The development strategy of coastal area potential based entrepreneurship skills education

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Abstract. The entrepreneurship skill education program is a program of the non-formal education carried out by PKBM to provide knowledge, skills, and entrepreneurship attitudes for residents based on the potential resources and business field needs in the citizens. The research is aimed to (1) analyze the factors that are influencing the development of the entrepreneurship skill education program (2) formulate the development strategy of the coastal area potential based on the entrepreneurship skill education program. The research used the qualitative descriptive method, and it was conducted in four districts with the characteristics of the coastal area at North Luwu Regency namely: Malangke District, West Malangke District, Bone-Bone District, and Tana Lili District. Data were collected using the documentary, questionnaire, and in-depth interview. The data were analyzed using the descriptive, principal component, and SWOT analyses. The research results indicated that: (1) influencing significantly in the development of the entrepreneurship skill education program at North Luwu Regency are: (1) natural resource potential (2) business field needs (3) partnership cooperation (4) institutional assistance in business pioneering (5) skills-based curriculum development based on work and business needs; (6) education level (qualifications) and tutor competence (7) access (distance) to PKBM (8) motivation and mindset of learning citizens (9) permanent work of learning residents, and (10) health conditions of learning residents. The development strategies of the entrepreneurship skill education program are the aggressive strategies through: (1) the development policies of the entrepreneurship skill education program based on regional potential and business opportunities (2) the standardized skill-based curriculum compilation based on competence and commodity types (3) the accompaniment policies of the entrepreneurship skill education program (4) the cooperation development with related stakeholders to carry out the improvement of the tutors competence based on regional potential and business opportunities, and (5) the program partnership establishment between IKM/DUDI and PKBM institutions in an effort to ensure the labour availability and absorption.

1. Introduction

Entrepreneurship Skills Education (hereinafter will be abbreviate as ESE) is a non-formal education service program implemented through courses and training to provide knowledge, skills and entrepreneurial attitudes to learning citizens following the potential of resources and the needs of business opportunities in the community. ESE, as one of the Adult Education models in the Non-formal Education Unit, is intended for learning citizens aged 15 years and above. Based on the Regulation of the Director-General of Early Childhood Education and the Ministry of Education and Culture No. 17 of 2017 concerning Technical Guidelines for the Entrepreneurship Skills Education
Program, ESE aims to provide skills training to learning citizens, facilities and infrastructure assistance, as well as providing support to learning residents in pioneering and developing businesses in the community. Specifically the implementation of the ESE program carried out by the Center for Community Learning Activities that aims to: (1) provide entrepreneurial knowledge to students (2) offer skills in the field of production of goods/services to students (3) instill mindset and entrepreneurship attitude to students; and (4) encourage and create new business startups through courses and training supported by business and industry, business partners and related services/agencies, so as to create jobs [1].

Local excellence-based education is regulated in the Law No 20 of 2003 National education system article 50 paragraph (5) and in the Government Regulation No 19 of 2005 in the explanation of article 91 paragraph (1). The policy of developing local excellence-based education is very relevant to the condition of Indonesia’s vast territory and has a variety of potentials and natural resources that can be optimally designed and become economic advantages of each region. Coastal and marine, for example, are sectors that have enormous potential to be developed. Marine resources, if managed properly, can make them a significant regional economic contributor with a variety of resources, both biological and non-biological.

With a 52.5 km long coastline, the potential of the coastal area in the North Luwu Regency as one of the districts in South Sulawesi Province is immense, especially in the fisheries and marine sector. Based on data released by the Department of Fisheries and Maritime Affairs of South Sulawesi Province in 2018, the amount of fishery production in the North Luwu Regency in 2017 was 201,870.50 tons with a production value of 428.92 trillion [2]. The most significant production of the Fisheries sub-sector in aquaculture in the Bone-Bone District was 51,942.97 tons; while the most significant production of capture fisheries in Malangke District was 844.33 tons [3,9].

Research on the development of learning models based on economic potential in the Center for Community Learning Activities has proven to be sufficient for the sustainability of a program that can increase the income of learning citizens. The concept of local potential based learning management developed in the form of: (1) the planning stage must involve Center for Community Learning Activities managers, tutors and learning citizens (2) the organizing stage is done by identifying local potentials that can support learning (3) student-centered oriented learning (4) coaching activities carried out in accordance with needs (5) evaluation of the process and results, and (6) program development based on the results achieved [4,5,16]. According to Sudjana components that are the most important elements in the implementation of Out-of-School Education are (1) individual input (2) environmental input (3) facility input (4) output (5) other input, and (6) influence (outcome) [6].

Based on the final report on the implementation of the 2016 ESE program, 4 (four) Center for Community Learning Activities located in coastal areas received ESE assistance in the field of Catering, Tailoring, Computer and Carp Cultivation of Fisheries [7]. The skills taught are not yet fully compatible with the potential of resources and business needs in the coastal areas of the North Luwu Regency. This study aims to analyze the factors that influence the development of the ESE program and develop strategies for developing ESE programs based on the potential of coastal areas in the North Luwu Regency.

2. Method

2.1. Research Design
This research uses a quantitative approach with descriptive methods. Data obtained through direct observation, interviews with informants, and questionnaires against respondents. The main variables of this study are limited to 3 inputs: individual input, facility input, and environmental input.
2.2. Time and Research Location
This research was conducted in four districts with characteristics of coastal areas in the North Luwu Regency, namely: Malangke District, West Malangke District, Bone-Bone District, and Tana Lili District. The study was conducted from April to June 2019.

2.3. Data and Resources
Primary data were obtained directly from each head of community in Wapeko village who was directly involved in the program. This primary data was collected through in-depth interviews and questionnaire filling, while secondary data was obtained from various related sources such as data from the Yasanto baseline survey, population data and village situation from the Kurik district and the village secretaries of Wapeko and Merauke in figures years [8, 9]. Secondary data that were obtained will be used as a complement and reinforcement of primary data.

2.4. Determination of Respondents
There were 80 respondents consisting of learning citizens, tutors, and Center for Community Learning Activities managers who were selected by simple random sampling. In-depth interviews were also conducted with eight informants selected by the purposive method.

2.5. Data Collection Techniques
Data collection techniques used in this study are: (1) document study, this method aims to collect and record documentary data, such as ESE Implementation Report, RPJMD, Strategic Plan and Performance Report at the Fisheries Service; Department of Industry, Trade, Cooperatives and Small and Medium Enterprises; and North Luwu District Education Office (2) questionnaires, questions or statements made using a Likert scale containing five levels of answers aimed at learning citizens, tutors and managers of Center for Community Learning Activities to find out their perceptions about the factors that can influence the development of ESE (3) In-depth interviews were conducted with informants to find out in more detail the various problems in the ESE program.

2.6. Data Analysis
Data obtained to determine the factors that influence the development of the ESE program in the form of a questionnaire in the form of raw data are grouped based on the main variables in the form of transfer sheets. Data were analyzed using factor analysis and regression analysis. To get an alternative strategy for developing ESE programs based on the potential of coastal areas, SWOT analysis is used by considering the factors obtained in the previous review.

3. Results
Based on the results of the analysis of the factors used to reduce the constituent components of the main variables as a whole, three new factors were obtained, namely: (1) Environmental Factors (2) Facilities Factors, and (3) Individual Factors. The results of the factor test extraction on the environmental input variable showed that from the 3 components with 15 indicators extracted into one new factor with an eigenvalue value of 2.491 with a variation percentage of 83.039% and a cumulative percentage of variance of 83.039% which afterwards were given the name Environmental Factors can be seen in Table 1.

| Indicator                        | Initial | Extraction |
|----------------------------------|---------|------------|
| k1; Natural Environment          | 1.000   | 0.747      |
| k2; Socio-Cultural Environment   | 1.000   | 0.805      |
| k3; Institutional Environment   | 1.000   | 0.940      |
| Eigenvalues                      |         | 2.491171   |
Factor test extraction results on the Input Means variable shows that from the 5 components and 25 indicators extracted into one new factor with an eigenvalue value of 3.732 with a percentage variation of 74.639% with a total cumulative variance percentage of 74.639% which afterwards is given the name Factor-Factors can be seen in table 2 Factor test extraction results on the Individual Input variable showed that of the 3 components and 11 indicators extracted into one new factor with an eigenvalue value of 2.253 with a percentage variation of 75.090% and a cumulative percentage of variance of 75.090% which was subsequently named the Individual factor can be seen in table 3.

Table 2. Matrix of Facilities Input Variables

| Indicator                        | Initial | Extraction |
|----------------------------------|---------|------------|
| k4; Curriculum                   | 1.000   | 0.719      |
| k5; Learning Process             | 1.000   | 0.714      |
| k6; Instructors/Tutors           | 1.000   | 0.779      |
| k7; Facilities and Infrastructure | 1.000   | 0.788      |
| k8; Fee/Cost                     | 1.000   | 0.732      |
| Eigenvalues                      | 3.7319796 | 74.639592 |
| % of Variance                    | 83.0390335 | 83.0390335 |
| Cumulative %                     | 74.639592 | 74.639592 |

Table 3. Matrix of Individual Input Variables

| Indicator       | Initial | Extraction |
|-----------------|---------|------------|
| k9; Physical    | 1.000   | 0.688      |
| k10; Psychological | 1.000   | 0.747      |
| k11; Functional | 1.000   | 0.818      |
| Eigenvalues     | 2.25269942 | 75.0899808 |
| % of Variance   | 75.0899808 | 75.0899808 |
| Cumulative %    | 75.0899808 | 75.0899808 |

From the results of the factor analysis, correlation tests and in-depth interviews it was concluded that the factors that influence the development of the ESE program are (1) natural resource potential (2) business field needs (3) partnership collaboration (4) institutional assistance in business pioneering (5) skills-based curriculum development based on work and business needs; (6) education level (qualifications) and tutor competence (7) access (distance) to Center for Community Learning Activities (8) motivation and mindset of learning citizens (9) permanent work of learning residents, and (10) health conditions of learning residents. The correlation test results on these factors can be seen in table 4.
| Component                                      | Pearson Correlation | Sig. (2-tailed) | Component                                      | Pearson Correlation | Sig. (2-tailed) |
|-----------------------------------------------|---------------------|-----------------|-----------------------------------------------|---------------------|-----------------|
| q1 Skills according to the potential of natural resources | .721**              | 0.000           | q26 Creativity building learning              | .561**              | 0.000           |
| q2 Business opportunity identification         | .662**              | 0.000           | q27 Learning result evaluation                | .593**              | 0.000           |
| q3 Societal habits                             | .544**              | 0.000           | q28 Tutor qualification                       | .746**              | 0.000           |
| q4 Comfortable environment                     | .559**              | 0.000           | q29 Tutor competence                          | .714**              | 0.000           |
| q5 Societal customs/norms                      | .449**              | 0.000           | q30 Tutor ratio/number                        | .551**              | 0.000           |
| q6 Business fields requirements                | .834**              | 0.000           | q31 Distance (access) to PKBM                 | .750**              | 0.000           |
| q7 According to Societal Aspiration/Demands    | .516**              | 0.000           | q32 Students ration in one group              | .583**              | 0.000           |
| q8 Establish coordination and cooperation with DUDI | .848**              | 0.000           | q33 RKB PKBM Condition                        | .602**              | 0.000           |
| q9 Institution assistance for modal aid access | .446**              | 0.000           | q34 Furniture, utensils condition             | .583**              | 0.000           |
| q10 Institution assistance for marketing       | .451**              | 0.000           | q35 Availability of props                     | .593**              | 0.000           |
| Question | Description | Correlation Coefficient | P-value | Question | Description | Correlation Coefficient | P-value |
|----------|-------------|-------------------------|---------|----------|-------------|-------------------------|---------|
| q11      | Assisting institution in business matter | .852** | 0.000 | q36      | Availability of books and teaching materials | .419** | 0.000 |
| q12      | Assisting institution in business in 3 months | .551** | 0.000 | q37      | Decent tutor salary | .597** | 0.000 |
| q13      | Government support program sustainability | .662** | 0.000 | q38      | Operational cost | .685** | 0.000 |
| q14      | NGO support and assistance | .522** | 0.000 | q39      | Equipment capital expenditure available | .533** | 0.000 |
| q15      | Social organization support | .590** | 0.000 | q40      | Sources of financing | .559** | 0.000 |
| q16      | Skill-based competency curriculum | .750** | 0.000 | q41      | Age of citizens | .533** | 0.000 |
| q17      | Curriculum according to regional potential | .641** | 0.000 | q42      | Sex | .582** | 0.000 |
| q18      | Curriculum according to business needs (work) | .714** | 0.000 | q43      | Five senses condition | .532** | 0.000 |
| q19      | Building the mindset curriculum | .512** | 0.000 | q44      | Learning Readiness | .485** | 0.000 |
| q20      | Building the motivation curriculum | .404** | 0.000 | q45      | Motivation for learning | .780** | 0.000 |
| q21      | Practice-method learning | .607** | 0.000 | q46      | The mindset of learning | .780** | 0.000 |
| q22      | Intern-method learning | .549** | 0.000 | q47      | Cognition structure (belief) | .563** | 0.000 |
The ESE program development strategy is an aggressive strategy through: (1) compile policies for developing ESE programs based on regional potential and business opportunities (2) compile skills-based and standardized curriculum based on the type of commodity and work needs (3) compile assistance policies in implementing ESE programs (4) build cooperation with stakeholders in increasing Tutor competence based on regional potential and business opportunities, and (5) establishing partnership programs between IKM/DUDI and Center for Community Learning Activities institutions in an effort to guarantee the availability and absorption of labor. Internal factors, external factors, and strategic alternatives can be seen in the SWOT matrix in table 5.

**Table 5. Matrix of SWOT of ESE Development Strategy St**

| Policy (Strategic Plan) | Weakness (W) |
|-------------------------|--------------|
| Tutor competencies are not in accordance with the skills taught | The model and learning time can adjust the needs of the students |
| There is no standard curriculum based on the competencies needed | Weak competence and business management (market access and capital) of the cultivating community |
| DAPODIK integrated education data information service | |

**Opportunity (O)**

Central Government support through budgeting policies and legal products

**Strategy S-O**

Develop development and assistance policies in the implementation of the ESE program

**Strategy W-O**

Building cooperation with stakeholders in the training of commodity-based Tutor competency improvement
The development of the IKM segment encourages the creation of new entrepreneurs encouraging the absorption of a workforce that demands the skills of actors. Effort

Support of research institutions, DUDI, BLK, and BP-PAID

Availability of natural resources potential supports business development and learning

Threat (T)  Strategy S-T  Strategy W-T
Price problems are affected by dumping politics, price fluctuations, and supply availability. Encourage the formation of a container/business association to ensure price stability. Product diversification, creating added value to SMI products so that they are able to compete with other regional processed products.

Other IKM processed products in the region are known to the public (Chips, Amplang, etc.)

Students environmental conditions can affect student motivation

Collaborating with the PKBM Forum to carry out PNF socialization

4. Discussion
The results showed that the factors that significantly influenced the development of the ESE program in the North Luwu Regency were: (1) facility factors, (2) environmental factors, (3) individual factors. From the results of the factor analysis, correlation test and in-depth interviews, it was concluded that the factors influencing the development of the ESE program were (1) natural resource potential (2) business field needs (3) partnership cooperation (4) institutional assistance in business pioneering (5) development a skill-based curriculum based on work needs and business field; (6) education level (qualifications) and tutor competence (7) access (distance) to PKBM (8) motivation and mindset of learning citizens (9) permanent work of learning residents, and (10) health conditions of learning residents.

The implementation of the ESE program is carried out with the “4 in 1” approach through the following stages: (1) identifying business opportunities by identifying potential local resources (products or services) that can be developed into new businesses according to market opportunities (2) implementing entrepreneurial-based learning the development of attitudes, knowledge and entrepreneurial skills (3) evaluating learning outcomes, and (4) conducting business mentoring and pioneering by establishing partnerships with business partners, marketing products, business apprenticeships and others [1].
Anggraini, Sumardi and Jas explain that PKBM had five tasks in carrying out the program, namely: (1) identifying community learning needs (2) planning program implementation in accordance with community needs (3) fostering program implementation (4) conducting an assessment of the running program, and (5) report the implementation of the program to relevant officials [10]. Furthermore, their research shows that the cause of problems in the low performance of the implementation of Center for Community Learning Activities was due to the manager's lack of understanding of the technique of identifying community learning needs and the lack of planning of learning program activities in Center for Community Learning Activities [10].

This study supports the theory of Sudjana stating that environmental input is one of the components that must be considered in the implementation of the PLS program when viewed from a systems approach [6]. This occurs because environmental input has a supporting contribution to the learning process.

The results of this study are also in line with the results of the research in Rokan Hulu Regency which reveals problems and causes of low public interest in non-formal education, including: (1) economic factors (2) the low awareness of the population towards the importance of education, so that many parents do not send their children to school [11]. Research in Papua also revealed several problems of non-formal education including (1) lack of instructors (tutors) (2) lack of training to increase competency for instructors, and access to non-formal education units, especially in remote areas [12]. Other research on Center for Community Learning Activities problems in Pekanbaru City, Riau, based on observations in several Center for Community Learning Activities found symptoms of issues including (1) most Center for Community Learning Activities do not have adequate classrooms, narrow classrooms, so the function of Center for Community Learning Activities as a place for learning communities is not going well (2) most of Center for Community Learning Activities do not have tutors in accordance with their fields, so the function of Center for Community Learning Activities as a learning place is not going well (3) most Center for Community Learning Activities does not have a handbook for learning citizens, thus the function of PKBM as an information center is not going well (4) Center for Community Learning Activities does not have enough learning time to develop creativity [14].

The development of ESE programs based on the potential of coastal areas is done by identifying business opportunities by identifying and implementing entrepreneurship learning based on the possibility of existing resources that can be developed into new businesses according to market opportunities. There are at least 11 marine economic sectors that can be developed based on the potential of coastal and marine resources, namely: (1) capture fisheries (2) aquaculture (3) fishery product processing industries (4) marine biotechnology industry, (5) mining and energy (6) marine tourism (7) sea transportation (8) maritime industry and services (9) small island resources (10) coastal forestry (mangrove), and (11) non-conventional natural resources [15]. With a 52.5 km long coastline, the potential of the coastal area in the North Luwu Regency is tremendous, especially in the fisheries and marine sector. Total fisheries production in North Luwu Regency in 2017 was 201,870.50 tons with a production value of 428.92 trillion [2]. The most significant production of the Fisheries sub-sector in aquaculture in the Bone-Bone District was 51,942.97 tons, while the most significant production of capture fisheries in Malangke District was 844.33 tons [9]. Through the approach of the amount of production and production value, it is obtained a picture of the leading commodities in the coastal area of the North Luwu Regency in the form of Seaweed (Eucheuma Cottonii and Gracillaria Sp.), Milkfish and Shrimp [13].

Determination of the strategy that will be carried out in an effort to develop an ESE program based on the potential of coastal areas in the North Luwu Regency is done through a qualitative approach using a SWOT analysis (Strength, Weakness, Opportunity, Threat). From the results of weighting and rating through the Internal Factors Analysis Summary (IFAS) matrix and the External Factors Analysis Summary (EFAS) an alternative ESE program development strategy is in quadrant I, which supports the development of the aggressive strategy. Alternative strategies generated through the assessment of the highest weighting and rating in the plan of developing ESE programs based on the
potential of coastal areas are carried out through; (1) compile policies for developing ESE programs based on regional potential and business opportunities (2) compile skills-based and standardized curriculum based on the type of commodity and work needs (3) compile assistance policies in implementing ESE programs (4) build cooperation with stakeholders in increasing Tutor competence based on regional potential and business opportunities, and (5) establishing partnership programs between IKM/DUDI and Center for Community Learning Activities institutions in an effort to guarantee the availability and absorption of labor.

5. Conclusions and Suggestions
Based on the discussion of research results, it can be concluded that the factors that influence the development of the ESE program in North Luwu Regency are: (1) natural resource potential (2) business field needs (3) partnership cooperation (4) institutional assistance in business initiation (5) skills-based curriculum development based on work and business needs; (6) level of education (tutor qualifications) and tutor competence (7) access (distance) to Center for Community Learning Activities (8) learning people's motivation and learning people's mindset (9) permanent work of learning citizens, and (10) health conditions of learning residents. The development of ESE programs based on the potential of coastal areas is an aggressive strategy through; (1) compile policies for developing ESE programs based on regional potential and business opportunities (2) compile skills-based and standardized curriculum based on the type of commodity and work needs (3) compile assistance policies in implementing ESE programs (4) build cooperation with stakeholders in increasing Tutor competence based on regional potential and business opportunities, and (5) establishing partnership programs between IKM/DUDI and Center for Community Learning Activities institutions in an effort to guarantee the availability and absorption of labor.

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