is still inconsistent. Human resources in tourism and hospitality are strategic issues that will determine the quality of achievement of national development goals and also in improving Indonesia's global competitiveness.

Tourism development is inseparable from the government's goal to empower the community in achieving the prosperity of life. In line with these objectives, the provincial government of NTB can harmonize the development of tourism with the development of Micro Small and Medium Enterprises (MSMEs), in which MSMEs or UMKM in Indonesia has proven a very important role in the national economy, especially in the aspect of increasing employment opportunities, income distribution, and an increase in non-oil and gas exports. The government strongly supports the development of UMKM through various policies that have been issued.

### Special purpose

Ecotourism is another alternative form of tourism industry that has consistently grown on a global scale over the past few years [1]. This is a new opportunity to generate income from natural resources without damaging the environment [2]. The basic principles refer to the objective of minimizing negative impacts on the environment, in accordance with the local culture and actively contributing to the economic development and welfare of the local community as well as the stakeholders involved. Ecotourism has the potential to be a driver of sustainable tourism development and also provides opportunities for the development of undeveloped areas for poverty alleviation. It is an incentive for economic development and social welfare of society and at the same time aims to preserve the natural environment and cultural heritage through the creation of environmental awareness.

Public participation in the tourism planning process is suggested as a step in implementing sustainable tourism, including community participation, redistribution of power, collaborative processes and social capital creation, knowledge sharing and transformation of learning processes, the process involves all stakeholders - local government officials, local residents, architects, developers, businesspeople, and planners.

The aim of this implementation is to build ecotourism development and planning model in the context of developing countries, especially the relationship between ecotourism and sustainable community development through green entrepreneurship as the main weapon to enhance the attractiveness of ecotourism destination in West Nusa Tenggara province. A fundamental problem in the development of sustainable local community-based ecotourism is the lack of a clear format of local community development to achieve local people's welfare while remaining within the main function corridor

of conserving nature. Furthermore, in the development of green entrepreneurship is not easy to build business actors who spirited community and environmental servant or community service agencies that spirited entrepreneurs with environmental insight.

### Urgency (Virtue)

Community empowerment is the key to developing the welfare of the people through tourism. Community empowerment is also a requirement for developing sustainable tourism. Development of ecotourism attraction should be continued with the empowerment of the surrounding community to improve their welfare but on the other hand remain responsible for preserving nature. Empowerment is done step by step with appropriate perceptions and interpretations in order to avoid misguided empowerment that does not support the principle of sustainable empowerment.

Green Entrepreneurship is an appropriate solution for empowering the community towards improving the welfare of the people with in the planning of sustainable ecotourism development. Sustainable ecotourism development is the responsibility of all stakeholders. All issues on ecotourism development that create negative impacts must be addressed by all stakeholders, ie governments, NGOs, private sector, and academia, including local communities, to prevent or avoid damage to socio-cultural and environmental issues.

This urgency is an urgent need for policy patterns and strategies to develop the concept of green entrepreneurship to support the attractiveness of tourists visiting ecotourism destinations in NTB province. The concept of green entrepreneurship that will be developed through several variables are green creativity, green proactiveness, green innovativeness, green risk-taking, green opportunity focus, green resource utility, and green value creation that support ecotourism program.

### Literature Review

Previous research done by this research team:

- Community service Hi links scheme 2014 and 2015 and 2016: The results of Year I (2014) and II (2015) include: a) Conducting Training Need Analysis for woven sarong weaving craftsmen using Non-machine weapon (ATBM). b) Developing model and training module of Batik Design Innovation On Weaving ATBM. c) Implementation of Non-machine Weapons with new Technology and mordant tub (dyeing yarn to be dyed). d). Training of import export, accounting, taxation of cooperatives, marketing management on line, and entrepreneurship. e). training and coaching of troso weaves, and natural colors. f) a comparative study to Jeparo. g). National Seminar to LPPM UNY. h). Training diversification of Lurik & Batik products with bleaching and stamp techniques. i). Resource person to Gajayana University Malang. j). A training resource for UKM songket weaving in Bima NTB.
- Devotion to the ibpe scheme of 2014 and 2015 and 2016: The outcomes of the IBPE (Community Service activities) are expected to: 1) Increase the assets and turnover of SMEs, namely increasing production facilities and increasing skilled labor and increasing sales turnover. 2) Increasing the quality of products produced, with various trainings to improve employee skills and improvements in management and application of new product designs are expected to increase product quality. 3). Widespread product market, with the application of better marketing strategy is expected

products market become more widely; exports to countries that have not been reached before. 4). Improving the welfare of the environment, because the majority of people in the neighborhood where SMEs are active as batik craftsmen then with the improvement/progress of SMEs means will improve the welfare of the environment in general. Broadly speaking the patterns used in the implementation of IbPE activities include: discussion, workshop/studio workshop, factory operations, training and mentoring (groups and individuals). Steps in its implementation: a. Discussion Team with SMEs about the condition of the existing feeder machine as well as the repair and addition of the necessary machinery. b. Development of new product design more attractive/interested market. c. Technical technical innovation of coloring (with natural dye) which is more in demand of foreign consumers. Developing insights to expand the market premises of exhibitions. Then all the activities are followed by assistance in the implementation process. Throughout the technical or administrative problems identified by the devotees team in every aspect of SMB Batik business, names Sadewa, and Bimo Suci are mostly solved in the first year. But there are some issues that SMEs are still facing today that require follow-up solutions by 2015, that is (based on the results achieved in the first year program):

- o Business Management
- o Technical process of staining by using natural dyes.
- o Innovation of product design
- o Product Diversification Innovation

In summary, the research team has conducted various research and dedication to the community with various schemes relevant to the empowerment of green entrepreneurship SMEs:

- Cooperate with DIKTI in 2007 by the author in Research Grant Competing with fund Directorate of Higher Education research title "Entrepreneurship Training Model with Application of Weaving Technology of Ikat Strategy Improve Business Performance of Traditional Lurik Craftsman in Bayat Village of Sragen Regency".
- Cooperate with DIKTI Research Continued to the second year 2008 by the author of Research Grants Competitive Directorate of Higher Education entitled research "Entrepreneurship Training Model With Application Of Weaving Technology Of Traditional Lurik Weaving Craftsman In Bayat Village, Sragen Regency"
- Working with the Ministry of Manpower, Population and Transmigration of the Republic of Indonesia, in 2009, the study entitled "Enhancement of Entrepreneurship Skills for Children Dropped Out of Poor Families in Trucuk Village Trucuk Sub-district of Sragen Regency" and in 2010 in collaboration with the DIKTI community service IBM about the handycraft duck in batik.
- Working with BPNFI Central Java Province, Year 2009, under the title Research of Community Empowerment of Lurik Craftsman in Kedungampel Kecamatan Cawas Sragen Regency.
- The competing grant of 2012 on entrepreneurship model of SME handycrat in Solo dan Yogyakarta.
- Instructor Devotion to the community skim ibpe batik natural colors in Sragen in 2013 and 2014.

- Working with LIPI iptekda about training and assistance of SME Batik Wood Puri Art in Palur Karanganyar in 2013.
- Service grant grant to Hi Link community of SME sarong loom goyor Kalijambe Sragen in entering export market in 2014.
- Devotion to community skim ibpu SME batik Laweyan Solo.

This program cooperates with partner of UKM Batik Dewi (UKM 1) and Batik Sinung Rejeki (UKM<sup>2</sup>) located in District of Laweyan. Laweyan is a batik industrial center with business owners called merchants. Batik industry in Surakarta entered the XX century with Laweyan batik manufacturers producing batik caps for 'national' and local markets. While batik entrepreneurs in the middle of town produce and trade batik in local markets. Laweyan batik entrepreneurs with batik products and batik-patterned textiles (sablon) in the era of globalization today have proven to have good durability, amid competition with similar products from other regions and from abroad.

Like most SMEs, Laweyan's batik entrepreneurs also face internal problems including capitalization, design innovation, and financial management, which includes financial / bookkeeping administration, it is evident that not all SMEs have done a good record. In addition there are problems related to the equipment, which at this time is still classified as traditional, given the limited capital availability so as to reach equipment such as grengseng, sewing machines, computer for pattern, pattern table, and others still need help from related parties, especially the Municipal Government of Surakarta.

Some solutions offered to overcome the problems that are faced are doing Innovation of design and engineering of production equipment, Factory layout arrangement and Development of batik cap. Besides developing the design of batik motifs that are more attractive to the market, the development of combination techniques of batik-lurik ikat and professional bookkeeping, as well as the use of information and communication technology media for promotion. As for the business development of marketing management, cultivated media campaigns and establish marketing cooperation with relevant agencies, for example by following the exhibitions.

- National Strategy Research to increase productivity and value added of gemstone craftsmen in Sangiran.
- PUPST Scheme: empowerment of garbage waste industry based on greenpreneurship.

Recently, global warming has become a serious problem and evokes the enormous challenge facing mankind. Waste is one of the contributors to environmental degradation if not managed properly. Independent participation of the population is needed to manage waste effectively and efficiently. This research was developed in Yogyakarta. The first year of research shows that Sukunan Village needs training in the field of design and products made of waste, especially stereofom waste and glass waste that will be used for raw materials to make brick products, concrete buis, and ornaments. Sukunan village also requires training in technology models, tools, green entrepreneurship spirit, and managerial concepts needed to find and capture market opportunities. So this research develops appropriate modules and training to provide the support of equipment needed by Sukunan Village.

Climate change is an urgent issue to overcome. If climate change arises from a causal relationship between the greenhouse effect and global warming then business sustainability is also a causal link between business and environmental behavior. As the motor of the economy of the country, small and medium enterprises (SMEs) in

this climate change era should contribute optimally. SMEs and other tourism businesses must adapt to the environment as a way to win market competition while also conserving the environment. The existence of green entrepreneurship orientation will strengthen their eco-innovation to produce green products as an advantage to win the competition [3].

According to Herman [3] stating that green Entrepreneurship is an appropriate solution for community empowerment towards improving people's welfare in the planning of sustainable ecotourism development, the main indicators of development are green innovation, green-risk taking, green proactiveness, and green resources controlled SMEs and tourism business actors are business actors who really care about the environment and society. Concern is not partial but become the value that became the main basis of integrated ranging from vision-mission to business strategy. To support the effort of developing green entrepreneurship in ecotourism must be supported by efforts of promotion and strategy of green marketing is effective and sustainable. Green marketing through green advertising is the best and effective strategy in attracting tourists and consumers in changing their behavior to consume the green product [4]. Growing green behavior on consumers will affect the courage of consumers to make decisions to buy green products and enjoy ecotourism.

Utilization of Cow Bones In Bone Ash Shape As Basic Material of Natural Dye (Slip Engobe) On Traditional Ceramics. In Puger Village Jurang Bayat District Klaten. The volume of animal bone waste around our environment is enormous. The nature of bone waste is very difficult to decompose, so it is necessary to find a method to reduce the waste so as not to disturb the environment. One of the methods used is the utilization of animal waste as the basic material of natural dyes for traditional pottery. In this research will be seen the potential of cattle waste to the chemical properties properties of bone ash (bone ash). The method used in this research includes the process of calcination and homogenization, decoration analysis. The result of bone ash processing as a base material of natural dye called engobe slip has a smooth, lightweight, high temperature heat resistant characteristic in its application can be mixed with local red and black clay slips to lower the temperature level and bone ash binding to fit the soil slip temperature clay that the temperature range is between 4500 -7000C. The superiority of these qualities can be used as an alternative material for coloring dyes from paint, wall paint and varnish that have been used by craftsmen as a dye and decoration on traditional pottery objects in Puger Jurang Bayat Klaten Village.

## Ecotourism

There are many terms used to link tourism development with the conservation of natural and cultural resources. Some of them are ecotourism, nature-based tourism, adventure tourism, sustainable tourism, and alternative tourism [5]. Ecotourism should be distinguished from natural attractions. Nature or nature-based tourism, covering any kind of mass tourism. Nature tourism is a tour that aims to enjoy wild life or undeveloped natural areas. Ecotourism demands additional requirements for nature conservation. Ecotourism activities use the appeal of natural resources in remote rural areas that can be an important source of economic diversification and the livelihood opportunities of nearby communities [6].

The International Ecotourism Society (TIES) in 1990 [7], defines ecotourism as a responsible journey to the natural environment by constantly maintaining it and providing sustainable prosperity to local communities. This definition indicates a positive but positive support

for the protection of natural resources by local communities and visitors, as well as an important social dimension for ecotourism. The definitions of Ceballos-Lascurain [2] are environmentally responsible tours, exciting journeys and wildlife visits in order to enjoy and appreciate nature including every cultural feature that accompanies it both past and present, which promotes conservation, has an impact low visits, and provide benefits to the active involvement of local socio-economic communities. Another opinion of Fairbrain et al., [8], ecotourism is a low-impact nature tourism that contributes to the maintenance of species and habitats both directly through contributions to conservation and / or indirectly by providing an adequate and valuable income to local communities, which is expected to be an active actor in efforts to protect wildlife and the preservation of its area. From some of the above opinions, ecotourism can be defined as a sustainable nature-based tourism activities that awaken the awareness of tourists and the community about the importance of nature conservation and the development of the welfare of surrounding communities.

## Community-based ecotourism

Community-based ecotourism approach promotes the need to promote both the quality of life of the community and the efforts of resource conservation. In the basic concept of Community-based Ecotourism (CBE) refers to efforts in ecotourism sector owned and managed by the community. Furthermore, CBE implies that the community manages the existing natural resources in order to earn revenue through the activities of tourism enterprises and uses those revenues to improve its welfare. Therefore, CBE involves conservation, business, and community development.

According to Sproule [5], in CBE concepts there will be community members directly involved (eg managers and workers involved with products or services for sale) and indirectly (the wider community selected by business managers and those who do not directly use natural resources ), as well as community members who enjoy direct benefits (including workers, craft producers, tour guides, and surrounding communities) and indirectly (the wider community as recipients of community development projects funded by tourism revenues).

Some authors have suggested that the term ecotourism-based business should be used to differentiate environmental initiatives, but also to ensure that local community members have a high degree of control over the activity, and a significant proportion of the benefits gained [2].

## Tourism destination ecotourism

With increasing interest to spend leisure time back to nature and increasing awareness about care for the environment, ecotourism has become one of the fastest growing segments of the world tourism industry [6]. The 2002 declaration as the declaration of the International Ecotourism Year by the World Tourism Organization (WTO) reflects the importance of ecotourism in the global industry. It provides better relationships, reduces leakage of a country's income, creates local employment, creates multiplier effects and promotes sustainable development [7,8].

According to Nemirschi, one practical way to improve the development of tourism business in the community is to encourage the growth of local tourism entrepreneurs. To achieve this mission, a process is required to give birth to green entrepreneurs in the tourism sector. Furthermore, a community then develops appropriate policies to stimulate the growing interest in environmentally conscious entrepreneurship to support the attractiveness of the ecotourism sector.

The attractiveness of ecotourism objectives can be defined as the extent to which ecotourism destinations meet the expectations of travelers in terms of dimensions such as recreational opportunities in ecotourism, food and accommodation areas, cultural riches, natural beauty, and various other facilities [9]. The appeal according to Gunn [10], is the energy power of the tourism system. The attraction is the perceived ability of the goal to benefit the individual. From the literature review above, the author tries to propose community empowerment model in supporting the development of sustainable ecotourism so as to provide benefits for improving the welfare of the community but still in the corridor care for the preservation of the environment.

### Green entrepreneurship

Tourism sector activity has been supported and responded positively by the Indonesian government in the hope of replacing the oil and gas sector which has contributed the largest foreign exchange earnings in the country, while the tourism sector tops the top five in most recent years. The ultimate goal of ecotourism-based community empowerment is the eradication of the poverty of rural communities through the creation of tourism activities that generate sustainable incomes while maintaining the preservation of natural and cultural resources in their environment. The income of foreign exchange can be seen in Table 1 below:

Day et al. [11], states entrepreneurship is essentially the nature, character and character of a person who has the ability to realize innovative ideas into the real world creatively. The essence of entrepreneurship is an ability to create something new and different (ability to create a new and different thing). Carson et al., [12], states that entrepreneurship is a combination of creativity, innovation, and truth at the expense of the hard work of forming and nurturing new ventures. Entrepreneurs are business people who can grasp new business and business opportunities by taking risks and turning their ideas into reality. Entrepreneurs introduce innovation, adoption and new ideas about the economy that is also targeted to the surrounding community. The entrepreneurial activity is related to Schumpeter's opinion by proposing the concept of creative destruction, the entrepreneur promoting changes to the economic and business environment and changing the old pattern of business operations.

The concept of Green Entrepreneurship is a relatively new concept that has been the focus of attention since the 1990s [13]. Implementing environmentally responsible business practices can be imagined to open up additional opportunities for entrepreneurs. Today, green entrepreneurship provides new opportunities for entrepreneurs who are responsive in identifying and exploiting opportunities in these market niches to improve their welfare while still caring about the environment. The term green entrepreneurship will be interpreted as entrepreneurship developed in the green sector, where green here is a solution to solve old problems in new ways. A green entrepreneur is someone who starts a business by making or offering a product, service or a process that is environmentally sustainable.

Green entrepreneurship is a form of individual and organizational concerns involved in entrepreneurial activities by creating environmental benefits by offering green conceptual products or services. It also refers to organizational efforts in designing, promoting, pricing and distributing products that will not harm the environment. Meanwhile, according to Ndubisi et al., [14], green entrepreneurship is the tendency of an entrepreneur to innovate or create a green organization as an important element of a comprehensive green system.

According to Chan, et al., [15], there is still an important difference in the viewpoint of green entrepreneurship in developed and developing countries. Developed countries and international organizations tend to place greater emphasis on green terms and market opportunities, while developing countries tend to focus more on terms of entrepreneurship and on market needs. Entrepreneurs of China and India for example, completely changed the pattern of economic development by developing affordable products that meet the needs of the poor, but still in the green corridor [8].

Bennett, Berle and Blue first adopted the term environmental entrepreneur, green entrepreneur, eco-entrepreneur and ecopreneur in their study [16]. Based on the literature review, the basic characteristics of green entrepreneurs are:

- Green entrepreneurs see new business and business opportunities, which usually involve very high risks. The results of business ventures are often unexpected.
- Green entrepreneurs are intrinsically motivated.

His business activities have an overall positive effect on the natural environment and economic sustainability, and are mindful of trying to create a more sustainable future. Osukoya [17] argues that small firms have several advantages over large companies in adopting environmentally conscious practices. Consumers tend to see smaller companies more friendly than larger companies, and small firms are in a position to react actively to the demands of increasing green products and services in almost all market segments [17]. The entrepreneurial spirit is more important in making green business innovations than existing regulations [18].

### Sustainable tourism

According to Law no. 10 Year 2009, a tour is a travel activity undertaken by a person or group of people by visiting a certain place for recreational purposes, personal development, or studying the uniqueness of tourist attraction visited in the temporary period [19]. Tourism is all kinds of tourism activities and supported by various facilities and services provided by the community, entrepreneurs, government, and local government. Tourism also has a purpose, namely to increase economic growth, improve people's welfare, eradicate poverty, overcome unemployment, and conserve nature, environment, and resources [20-24]. The presence of tourists both domestic and foreign tourists will affect the consumption of tourists. The expenditure of tourists is directed to various other industries and

Year	The Number of Foreign Tourists	Average Expenditure (USD)	Average length of Stay (Days)	Receipt of Foreign Exchange
2008	6,429,027	1178.54	8.58	7377.39
2009	6,452,259	995.93	7.69	6302.50
2010	7,002,944	1085.75	8.04	7063.45
2011	7,649,700	1118.26	7.84	8060.00
2012	8,044,462	1133.35	7.7	9010.00

Resource: PES – P2DSJ Kemenparekraf, 2012.

Table 1: Tourist Visits Statistics Abroad in Indonesia (Year of 2008 – 2012).

services as long as tourists visit certain tourist areas. The impact will be seen on the value of spending expenditures of tourists, so that will affect the employment opportunities, income, and foreign exchange revenue for tourist destinations [25].

The existence of tourism activities create many business opportunities for the surrounding community [26]. An entrepreneur will be able to capture these opportunities to meet the expectations of tourists. The ecotourism trend should provide more opportunities by positioning into green entrepreneurship to exploit ecotourism destinations while maintaining the environment. Kasali [19], conveys the importance for entrepreneurs not to impose entrepreneurial products, but rather to be a marketing entrepreneur who is not shackled to product creation but rather to value creation [27]. The starting point of thinking is not a product, but a market. What the market wants, then newly built marketing network with all the equipment, ranging from financial and banking, branding and packaging, to the logistics problem [28].

## Research Methods

### Model development

This research uses Research and Development method in accordance with a procedure developed by Plomp. According to Borg and Gall, development research is a process used to develop and validate educational products. The development research itself is based on an industry-based development model, whose findings are used to design products and procedures, which are then systematically field tested, evaluated, refined to meet certain criteria of effectiveness, quality, and standards. From the above description, it can be concluded that the development research is activities that produce products or improve the product and then examined the effectiveness and feasibility of the product.

According to Anik, the characteristics of research and development are: (1) research-based development, it means that product development is pursued through education and training, (2) product-oriented rather than theoretical, and (3) development outcomes are used for improvement and development the quality of product and the business to be better. The model development of the education and training for Small and Medium Enterprises (SMEs) of Lombok weaving and the development of green tourism village will follow the model development stage according to Plomp. The phases of developing the Plomp model include (1) the initial investigative phase; (2) design phase; (3) phase of realization / construction; (4) testing phase, model evaluation, and revision; (5) implementation phase. The model development of green village and Lombok weaving uses Focus Group Discussion (FGD) to validate the development of appropriate models based on field observations and Expert Judgment in validating the development of models prior to field trials.

### Development procedures

In the implementation of research and development (R & D) there are several procedures used are qualitative and experimental. According to Sugiyono, qualitative methods can be used in preliminary research to produce information about the model of education and training that will be developed in the development of tourist villages and green entrepreneurs on weaving Lombok. Based on the data obtained further can be designed the effective model of development of education and training. According to Sugiyono to determine the effectiveness of the model then it needs to be tested. Testing is done by empirical test in

the form of model test in the field. Once the model is tested, it can be applied to solve the problem of education and training model of SMEs and green entrepreneurs to support the model of development of tourist village.

The steps of development carried out in this study are presented in Figures 1 and 2 below:

## Results and Discussion

This research activity is planned to be done in 3 (three) stages with a period of 3 years, the first year of 2018 has been conducted activities of secondary data collection, primary data collection (a needs analysis), and the preparation of research results. At this stage, the research activity is expected to find the complete profile of ecotourism potential in NTB Province Tourism Area as a profile of potential development of green entrepreneur with the output of green-woven development (green product), development of environmentally friendly pearl, motive development and weaving design with technology utilization, tourism villages as cultural and ecotourism destinations through the preparation of new ecotourism destination profiles, community

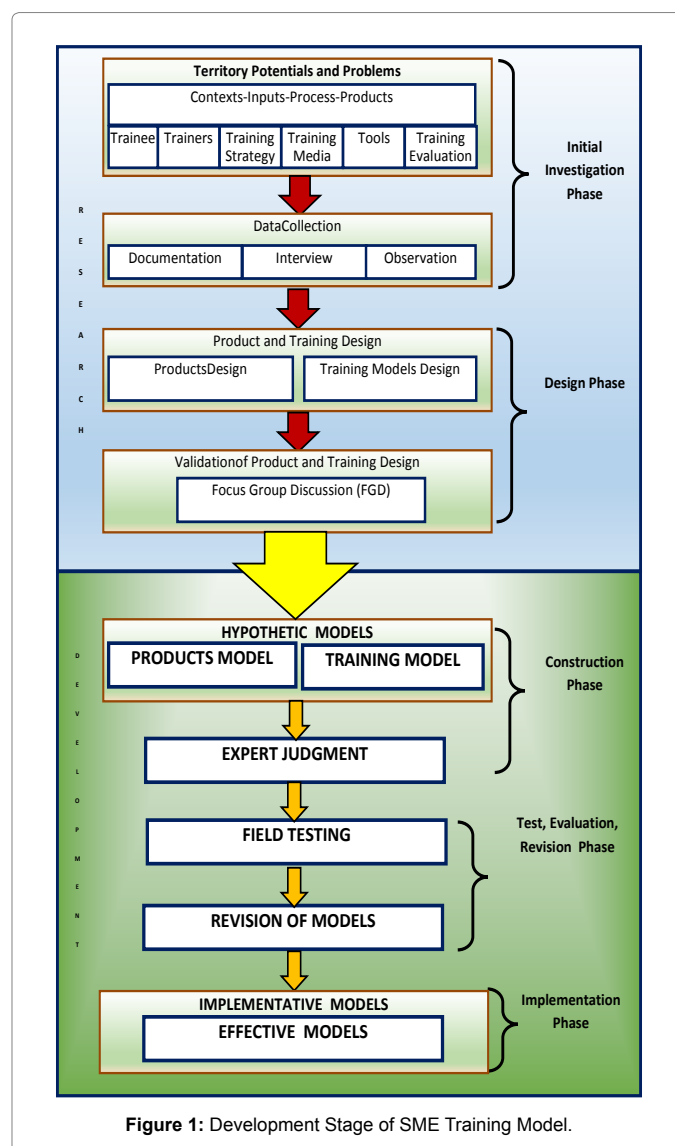


Figure 1: Development Stage of SME Training Model.

development, green and traditional village tourism program arrangements, education and training, business network development and promotion. The detailed implementation of the study is described in Table 2 below:

### Analysis of social impact and performance

- Most residents have a positive view on tourism and confirm the economic benefits and improved infrastructure due to tourism.
- However, some see conflicts over land and over workers coming from outside Lombok / NTB Province as well as higher living costs and property prices as negative impacts of tourism.
- Small business suppliers consider production limitations on their side as the main obstacles to local procurement. Others

blame the unsteady seasonal demand from tourism.

- Local souvenirs are not very popular with tourists.

### Analysis of environmental impact and performance

- Lombok's nature is the main attraction for most tourists.
- 74% of visitors claim that nature & scenery was their main travel consideration.
- And its preservation is a major challenge:
- visitors very concerned about negative environmental impacts like littering, coral reef destruction and noise pollution from traffic.
- Especially better waste management is seen as a key challenge by all stakeholders: tourists, hotel managers and residents
- Important motives for hotel managers to participate in 'green' tourism cost reduction and improved reputation of the business.
- Expert advice, staff training and better information on technologies and suppliers are required to make tourism enterprises more environmentally friendly.
- Most managers do not agree that there is a lack of environmental regulation and enforcement by the state.
- Many managers are not familiar with the concept of eco-labels as 50 % do not know whether they participate in an eco-label scheme.

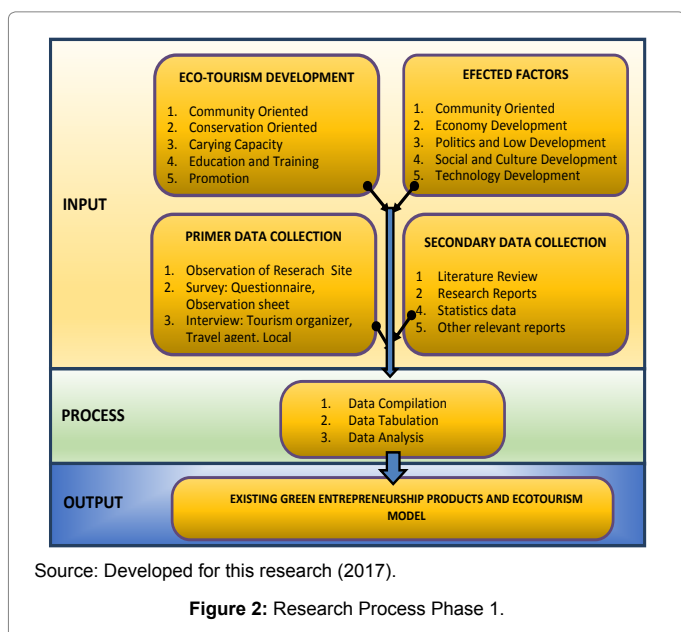


Figure 2: Research Process Phase 1.

### Analysis of economic impact and performance

- Domestic visitors outnumber foreign tourists by a 60/40 ratio.
- The majority of Lombok visitors is young and well educated.
- Lombok visitors book their individual travel services separately.
- The average length of stay of all visitors is found to be 5 days,

Research Implementation	Design	Research Methods	Indicators
<b>Year 1 (The first year)</b>			
Collecting data and information about green entrepreneurship advocates NTB's ecotourism attraction	Primary data collection so get description: a. A Complete profile of potential green entrepreneurship and ecotourism of NTB. b. The Full profile of NTB's green entrepreneurship potential consisting of: • Community based development • Conservation oriented • Carrying capacity • Education and training • Promotion • Monitoring and evaluation	1. Observation of the research sites (Malhotra, 2010; Ritchie, 2005 and Dwyer, 2014). 2. A Survey with questionnaires & interviews on tourism managers and Tourists (Malhotra, 2010; Ritchie, 2005 and Dwyer, 2014)	1. Community based development (Richards, 2000) and (WWF Indonesia, 2009) • Community empowerment in tourism development. • Tourism life cycle, starting from introduction, growth, up to the peak. • Advocacy of local culture. 2. Conservation Oriented (Richards, 2000) and (Weaver, 2006) • Conservation of local culture. • Environmental conservation, such as coral reefs, forest tours and so forth. • Law Enforcement on environmental sustainability • Education of nature conservation for both community lokal, business actor, and the tourists • Education of local tourism resources on ecology. 3. Carrying capacity: • The carrying capacity of the area in terms of soil, water, WC, garbage, and so on • The Growth of Tourist Visits versus capacity carrying capacity area • Leisure of tourists and local people • Tourist visits: number versus longstay guest 4. Education and training (Mowforth, 2003): • Tourist managers • Tourist entrepreneur • Tourists 5. Promotion [(Kins, 2010), and Morrison (2010)]: • Increase stakeholder awareness of sustainable eco-tourism principles 6. Monitoring and evaluation [(Turban et.al, 2010) and (Dewi, 2011)]: • Monitoring and Evaluation conducted by Stakeholders, in a jointly formed place, covering the phases ofplanning, objectives, schedule, and implementation

Table 2: Details of Research Methods Each Stage in First year research.

contrary to official statistics which only state an average visit duration of 3 days.

- Overseas visitors from the Western countries stay about 5-7 days compared to only 3-4 days for Indonesians and their Asian neighbors.
- Foreign tourists stay on average only 1/3 of the duration of their visit to Indonesia in Lombok, the rest of their visit they stay in Bali and/or other Indonesian destinations.
- The average total expenditure is only EUR 298 per Lombok visitor, ranging from a low of EUR 144 per domestic tourist to a high of EUR 380 for visitors from Central and Western Europe.
- The overall tourist expenditures of 1.1 million visitors per year are approx. EUR 240 million (or USD 312 million).
- The 40% of foreign visitors make almost 60% of total expenditures.
- The average room rates and the revenue per available room (RevPAR) are low for most establishments except for some luxury hotels.
- The average procurement values per guest night range between from 0.4 to 10.2 Euro depending on the star grading and the comfort level, the presence and standard of a full-service restaurant, meeting facilities for day guests.
- Average total procurement of food & beverages, non-food products and service contracts per guest night: EUR 7.56.
- The total procurement value is approx. 43.8 million Euro per year.

### The results of training needs analysis survey for pearl cultivation

Data collection techniques to determine the needs analysis of craftsmen is using questionnaire. The instrument in the questionnaire method uses a questionnaire sheet containing a number of written questions that must be answered by the respondent. Overall there are 84 questions with details:

- Respondent's personal data: Consists of 8 questions including: respondent status, gender, level of education, number of families, business status, length of business, establishment of business, and experience in training.
- Aspects of entrepreneurship: Consisting of 11 questions, 10 questions about entrepreneurial spirit and 1 question about participation in entrepreneurship training.
- Management aspects: Consists of 5 questions about business characteristics, 8 questions about the objective conditions of business management, and 1 question about participation in business management training.
- Production aspects: Consists of 17 questions about the objective conditions of production activities and 1 question about participation in gemstone training.
- Marketing aspects: Consists of 18 questions about the objective conditions of marketing activities and 1 question about
- Financial aspects: Consists of 17 questions about the objective condition of business finances and an item question about participation in business financial management training.

Respondent	Amount	Percentage
The head of the family	2	20%
Wife	8	80%
Child	0	0%
<b>Total</b>	<b>10</b>	<b>100%</b>
<b>Gender</b>		
Respondent	Amount	Percentage
Man	2	20%
Woman	8	80%
<b>Total</b>	<b>10</b>	<b>100%</b>
<b>Level of Education</b>		
Respondent	Amount	Percentage
Elementary School	0	0%
Secondary School	2	20%
High School	4	40%
Academy/College	4	40%
<b>Total</b>	<b>10</b>	<b>100%</b>
<b>The Burden of The Family</b>		
Respondent	Amount	Percentage
< 2 person	3	30%
3 - 5 person	7	70%
> 5 person	0	0%
<b>Total</b>	<b>10</b>	<b>100%</b>
<b>Status Of The Job</b>		
Respondent	Amount	Percentage
Main Job	2	20%
Side Job	8	80%
<b>Total</b>	<b>10</b>	<b>100%</b>
Long of Business		
Respondent	Amount	Ppercentage
< 2 years	1	10%
2 - 5 years	5	50%
> 5 years	4	40%
<b>Total</b>	<b>10</b>	<b>100%</b>
<b>Business Formation</b>		
Respondent	Amount	Ppercentage
Own Business	1	10%
Legacy	0	0%
Others	9	90%
<b>Total</b>	<b>10</b>	<b>100%</b>
<b>Training Participation</b>		
Respondent	Amount	Ppercentage
Ever participate	10	100%
Never	0	0%
<b>Total</b>	<b>10</b>	<b>100%</b>

Table 3: Personal identity.

### Personal identity

The following Table 3 present the respondent's personal identity.

The purpose of Training Need Analysis is appropriate the contents of the training to the needs of the training participants, namely small businessmen of pearl craftsmen. The preparation of training needs analysis is carried out by approaching the concept of small business entrepreneurship. Enterprising small business is a small business that is managed by a company or small business approach that implements management functions in managing its business. These management functions are planning, organizing, implementing and controlling.

Small business activities basically include activities related to production / technology, marketing, financial/capital management



and business management. From the explanation about the description of the craftsmen’s business in the study area, it can be concluded that the obstacles inherent in the craftsmen’s business are poor access to technology, limited access to marketing, limited capital / finance and lack of managerial skills.

With some of the inherent weaknesses, the aspect of training needs analysis will be related to the aspects of production, marketing, finance, and business management of the craftsmen. Research from Harvard University shows that the key to entrepreneurial success is 85% determined by mental attitude / entrepreneurial spirit and only 15% is determined by technical expertise. Referring to the results of the study, aspects of the entrepreneurial spirit are aspects that are taken into account in conducting training needs analysis.

The following study of the five variables, namely entrepreneurial, management, production, marketing, and financial souls related to training needs analysis is based on the results of analysis of primary data collected.

**Entrepreneurship:** From the respondents’ answers to the ten questions about the entrepreneurial aspect, the identification of entrepreneurial mentality possessed by respondents is as follows:

- Confidence: As many as 100% of respondents said they had confidence in doing work as craftsmen.
- Self-motivation: As many as 100% of respondents have self motivation to achieve goals.
- Love Challenges: The number of respondents who like challenges in work 100% and the number of respondents who do not like the challenge is only 0%.
- Leadership: As many as 80% of respondents are accustomed to taking the role of leader in the group and the remaining 20% are not used to taking leadership roles.
- Expanding Knowledge: As many as 100% of the respondents who took the opportunity to expand their knowledge by reading and taking courses while the remaining 0% did not want to expand their knowledge.
- Communication: All respondents said they could communicate with others.
- A good listener: Almost all (100%) claim to be good listeners and the remaining 0% cannot become good listeners.
- Achievement: As many as 80% of respondents were able to develop achievements and 20% were unable.
- Self-image: As many as 100% of respondents said they had a positive self-image while the remaining 0% said they did not have a positive self-image.
- Decision-making: As many as 90% of respondents said they were able to make decisions easily and confidently while the remaining 10% said they did not.

The degree of qualification of the entrepreneurial spirit of the respondents can be known by giving a score for each question item, the answer “Yes” is given a value of 1 and the answer “No” is given a value of 0.

Scores of entrepreneurial aspects are illustrated in the following Table 4.

Table 4 shows that the total score obtained from the entrepreneurial

	Description	Yes (1)	No (0)
1	Confidence	10	0
2	Self-Motivation	10	0
3	Like a challenge	10	0
4	Leadership	8	2
5	Expanding Knowledge	10	0
6	Communications	10	0
7	Good Listeners	10	0
8	Achievement	8	2
9	Positive Self Image	10	0
10	Decision Maker	9	1
	Amount of Score	95	10
	Score Average	9,55	

Sources: Primary Data Processed

**Table 4:** Score of Entrepreneurship Aspects.

aspect is 95 with an average score of 9.5, meaning to be able to achieve ideal, the entrepreneurial spirit of small entrepreneurs is currently in the 95% position. To achieve the ideal position, efforts are still needed to improve it, while 100% of the respondents said they agreed to participate in various trainings.

### Management and organization

In general, the profile of the craftsmen’s business is in the form of individual businesses (20%), small business scale (90%), with the type of business is the trade handicraft industry (80%), which can be said as a home industry because the average has less than 5 workers (60%).

The establishment of a business is from its own business (100%) with a business period of mostly over 5 years. Although most businesses are part-time jobs (80%), the purpose of establishing a business is to seek profit and growth.

The condition of the business management of the craftsmen is explored with 8 questions covering aspects of business licensing, business planning and organizing aspects. The degree of business management is known by giving a score of 0 for the answer “None” and scores 1, 2 and 3 for the answer “Yes” in the condition of “less”, “enough” or “good”.

- Business Licensing: As many as 70% of respondents do not have business licenses (SIUP, TDP, NPWP, Establishment Deed) and 30% have SIUP.
- Division of Duties and Authorities: As many as 20% of the respondents did not divide their tasks and delegate authority, the rest did so in conditions of “lacking”, “enough” and “good”.
- Job Description: As many as 60% of the respondents did not have a clear job description, and the rest had the conditions of “lacking”, “sufficient” and “good”.
- Salary and Staffing Regulations: As many as 90% of the respondents did not have salary and staffing regulations, and the rest said they had but in unfavorable conditions.
- Business Planning: 60 percent of the respondents did not make a business plan, and the majority of the rest made it with unfavorable and good enough conditions.
- Activity Briefing: As many as 40% of respondents did not direct their activities, the rest did not do well, were good enough and good.
- Coordination and Communication: As many as 0% of

respondents did not carry out coordination and communication in the implementation of activities, and the rest did it poorly, quite well and well.

- Activity Monitoring: As many as 60% of respondents did not supervise the course of activities, 40% carried out supervision fairly well and well. As many as 100% of respondents said they agreed to participate in business management training.

## Marketing

The general description of pearl marketing activities carried out by craftsmen is: product distribution is carried out through intermediaries / collectors (60%) with marketing areas that are already international (20%).

With the condition of payment of sales on credit (0%) and cash (100%), in the last three years there has been a tendency to increase business performance as a result of increased sales turnover (10%) and increased demand level (10%).

The increase in performance according to respondents was caused by the absence of (a little) competition factor (20%). Demand forecasting is 30% and the competition situation is 50%. Good future prospects 100% agree.

The objective conditions of the respondents' business marketing activities were identified from the answers to 11 questions to respondents which included aspects including: marketing planning, marketing strategies, and selling skills. The degree of business management is known by giving a score of 0 for the "None" answer, as well as scores of 1.2 and 3 for the "Yes" answer in conditions of "lacking", "enough" and "good".

- Sales target planning: As many as 60% of respondents did not plan sales targets and the remaining 40% made plans but were still in a less than perfect condition.
- Listing of sales: 70 percent of respondents made sales records.
- Determination of selling prices: No respondent has yet to calculate the selling price of the product.
- Positioning products: 0 percent of respondents have not made an effort to position the product on the market with a price variable.
- Marketing planning: 50 percent of respondents have made a marketing plan even though it is still in a simple form while the remaining 50 percent have not made marketing plans.
- Distribution channel: 40 percent of respondents chose a simple distribution channel, namely use collectors who visit the respondent's house while 60 percent of respondents sell directly to the market.
- Promotion: 80 percent of respondents carried out simple promotional activities in a "cheeky" manner, while the rest mostly did not carry out promotional activities.
- Demand forecasting: 30 percent of respondents make demand forecasts through feeling / intuition while the rest have not made demand forecasting.
- Competition situation: 50 percent of respondents did not observe the competitive situation visually without conducting research while the rest gave attention.

- Target market: All respondents simply 50% did not determine the target market for their products.
- Selling skills: 40% of respondents are known to have enough selling skills. Marketing is often a constraint for small businesses to develop, especially in the development stage. Participation in marketing training is important and approved by 100% of respondents.

## Production

The production system of pearl farming small business is by order and process (70% is a weekly production system). Most craftsmen (90%) experience erratic ease in the procurement of raw materials and with good quality (40%).

Small business real conditions seen from the aspect of production management can be identified from the answers to 7 questions given by respondents. The degree of management of production activities can be known by giving a score of 0 for the answer "None", and giving a score of 1, 2 and 3 for the answer "Yes"

with conditions "lacking", "enough" and "good".

- Production planning: As many as 30% of respondents have made production planning in the category of "good enough".
- Production quality planning: In simple terms 40% of respondents have been able to plan the quality of production.
- Equipment procurement planning: As many as 60% of respondents did not plan in the procurement of production equipment used.
- Supervision of Equipment Use: As many as 80% of respondents did not supervise the use of equipment.
- Production administration: As many as 90% of respondents did not hold production administration activities.
- Production quality supervision: All respondents (70%) have not implemented quality control in the production process.
- Occupational health and safety: As many as 70% of respondents did not carry out activities related to occupational safety and health efforts in the production process.

The reasons for respondents interested in participating in the training include:

production can be done with the equipment they have (90%), production skills (100%), attractive designs (100%), difficulty selling products (70%), good demand prospects (100%) with promising profit prospects (100%), and tight competition (20%). All want to participate in production training activities.

## Finance

The general description of the financial aspects of small businesses is that capital is mostly sourced from owner savings (30%), operational funds are not sufficiently available (00%), all craftsmen have accounts in banks (80%), financial management is handled by the owner (90%), working capital mostly from merchandise trade (90%), difficulty in accessing banking credit (10%), business working capital in the form of bills (100%) with smooth conditions (90%) while current assets in the form of merchandise inventories are sufficient (70%). Business performance seen from profit over the last three years shows a stable trend (90%).

The degree of financial management of small businesses is obtained from the answers to 8 questions given by respondents who were given a value of 0 for the answer "None", as well as a score of 1.2 and 3 for the answer "Yes" in conditions of "less", "enough" and "good".

- Transaction proof storage: 50 percent of respondents did not keep transaction evidence.
- Recording transactions: 70 percent of respondents record financial transactions.
- Cash flow record: 40 percent of respondents record cash flows.
- Planning cash flow: 10 percent of respondents have cash planning.
- Profit planning: 70 percent of respondents did not have a business profit plan and 30 percent of respondents who planned the desired profits in their business.
- Cash flow control: 80 percent of respondents did not supervise the occurrence of irregularities in the cash budget that they compiled.
- Profit control: 30 percent of respondents control the profits obtained.
- Separation of personal and business wealth: 80 percent of respondents did not make a separation between personal and business wealth.

The questionnaires answers given by respondents, 100% of respondents expressed willingness to participate in the training on business financial management.

## Entrepreneurship

The potential need for training in the field of entrepreneurship is primarily in business planning, managing time effectively, thinking creatively and innovatively, developing work ethics, entrepreneurship, and forming an entrepreneurial personality.

**Organizational management:** In general, the business profile is a small-scale business, including the category of small-scale household industry with a type of pearl craft business. The establishment of a business is mostly from one's own business with an average business period of more than three to five years. Even though most businesses are side jobs, the purpose of the majority business establishment is to seek profits. The potential training needs in the field of organizational management are mainly in the skills of managing business, business organizations, small business prospects, business forms and licensing, cooperation and partnerships, as well as lobbying and negotiation.

**Marketing:** The general description of the marketing activities of small businesses is that the marketing area is still local but for already large craftsmen it has reached export. Potential training needs in the field of marketing are mainly focused on selling techniques, marketing strategies, market opportunities, competitor analysis, market analysis, and marketing information.

**Production:** The small business production system is based on orders and processes, while most craftsmen have difficulty procuring quality raw materials. Although the situation of pearl market competition is stable but there are difficulties in selling themselves to export markets, respondents have the motivation to have technical skills about pearl farming and jewelry making before plunging into the industry.

**Finance:** The financial management is absolutely handled by the owner and most of them have accounts in the bank. Financial planning and control as well as practical bookkeeping for small businesses has the potential to become training needs as well as insight into the separation of personal and business Field testing is limited to natural color processes for weaving SMEs.

Limited field testing is carried out on special weaving UKMs, which are natural colors. The number of participants is 20 SMEs.

The modules for the training made are:

- Natural color module
- Accounting module
- Entrepreneurship module
- Online marketing management module
- Module of procedures for export import documents
- Cooperative taxation module.

### Assistance activities:

- Objectives of Mentoring Activities: Provide technical advocacy and direction to students in understanding the knowledge and skills acquired during training and applying in the business world and industry as well as working independently.
- Assistance: Assistance in the form of guidance and technical guidance covering three aspects, namely:
  - o Applying a new motif design weaving east Lombok with natural colors.
  - o Planning and business and entrepreneurial management.
  - o Management basics and accounting (accounting).

**Mentoring instructor:** Mentoring instructors are teaching staff from FEB UNS and FT UNY and experts as many as 3 people and assisted by S1 and S3 students.

**Mentoring model:** Assistance is carried out using a participatory approach model in the field, namely through full participation of instructor mentoring in student activity activities.

Assistance is carried out with the group strategy of mentoring to 6 groups. Each group consists of 5 students: 4 people as members and one student who is chosen as the group leader.

**Time and place of assistance:** Technical assistance for students for two months with a frequency of 1 instructor mentoring visit to each group and one evaluation. Comparative study activities to UKM Sragen and Sukoharjo are useful to provide a new ATBM model with dynamo and traditional lurik.

### Implementation of assistance

The Instructor Team visits each group and identifies the problems that occur and provides solutions to problems by providing explanations of the difficulties experienced by students in terms of the jewelry making process. The Mentoring Team provides direction and guidance to get good quality results by providing examples of natural color processes for threads in theory and practice.

At the end of the meeting an evaluation was held for students to find out whether students were able to produce products according to standards or as a selection for the receipt or not of the product / new

gemstone designs. If the evaluation results turn out to be something that is not as expected, the Team will provide time allowances and provide guidance so that students are able to produce standard and good quality products.

Improvement Training Model Workshop will be carried out through workshop forums with related field resource persons and compiled teaching materials / modules as material to be delivered in the learning process. Development Weaving designs are typical of East Lombok's natural colors that will be patented.

Simple patent (law no. 14 of 2001) definition is an exclusive right granted by the state to the inventor for the results of his invention in the field of technology, which for a certain period of time carry out the invasion itself or give agreement to another party to implement it. The claim amount from the invoice consists of 1 (one) invention with a Simple Patent object in the form of a product or tool. Coverage of protection: includes every invention in the form of a new product or tool and has practical use value due to its shape, configuration, construction, or components. Validity period: 10 years and cannot be extended. Limited time then for more submissions to Simple Patents. For simple patent management, the time taken is 34 months. When submitting a proposal, copyright has been protected by the state (can be used as proof of copyright ownership). The 34 month period has the following details:

- 6 (six) first months of examination of formalities (complete administrative documents);
- 3 (three) months announced / published through the Patent Official News (BR.A);
- 24 (twenty four) months of substantive examination;
- 1 (one) month certification process;

- Publication through the State News (Patent Official Gazette B / BR.B).

Copyright will be submitted later in the second year, namely the weaving of East Lombok's distinctive features with natural dyes. UKM Mutiara already has brand rights, namely Ragenda Mop (attached).

The results of the spread of the questionnaire about green entrepreneurship to UKM Mutiara

The results of the questionnaire distributed to 90 pearls and pearl traders in Mataram are as follows Tables 5-7:

## Discussion

1. The test is carried out based on the results of the questionnaire, which begins with the fulfillment of the classical assumption and normality test requirements. The test results for the influence of ability in entrepreneurship based on the spirit of greenpreneurship on performance shows a positive coefficient with a significance level of 1%. Such conditions are logical because when humans have a greenpreneurship spirit, the main action that is always done is to utilize environmentally friendly products through various technologies. The use of these technologies aims to always protect the environment through the reuse of unused shells made by souvenirs.
2. Testing factors for developing environmentally friendly products for performance. The test results show a positive coefficient value with a significance level of 1%, which indicates that the development of environmentally friendly products has an effect on improving performance. As expected conditions that the development of innovative and environmentally friendly products can encourage an increase in income as well

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.698 <sup>a</sup>	0.488	0.463	0.62889

a. Predictors: (Constant), X4, X2, X1, X3

Table 5: Model Summary.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.982	4	7.995	20.216	.000 <sup>b</sup>
	Residual	33.618	85	0.396		
	Total	65.6	89			

a. Dependent Variable: Y

b. Predictors: (Constant), X4, X2, X1, X3

Table 6: ANOVA<sup>a</sup>.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.552	3.295		-0.471	0.639
	X1	0.282	0.081	0.317	3.472	0.001
	X2	0.332	0.072	0.467	4.586	0
	X3	0.268	0.099	0.301	2.705	0.008
	X4	0.221	0.071	0.281	3.113	0.003

a. Dependent Variable: Y

Information:

Y: SME performance

X1: the spirit of greenpreneuership

X2: quality of learning

X3: product innovation

X4: development of environmentally friendly products

Table 7: Coefficients<sup>a</sup>.

as profits so as to increase the level of the economy for the community.

3. Testing the quality of learning on performance. The test results show a positive coefficient value with a significance level of 1% which indicates that the quality of learning has an effect on improving performance. Training and mentoring conducted by the research team during the first year and at the time of the preliminary survey (workshop) can encourage increased income as well as profits, so as to increase the level of the economy for the community.
4. Testing product innovation for performance. The test results show a positive coefficient value with a significance level of 1%, which indicates that environmental friendly product innovations have an effect on improving performance. As expected conditions that through this product innovation, it can encourage increased income as well as profits so as to increase the level of the economy for the community.

The conclusion is that the test results indicate that the spirit of greenpreneurship, the quality of learning, product development, and product innovation have an effect on improving business performance. Such conditions indicate that the performance of the pearl business is not only influenced by the spirit of greenpreneurship, but still considers the quality of learning and development of products and product innovation. So that skills / skills become an important factor because through skills there will be new innovations that will add value.

### **The Results of Intermediate Interpretation of SME**

The purpose of this study is one of which is to form a model for the development and planning of ecotourism in the context of developing countries.

1. Community efforts with the local government to minimize the negative impact of tourism businesses on environmental damage: Waste / pollution generated from the activities of cultivation, pearl and shellfish business is the processing of shellfish dust which causes air pollution that can disrupt workers and surrounding communities. There is an opinion that shellfish dust can be a medicine for the body, but in truth there is no definite information. Conducted an act of socialization as a response to the negative impact of the business by reforming sara, the need for vacuum cleaners and other alternative solutions that can be applied to the work area.
2. To actively adopt and utilize local culture to contribute to economic development and community welfare: Characteristics of local culture, appointed as scallop motifs: barn halls, bale drums, and prisian. Fresh Human Resources, the need for increased productivity. There is a culture for learning and providing opportunities for young children and local communities to be involved in business activities.
3. Building ecotourism has the potential to drive the development of sustainable tourism: the formation of community driving associations with the concept of pearl craft centers. The construction of artevak or monumental buildings marking the existence of mutiara craft and seashell. Build waste management and work safety implementation in every work activity. Form the concept of educational tourism the process of making pearls and shellfish waste, starting from seedlings, cultivation in sea cages, the process of production and processing of shellfish

waste, and shopping tourism products produced in the form of jewelry.

4. Alleviating poverty through sustainable ecotourism: Impact on the income of people involved in work that can meet needs, judging from the ability of workers to buy a bicycle or other things that can be indicative of adequacy.
5. The concept of ecotourism as an incentive for economic development and social welfare of the community as well as the preservation of the natural environment and cultural heritage through the creation of environmental awareness: The need for public awareness of natural conservation, especially the sea, by monitoring and prohibiting the use of potassium and bombs. The activity of monitoring the efforts of environmental companies by collaborating with local fishing communities, with the process of monitoring fishermen groups as coast guard is done in conjunction with fishing activities or when escorting guests when visiting cages.
6. Model of community participation ecotourism planning process: Community participation is indicated by coastal patrol, the activity of the patrol provides added value for fishermen with the function of sea security against destruction activities as well as services to tourists visiting and sending catch fish. On the side of processing pearls and shellfish waste, the surrounding community is actively involved in the design, production and marketing process. There are routine activities that are held from November to December by discussing together the fashion trends that will take place in the coming year with the trend analysis process.
7. Model of government redistribution to community groups or traditional institutions: The existence of government support in terms of training and management of pearl handicraft business and shellfish waste. Ten groups were formed in the framework of innovation and product development. The government provides assistance facilities at exhibitions and equipment to support productivity and maximize sales.

## **Conclusions and Recommendations**

### **Conclusion**

Development of ecotourism is directly related to the empowerment of local communities and small and medium enterprises (SMEs). The purpose of this research is to develop a model of ecotourism development and planning, especially the relationship between ecotourism and sustainable community development through a development strategy of green entrepreneurship by highlighting local uniqueness as the main weapon to enhance the attractiveness of ecotourism destination in NTB Province. The concept of green entrepreneurship to support the attractiveness of tourists visiting ecotourism destinations in NTB Province is one of the unique competition strategies of the national and international tourism industry.

This research was conducted in West Lombok and East Lombok for three years starting from February 2018 until later in 2020. This research uses Research and Development approach of Plomp model. Green entrepreneurship is developed through education, training and mentoring of SMEs development of pearl products as well as clam waste and woven cloth of Lombok with natural dyes in a green tourism village.

The results showed that the pearl shell breeding industry in West

Lombok started from pearl shell cultivation, pearl shell cultivation and care, pearl planting, pearl processing, pearl processing into jewelry, pearl shell waste processing into jewelry and souvenir, and pearl shell meat consumption has a high economic value and gives a strong appeal to tourists. Pearl shell business from upstream to downstream can be used as a typical green tourism model of NTB that has high educational value. The industry of woven fabrics with natural dyes of various types of leaves, leather, and logs in Pringgasela Village is able to empower 1,250,000 women. Woven fabric products become a source of family income and credibility of women. The people of East Lombok adhere to the local Value that a woman will be of high value in the society when she has a high skill of weaving cloth. Natural wastes dye fabrics are very well used as fertilizer of paddy soil around the village so that weaving business is very environmentally friendly. Pringgasela Village in East Lombok is very potential to be used as a model of unique eco-friendly weaving center village in the world.

Overall, analysis results can be concluded:

- Tourism is a crucial economic sector with many direct and indirect benefits for the local economy and the local job market in Lombok.
- However, tourism is still an underperforming sector due to the low occupancy rates in many accommodation establishments.
- Destination marketing is still in its infancy state, as Lombok is still considered an add-on to a holiday in neighboring Bali.
- Lombok is a leisure holiday destination for beach holidays as well as for adventure and nature holidays, so the natural resources are the main asset for the tourism sector.
- Environmental sustainability is under threat and needs to be managed to increase/maintain the competitiveness of Lombok tourism.

### Overall recommendations

- To realize its potential the tourism sector needs to be developed in a sustainable way, i.e. for the benefits of Lombok residents and communities, as well as under protection of the natural environment, since – for the visitors - these are the main draw cards of Lombok.
- Lombok needs an effective public-private Destination Management Organization (DMO) which can be entrusted with the implementation and management of a sustainable tourism strategy for the destination.
- Establish a tourism forum consisting of public, private and non-governmental stakeholders to discuss and agree on a common vision and tourism action plan for upgrading both the destination and the services along the tourism value chain.
- Commission regular tourist satisfaction surveys to investigate the happiness of visitors with the services along the tourism value chain tablets as an innovative and efficient way to conduct visitor surveys.

### Recommendations – Economic performance

- Market Lombok as a major tourism destination in its own right and with a clear specialized profile with some primary tourism products and direct flight access from international markets.
- Extend the average length of stay of visitors by offering a

diverse mix of primary and secondary tourism products Green Tourism Village.

- Negotiate with international tour operators to make Lombok a component of a combination travel package (e.g. 2 weeks Bali + 1 week Lombok).
- Negotiate with Bali tour operators to arrange local tour packages to Lombok, including transport, accommodation, and excursions to Lombok attractions.

### Recommendations – Environmental performance

- Improve public waste collection and disposal in the sanitary landfill; Conduct environmental clean-ups on beaches, rivers and in nature areas Green Lombok Initiative.
- Protect and rehabilitate coral reefs.
- Arrange trade fair for technology providers to showcase 'green' technology solutions for the accommodation sector and other tourism enterprises, e.g. for energy and water-saving investments, waste reduction, composting.
- Demonstrate to managers/owners of tourism enterprises that 'greening' measures contribute to cost reduction, and better marketability of the products and services sold to environmentally conscious guests and customers Energy Efficiency project in cooperation with PHRI.
- Support consultancy companies to provide advisory services to tourism companies to improve their competitiveness, e.g. by offering energy and water audits in hotels and resorts, waste reduction, procurement advice.
- Sensitize tourism employees for sustainability issues, e.g. by an introduction of staff training, and staff incentives for resource protection and/or cost reduction.
- Tourism training courses in Lombok for environmental management for hotels, 'green' procurement.
- Facilitate the introduction of 'green' hotel standards and linkage to an internationally recognized certification scheme Green Lombok Initiative.

### Recommendations - Social performance

- Match-making events for hoteliers and local suppliers of food and non-food items linkage with local farmers.
- Improve the design and marketing of locally produced souvenirs pottery and jewelry cluster.

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