

ANALYSIS OF EXTERNAL FACTORS ON RURAL ECOTOURISM ENTREPRENEURSHIP (CASE STUDY IN BOGOR REGENCY OF WEST JAVA)

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ANALYSIS OF EXTERNAL FACTORS ON RURAL ECOTOURISM ENTREPRENEURSHIP (CASE STUDY IN BOGOR REGENCY OF WEST JAVA). The entrepreneurship aspect will determine the success of rural ecotourism development. Rural ecotourism products and services should be attractive and carefully set and packed by entrepreneurs, to attract tourists. This paper studies the external factors that may affect entrepreneurial capacity in rural ecotourism. Research was conducted in four tourist villages in Bogor Regency, namely Ciasihan, Sirnajaya, Watesjaya, and Pabuaran. The 442 respondents were divided into two groups, namely the entrepreneurial group (240 respondents) and the non-entrepreneurial group (202 respondents). Closed-ended questionnaire in "one score one indicator scoring" system pattern was provided to the respondents. Data were analysed in a quantitative descriptive manner based on the average value of each indicator. Analysis of causality between variables was conducted using logistic regression analysis. The results show that external factors that significantly affect rural ecotourism entrepreneurship are dominated by social aspects (seven factors) and some aspects of the entrepreneurship ecosystem, namely 1) market, 2) finance, and 3) business culture. The highest odds ratio is in the social interaction variable, 5.459, while the lowest is in the group solidarity variable, which is 0.323. With the odds ratio of social interaction of 5.459, it can be interpreted that if social interaction in the tourist village increases, it will tend to cause success in entrepreneurship 5.459 times higher than in the absence of social interaction. By utilising raw materials derived from natural resources, the ecotourism business will encourage business actors to be more concerned with preserving resources and forests and the environment. Therefore, entrepreneurship in the field of rural ecotourism must be optimally supported by all stakeholders involved.

Keywords: Entrepreneurship, external factor, ecotourism, tourist village

ANALISIS FAKTOR EKSTERNAL ENTREPRENEURSHIP EKOWISATA PERDESAAN (STUDI KASUS DI KABUPATEN BOGOR JAWA BARAT). Aspek kewirausahaan akan menentukan keberhasilan pembangunan dan pengembangan ekowisata pedesaan. Produk dan layanan ekowisata pedesaan harus dibuat dan dikemas oleh pengusaha dengan cara yang menarik dan sangat kompetitif sehingga wisatawan tertarik untuk mengkonsumsinya. Penelitian ini bertujuan untuk menganalisis faktor eksternal yang mempengaruhi kapasitas kewirausahaan dalam ekowisata pedesaan. Lokasi penelitian berada di empat desa wisata di Kabupaten Bogor, yaitu Desa Ciasihan, Sirnajaya, Watesjaya dan Pabuaran. Jumlah responden adalah 442 yang dibagi menjadi dua kelompok, yaitu kelompok wirausaha dari 240 responden dan kelompok non-kewirausahaan dari 202 responden. Data primer diperoleh melalui pengisian daftar pertanyaan oleh responden menggunakan kuesioner tertutup dengan menerapkan pola sistem "one score one indicator scoring". Analisis data dilakukan secara deskriptif kuantitatif berdasarkan nilai rata-rata masing indikator. Analisis kausalitas antara variabel dilakukan dengan menggunakan analisis regresi logistik. Hasil penelitian menunjukkan bahwa faktor eksternal

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yang secara signifikan mempengaruhi kinerja kewirausahaan ekowisata pedesaan didominasi oleh aspek sosial (tujuh faktor) dan beberapa aspek ekosistem kewirausahaan, yaitu 1) pasar, 2) keuangan dan 3) budaya bisnis. Rasio odds tertinggi adalah dalam variabel interaksi sosial, yaitu 5,459, sedangkan odds ratio terendah ada pada variabel solidaritas kelompok, yaitu 0,323. Dengan odds ratio interaksi sosial 5.459, dapat diartikan bahwa jika interaksi sosial di desa wisata meningkat, maka akan cenderung menyebabkan keberhasilan dalam berwirausaha 5.459 kali lebih tinggi daripada tidak adanya interaksi sosial. Bisnis ekowisata dengan memanfaatkan bahan baku yang berasal dari sumber daya alam akan mendorong pelaku usaha untuk lebih peduli dengan pelestarian sumber daya dan hutan serta lingkungan. Oleh karena itu kewirausahaan di bidang ekowisata pedesaan harus didukung secara optimal oleh seluruh pemangku kepentingan yang terlibat.

Kata kunci: Entrepreneurship, factor eksternal, ekowisata, desa wisata

I. INTRODUCTION

Entrepreneurship can be a catalyst for positive change in both the economic and environmental fields (Shahidullah & Haque 2014). Entrepreneurship has a very important role in achieving economic growth in rural areas (Cabrera & Mauricio 2017; Quezada 2017). The evidence shows that economic growth is inversely proportional to environmental sustainability, as many sectors, especially manufacturing, processing, and transportation, rarely consider the environmental impact in business models (Volery, 2002). The productive economy in rural areas is somewhat different from that in urban areas, which rely on a manufacturing economy. Economic activities in rural areas tend to utilising the local potential and natural resources by relying on skills and creative ideas packaged in entrepreneurship (Dinis et al. 2019). Ecotourism, one of the entrepreneurship activities in rural areas that increase value-added from natural resources (Boley and Green 2015), is identical to the middle to lower productive economic activities (MSMEs) by optimizing local products. As an alternative tourism product, tourists have high expectations for the quality of goods and services offered by ecotourism business actors. To create attractive and highly competitive ecotourism goods and services, it is necessary to have a reliable entrepreneur with superior capacity.

Productive entrepreneurship is determined by two major aspects: the condition of

the entrepreneur itself and environmental conditions (circumstance) or external factors. External factors of entrepreneurship can be interpreted as factors that come from the outside environment that can affect the emergence of a person's entrepreneurial spirit. These external factors are more inclined towards the environment where an entrepreneur carries out his business activities. Several studies on entrepreneurship state that the external factors that influence the formation of a person's entrepreneurial spirit are very diverse. Kallmuenzer et al. (2019) stated that dynamic external environmental factors are often associated with uncertainty and business competition. This external aspect is often associated with the problems and constraints faced by business actors (Lundberg & Fredman, 2012).

Gnyawali and Fogel (1994) summarised the external environmental factors that influence entrepreneurial performance, including 1) policies and regulations, 2) socio-economic conditions, 3) entrepreneurial and management skills, 4) financial aspects, and 5) non-financial support. Meanwhile, Shane and Venkataraman (2012) stated that competitive market, profit value incentives, political support and tax restrictions are needed to build a conducive entrepreneurship climate. Lordkipanidze et al. (2005) stated that culture, education system, infrastructure and tax rates have a vital role in shaping a conducive entrepreneurship climate. Aspects of cooperation and social

networking can also positively contribute to the development of entrepreneurship (Shaw 2004).

In developing countries, especially in Indonesia, the external conditions (environmental conditions) of the ecotourism business are identical with backward and deprived conditions (NWearing, Wearing, & McDonald 2012). This is understood because the locations of ecotourism businesses are generally in rural areas and areas adjacent to forest areas. Business actors are generally rural residents with various finance and business knowledge limitations (NWearing, Wearing, & McDonald 2012). Infrastructure facilities are also generally still in poor condition, even though they are available with a minimal quality. The government's attention to the rural environment is also lower than the attention to urban areas. With the unfavourable external environment situation, ecotourism business actors must survive in running their business units (Virtanen 2020).

External factors (Papzan et al., 2008) need to get more serious attention from all stakeholders involved in rural ecotourism efforts. In addition to internal factors (personal/psychological conditions), entrepreneurship in rural ecotourism is also influenced by external factors outside of themselves that cannot be controlled

or controlled directly by an entrepreneur. Several studies have shown that several uncontrollable external factors may be related to entrepreneurial activity within an organization (Kuratko et al. 2013; Cabrera & Mauricio 2017). The government, business people, social communities and local communities must create a conducive business climate. With such conducive external environmental conditions, it is hoped that rural ecotourism businesses can further develop and improve their quality so that community welfare could improved and natural resources are preserved (Teshome et al. 2021). Given the vital role of entrepreneurship in developing the ecotourism business, studying the various factors that influence the emergence of an entrepreneurial spirit in rural ecotourism is necessary. This study aims to examine the external components/attributes that play a role in building the entrepreneurial capacity of rural ecotourism.

II. MATERIAL AND METHODS

A. Study Site

This research was conducted in four rural ecotourism located in Bogor Regency, The villages where this research was conducted were Sirnajaya Village, Pabuaran Village,

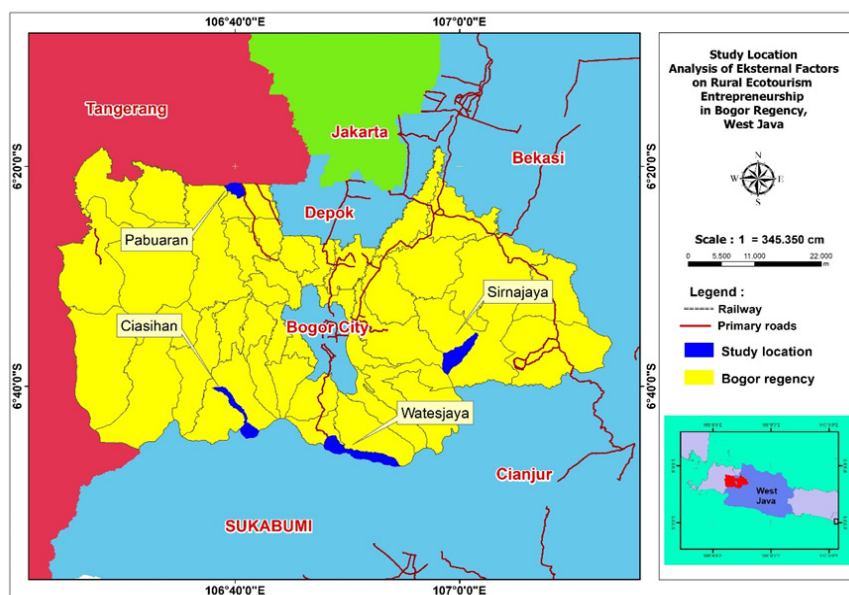


Figure 1. Map of the research site villages in Bogor Regency

Ciasihan Village and Watesjaya Village. The location selection was based on the large ecotourism potential and the growth of ecotourism destinations which became the main destinations for visitors from Jakarta, Bogor, Depok, Tangerang and Bekasi areas, which have huge potential for tourist visits. The distribution of the research location villages can be seen in Figure 1. The villages of the research location already represent the character of rural areas in Bogor Regency, with the largest economy supported by the agricultural sector.

B. Methods

This study identifies external variables that shape entrepreneurial behavior, including 1) environmental, 2) Entrepreneurship ecosystem, and 3) social aspects. Environmental aspects of concern in rural ecotourism entrepreneurship consist of two groups: 1) forest natural resources; and 2) rural land. Aspects of the rural ecotourism entrepreneurship ecosystem consist of 1) market, 2) finance, 3) business culture, 4) government policies, 5) human resources and 6) Infrastructure. Social aspects in the external space consist of 1) collective action, 2) information and communication, 3) social cohesion and inclusion, 4) trust and norms, 5) participation in the community, 6) group solidarity, and 7) social interaction. The research method used was a combination of qualitative and quantitative approaches. This type of research is more inclined towards exploratory research, while maintaining the power of quantitative analysis and in-depth meaning of various phenomena in the study location through a phenomenological approach (Anderson and Gaddefors 2016). The number of respondents was 442 selected with purposive sampling from rural communities around ecotourism destinations in Bogor Regency. Respondents were divided into two groups: the entrepreneurial group of 240 respondents and the non-entrepreneurial group of 202 respondents. Primary data was obtained from a closed-ended questionnaire that scored by single indicator scoring system pattern (Avenzora,

2008). Perception scores were assessed in the range of 1-7 with the following explanations: 1 = very low, 2 = low, 3 = somewhat low, 4 = average, 5 = somewhat high, 6 = high and 7 = very high.

C. Analysis

The score of respondents' perceptions of the external factors component is descriptively quantitatively based on the average value of each indicator. To identify external spatial variables that have a significant effect on rural ecotourism entrepreneurship, a causal analysis between variables was carried out using logistic regression analysis. The tendency or desire of the local community around ecotourism destinations to become an entrepreneur is the dependent variable (variable Y) which will be built in an equation model. At the same time, the external factor is the independent variable (variable X) which determines a person to become an entrepreneur. The dependent variable that will be examined consists of 2 possibilities: respondents who become entrepreneurs ($Y = 1$) and respondents who do not become entrepreneurs ($Y = 0$).

III. RESULT AND DISCUSSION

In addition to internal factors (personal/psychological conditions), entrepreneurship in rural ecotourism is also influenced by external factors outside of themselves that cannot be controlled or controlled directly by an entrepreneur. Several studies have shown that several uncontrollable external factors may be related to entrepreneurial activity within an organization (Kuratko et al. 2013; Cabrera & Mauricio 2017).

A. Validity Test and Reliability Test

The external space that forms rural ecotourism entrepreneurship consists of three aspects: 1) environmental aspects, 2) entrepreneurship ecosystem aspects, and 3) social aspects. These three aspects are further described into 15 factors/variables. The results of the reliability test of the research

instrument using the Cronbach's Alpha method were reliable on all factors (Cronbach's Alpha value > 0.6). The results of the validity test of the research instrument using the Pearson correlation method also obtained valid results (correlation value or calculated r value > r table) for all variables. Based on this, the survey results of tourists' motivation and perceptions can be analyzed further. Table 1 Validity and reliability test on external factors.

Table 1 shows that the entrepreneurship ecosystem aspect has the highest average score

of 5.22, while the environmental aspect has the lowest score of 4.83. All external factors of entrepreneurship have a positive score (score > 5). Furthermore, the difference in external factor scores in the four research villages is also not too large. This can be interpreted that the condition of entrepreneurship external factors in the four research villages is almost uniform.

Table 2 shows the average value on the Lingkungan aspect, the entrepreneurial ecosystem aspect and the social musty. The highest average score of 5.02 in the environment

Table 1. Validity and reliability test on external factors

External factors	Product moment correlation (r)	Cronbach's Alpha
Natural resources of forest and land	.460**	.864
Rural environment	.673**	.847
Market	.491**	.858
Finance	.495**	.860
Business Culture	.530**	.855
Government policy	.596**	.852
Human Resources	.689**	.846
Infrastructure	.673**	.847
Collective action	.691**	.846
Information and communication	.681**	.847
Social cohesion and inclusion	.368**	.862
Trust and Norms	.671**	.847
Participation in the community	.562**	.853
Group solidarity	.580**	.852
Social interactions	.654**	.848

Remarks:

*) $\alpha = 0.1 \Rightarrow r \text{ value} > r \text{ table} (0.116) = \text{Valid}$; **) $\alpha = 0.05 \Rightarrow r \text{ value} > r \text{ table} (0.138) = \text{Valid}$; Cronbach's Alpha > 0.60 = Reliable

Table 2. Average score environment aspect, entrepreneurship ecosystem aspect, social aspect

Tourism Village	Average Score		
	Environment Aspect	Entrepreneurship Ecosystem Aspect	Social Aspect
Ciasihan	4.80	5.14	5.21
Sirnajaya	5.02	5.31	5.06
Watesjaya	4.83	5.27	5.14
Pabuaran	4.67	5.14	5.01
Average	4.83	5.22	5.11

was obtained in Sirnajaya Village. This is due to the running of community-based rural tourism and the use of forest land for productive crops such as coffee, So that the community gets economic value from land use. In Sirnajaya Village, entrepreneurship ekosistem got the highest average score due to the functioning of BUMDES which can embrace most of the village community. The lowest score in the environmental aspect of 4.67 is in Pabuaran Village. The reason for this low value is that Pabuaran Village has established many factories for industry and the people tend to become laborers in the surrounding industries.

B. Environmental Aspect

The environmental aspect is related to resources, especially natural and environmental resources used as objects or raw materials to carry out the production process in rural ecotourism entrepreneurship. Environmental aspects of concern in rural ecotourism entrepreneurship consist of two groups: 1) forest natural resources; and 2) rural land. Environmental aspects of forest resources are related to everything that comes from forest areas or areas that can be used as objects or raw materials to produce goods and services in the ecotourism sector. Potential forest resources that can be used as business raw materials

include: 1) forest plants or stands, 2) wild animals in the forest, 3) the atmosphere in the forest, 4) forest views and panoramas, 5) water sources, 6) terrain/contours in the forest, and 7) local culture related to forest use.

It should be emphasized here that the research location for rural ecotourism entrepreneurship is in villages that border or are in forest areas. Ciasihan Village is one of the villages located near the Mount Halimun Salak National Park conservation area. Watesjaya Village is near the Gunung Gede Pangrango National Park. Furthermore, Sirnajaya Village is located near a state forest area Perum Perhutani. While, Pabuaran Village is located around a community forest owned by residents. With the majority of the environment being forest areas, various rural eco-entrepreneurship products will use forest resources in environmental goods and services.

Figure 2 shows that entrepreneurship actors utilize almost all forest resource goods and services as objects and raw materials in carrying out rural ecotourism entrepreneurship. Rural ecotourism business actors utilize the types of goods and services from the forestry sector. Rural ecotourism business actors with the highest score are water resources local culture in the use of forests as business opportunities such as forest resource products, which support

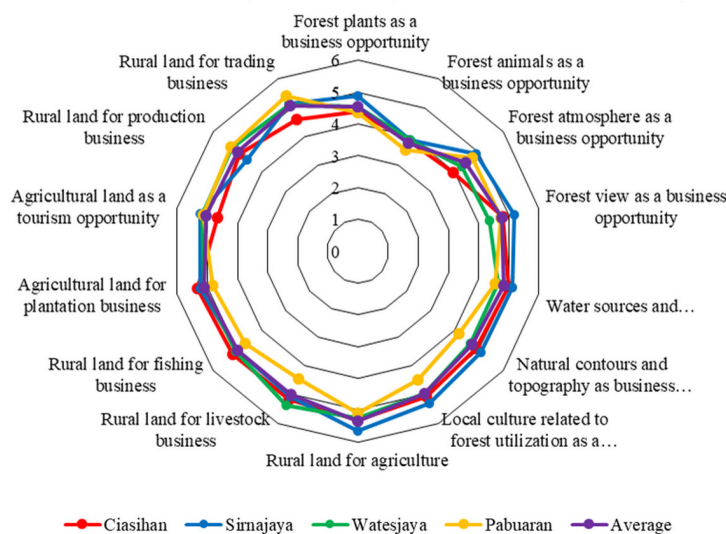


Figure 2. Score of environmental aspects in entrepreneurship

their businesses with low scores. In general, the score on forest resources to support rural ecotourism entrepreneurship is positive (score > 4) except for wildlife products.

Rural land resources are also an environmental aspect of internal spaces supporting rural ecotourism entrepreneurship activities. Several types of rural land use to support rural ecotourism entrepreneurship activities include: 1) for agricultural business, 2) for livestock business, 3) for fishery business, 4) for plantation business, 5) for tourism business, 6) for production, and 7) for trading business. The score for all types of rural land use is positive (score > 4). This can be interpreted that the rural land factor will determine the success of rural ecotourism entrepreneurship activities. Furthermore, the highest score was on the component of rural land use for agriculture (score 5.33), while the use for fisheries business had the lowest score of 4.98. Land concentration for agriculture has the highest value of 5.33 because agricultural culture has been understood by the village community for a long time, including the care and marketing of agricultural products. Meanwhile, in the fisheries business sector, the risk of failure is quite high and requires maintenance, capital and marketing which is more difficult than

agricultural businesses. Rural land use for tourism businesses has a fairly high score of 5.06. This can be interpreted that the function of rural land in supporting tourism businesses in the research location is also quite high.

C. Entrepreneurship Ecosystem Aspect

Aspects of the rural ecotourism entrepreneurship ecosystem consist of 1) market (Sutter et al. 2017), 2) finance (Otieno et al. 2013), 3) business culture (Gil Angel et al. 2017), 4) government policies (Kouakou et al. 2019), 5) human resources (Lajqi & Krasniqi 2017) and 6) Infrastructure (Parker & Khare 2005). Figure 3 shows that business culture is an aspect of the entrepreneurship ecosystem with the highest score of 5.92. At the same time, the financial factor is an aspect of the entrepreneurship ecosystem that has the lowest score of 4.44. In general, the score of all factors in the entrepreneurship ecosystem aspect is positive (score > 4).

Market factors will determine the success of a rural ecotourism business. Market factor has a score of 4.99 with a rather good predicate. Market conditions in rural ecotourism businesses in the research locations generally have the same situation as rural ecotourism businesses in various regions in Indonesia,

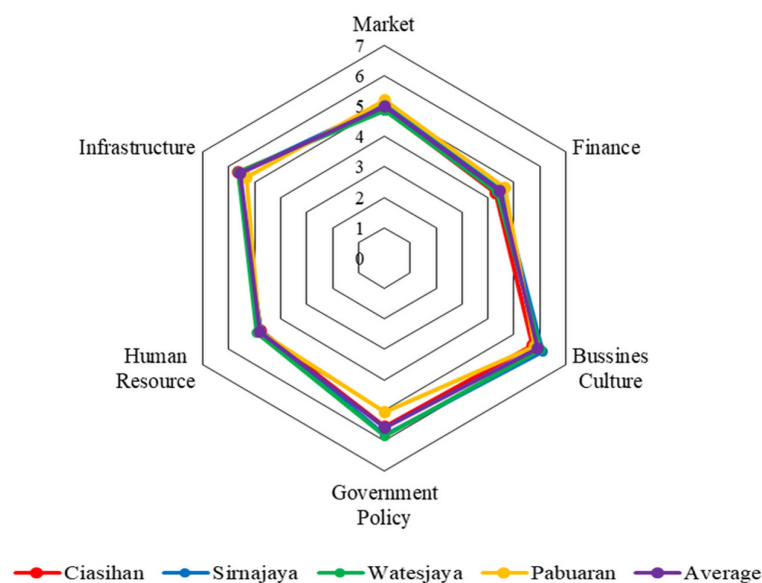


Figure 3. Score of ecosystem aspect in entrepreneurship

which local and national consumers dominate. The level of consumer purchasing power is medium to low. Competition between business actors is also quite high because they provide products and services that are somewhat similar or uniform.

The financial factor is often equated with the financial capital factor. The most important factor is determining the success of a business in all business fields, including rural ecotourism businesses. The score of the financial factor at the research location is 4.44 with the medium category and is a factor in the entrepreneurship ecosystem aspect with the lowest score. The low score on these financial factors can be interpreted as rural ecotourism business actors' financial condition or capital is in limited or lacking conditions. This is understandable because rural ecotourism business actors' socio-economic conditions and welfare are low and limited, so it is difficult to provide financial capital for entrepreneurship. These financial constraints are generally overcome by providing loan assistance packages from the government.

Business culture is related to local people's habits always to connect their life activities with entrepreneurship activities. This business culture arises because entrepreneurship activities have been long and passed down from generation to generation. For local people who already have a strong business culture, it can be said that business is a "lifestyle" and is not just looking for financial gain. Based on Figure 3 above, it can be seen that the business culture factor has the highest rating score of 5.92. The business culture is formed because the environmental conditions of rural ecotourism have the prospective potential for entrepreneurship.

Government policy is also seen as a factor that determines the success or quality of entrepreneurship in rural ecotourism. Government policies must make local community businesses better and provide high profits. Therefore, in the formulation of government policies, there needs to be input and involvement of rural ecotourism business actors so that all interests can be accommodated.

The score of government policy factors on rural ecotourism businesses is quite good with a score of 5.57, as shown in Figure 3.

Human resources involved in rural ecotourism businesses are from groups of entrepreneurs. They include parties/stakeholders interested in developing and developing rural ecotourism entrepreneurship. The score of the human resource factor in rural ecotourism entrepreneurship is positive, which is 4.83 with a fairly good category. Infrastructure also contributes greatly to the success of a rural eco-tourism business.

Infrastructure related to ecotourism business/business can be in the form of transportation infrastructure, communication, energy sources and other facilities that support rural ecotourism business. The better and quality infrastructure conditions in an area are expected to positively influence the success of businesses run by business actors. Figure 3 shows that the infrastructure factor in the research village is considered to be in fairly good condition with a score of 5.54.

D. Social Aspect

Social aspects in the external space consist of 1) collective action (Fennell 2007) and cooperation, 2) information and communication (Ohe 2019), 3) social cohesion and inclusion (Lemelin et al. 2015), 4) trust and norms, 5) participation in the community (Di Pietro et al. 2012), 6) group solidarity (Nabavi 2009), and 7) social interaction (Mikko et al. 2017). Figure 4 shows that the social aspect of ecotourism entrepreneurship is positive with a score of > 4. Group solidarity has the highest score of 5.35, while social interaction has the lowest relative score of 4.64. Collective action is an activity carried out together by cooperation to support business success in rural ecotourism. The collective action factor has a score of 5.14, with a rather high category. The local community still views that collective action must be maintained and preserved.

Information and communication can make entrepreneurship activities in rural ecotourism

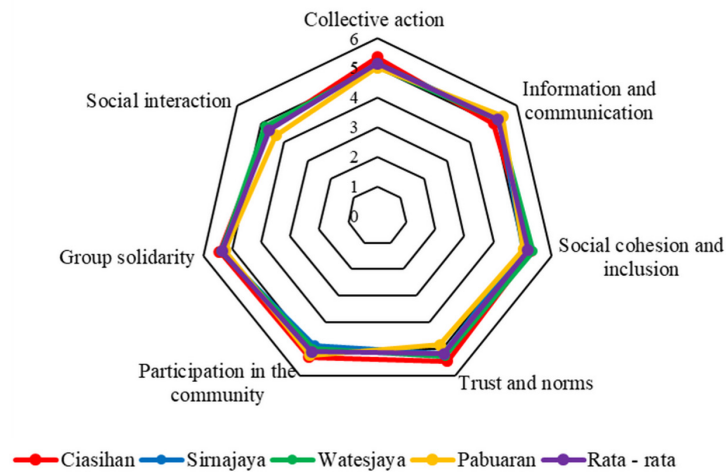


Figure 4. Score of social aspects in entrepreneurship

more dynamic. Smooth communication between business actors can quickly receive information, especially important information that requires immediate follow-up. The information and communication factor has a positive score of 5.2 with a rather good category. The level of social cohesion and inclusion in the study area is quite high, with a score of 5.18. With social cohesion and inclusion conditions that are quite good, rural ecotourism entrepreneurship is expected to obtain better results. Trust and norms can make entrepreneurship in rural ecotourism stronger and more stable. There will be no more suspicion that makes the business climate unhealthy with high trust between business actors. The trust factor and norm score in rural ecotourism entrepreneurship are 5.16, with a fairly high category. Furthermore, participation in the community also determines the success of entrepreneurship in rural ecotourism. Participation in the community will make the business actors more cohesive and have the same position. The participation score in the entrepreneurship community in rural ecotourism is quite high at 5.08.

Group solidarity is needed in all aspects of life, including rural ecotourism entrepreneurship. Group solidarity can create a sense of "fate and share", especially when problems or calamities. The group solidarity score on rural ecotourism

entrepreneurship is quite high, namely 5.35. Furthermore, social interaction also has a very important role in advancing rural ecotourism entrepreneurship. The social interaction score of rural ecotourism entrepreneurship in the research location is relatively low compared to other factors, namely 4.64.

E. External Factors Model in Rural Ecotourism Entrepreneurship

External factors will form a conducive business environment. Entrepreneurial success is not only determined by internal factors (personality aspects), but is also determined by factors originating from the surrounding environmental conditions. These environmental conditions can be natural, socio-cultural, political, and local security conditions. This environmental condition is often referred to as the "business ecosystem".

Logistic regression is part of multiple linear regression analysis. This logistic regression analysis is a technique to explain the probability of an actual occurrence from the response variable category (Firdaus et al. 2011). Logistic regression analysis examines the relationship between the explanatory variable (X) influences on the response variable (Y) through a certain mathematical equation model. The explanatory variables can be categorical or numerical

variables to estimate the probability of certain events from the response variable category. The feasibility test of the logistic regression model was assessed using the criteria of Hosmer and Lemeshow as measured by the chi-square value. Based on Table 3, it can be seen that the significance value of the model based on Hosmer and Lemeshow is significant (value 0.174). The model meet the good fit test criteria so that it is accepted for further analysis.

From the output of the Omnibus Test, as shown in Table 4, it can be seen that the significance value of the model at the 95% confidence level ($\alpha = 0.05$) is 0.000 or sig < 0.05. These results indicate that the model

is significant, so it can be said that there is at least one independent variable that affects the dependent variable (variable Y). Based on this, the model estimation can be accepted and used for further analysis (Ghozali, 2018).

Table 5 shows the highest odds ratio [Exp. (B)] is in the social interaction variable, 5.459, while the lowest odds ratio is in the group solidarity variable, 0.323. The odds ratio value is a value that reflects a person's probability of becoming an entrepreneur. With the odds ratio of social interaction of 5.459, it can be interpreted that if social interaction in the tourist village increases, it will tend to cause the formation of entrepreneurship in the tourist

Table 3. Value of Hosmer and Lemeshow

Step	Chi-square	df	Sig.
1	9.405	8	.309

Note: The value of Hosmer and Lemeshow is significant if > 0.05

Table 4. Parameters of logistic regression estimation based on Omnibus Tests of Model

	Chi-square	df	Sig.
Step	203.319	15	.000
Block	203.319	15	.000
Model	203.319	15	.000

Table 5. Logistic regression results on external factors

External Variable	B	S.E.	Sig.	Exp(B)	95% C.I. for EXP(B)	
					Lower	Upper
Forest Resource	-.272	.150	.069	.762	.568	1.021
Rural Environment	-.136	.217	.530	.873	.570	1.335
Market	.487	.163	.003	1.627	1.181	2.241
Finance	.513	.143	.000	1.670	1.262	2.210
Business Culture	.236	.182	.194	1.266	.887	1.807
Government Policy	.137	.211	.515	1.147	.759	1.733
Human Resource	.009	.195	.964	1.009	.689	1.477
Infrastructure	-.256	.218	.240	.774	.505	1.186
Collective action	.620	.223	.005	1.858	1.201	2.874
Information and Communication	-.431	.165	.009	.650	.470	.898
Social Cohesion	.719	.200	.000	2.052	1.386	3.038
Trust and Norm	-1.029	.226	.000	.357	.230	.556
Community Participation	.833	.237	.000	2.301	1.445	3.663

village, which is 5,459 times higher than in the absence of social interaction.

Table 6 shows that the Nagelkerke R-Square value is 0.531 in the sense that external factors affect the opportunities for local people to become entrepreneurs by 53.1%. The remaining 46.9% chance of rural ecotourism entrepreneurship is caused by other factors not included in the model.

Table 7 shows that of the 15 variables tested, there are ten significant external variables (external factors), namely: 1) market, 2) finance, 3) business culture, 4) collective action, 5) information and communication, 6) social cohesion, 7) beliefs and norms, 8) group participation, 9) group solidarity,

10) social interaction. The variables that are not significant are 1) forest resources, 2) rural environment, 3) human resources, 4) infrastructure and social cohesion. External factors require an entrepreneurial ecosystem and social environment. This will determine the success of the entrepreneurship program in rural ecotourism. Ecotourism businesses need support from an interrelated entrepreneurial ecosystem to grow and develop a rural tourism business and social environment.

The results show that the external factors that significantly affect the performance of rural ecotourism entrepreneurship are dominated by social aspects (seven factors) and some aspects of the entrepreneurship

Table 6. The Nagelkerke R-Square in the estimation of the entrepreneurship model

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	385.843 ^a	.397	.531

Table 7. Significant variables in the estimation of the entrepreneurship model

Significance Variable	Odds Ratio	Interpretation
Market	1.627	The better Market, 1.627 times more rural ecotourism entrepreneurship
Finance	1.061	The better Finance, 1.061 times more rural ecotourism entrepreneurship
Business Culture	1.266	The better the Business Culture, 1,266 times more rural ecotourism entrepreneurship
Collective Action	1.858	The better the Collective Action, 1.858 times more rural ecotourism entrepreneurship
Information & Communication	0.650	The better Information & Communication, 0.650 times more rural ecotourism
Social Cohesion	2.052	Better Social Cohesion, 2.052 times more rural ecotourism entrepreneurship
Trust and Norms	0.357	The better Trust and Norms, 0.357 times the more rural ecotourism entrepreneurship
Group Participation	2.301	The better Social Cohesion, 2.301 times more rural ecotourism entrepreneurship
Group Solidarity	0.323	Group Solidarity 0.323 The better Group solidarity, 0.323 times more rural ecotourism entrepreneurship
Social Interaction	5.459	The better Social Interaction, 5.459 times more rural ecotourism entrepreneurship

ecosystem, namely 1) market, 2) finance, and 3) business culture. Environmental factors are forest and land resources, and rural environments are not too significant for rural entrepreneurship of ecotourism. The same applies to government policy factors, human resources and infrastructure. The composition of external factors that are significant and insignificant to the success of rural ecotourism entrepreneurship is slightly different from the findings in several previous studies. For example, a study conducted by Davidsson & Henrekson (2002) mentions several external factors that influence the development of entrepreneurship, including culture, values, norms, networks and regional conditions. Lundberg & Fredman (2012) reported that external factors considered as obstacles in achieving the success of nature-based tourism in Sweden are 1) low level of profit, 2) limited capital, 3) regulation, 4) infrastructure, and 5) tax burden.

Honggang & Shaoyin (2014) reported in their study that market factors and accessibility are significant factors in influencing the success of entrepreneurship in small tourism firms, while financial factors, government policies and labor conditions are relatively insignificant. The role of the government in supporting Entrepreneurial performance can be realized in the following efforts: 1) improving the quality of physical infrastructure, 2) tax reduction policies, 3) protecting business actors and 4) guaranteeing a conducive political situation (Porter et al. 2018)

Environmental conditions and external factors strongly influence the success of a rural ecotourism business. Ecotourism businesses are generally located in rural areas far from the center of economic activity. This is because ecotourism products depend on the uniqueness and authenticity of natural objects, which in general are forest and other natural areas. Ecotourism business units are generally small and medium enterprises (Small and Medium Enterprises) with a family basis as the operator. The average business unit is not a legal entity and is run personally or in a family unit. The

quality of entrepreneurship in rural ecotourism is considered to be still underdeveloped. This is due to internal and external factors, which are not good. Small traders who sell ecotourism objects only sell goods from large manufacturers, such as food and beverage products. They are just a product selling agent or the last marketing chain of the modern industrial business giant. Local goods and products are still not widely processed and tourists as final consumers.

IV. CONCLUSION

The success of entrepreneurship in rural ecotourism is strongly influenced by external aspects such as infrastructure and quality of tourist destinations and internal aspects such as management and quality of human resources (HR). This external aspect is often associated with problems and obstacles faced by business actors. The success of entrepreneurship activities in rural ecotourism will be correlated with increasing the welfare of the surrounding community and the preservation of natural resources and the environment. The ecotourism business by raw materials derived from natural resources will encourage business actors to be more concerned with preserving and encourage business actors to be more concerned with preserving resources and forests and the environment. Therefore, entrepreneurship in rural ecotourism must be optimally supported by all stakeholders involved.

The development of rural ecotourism entrepreneurship will grow if it involves the social interaction of rural communities, the development of ecotourism is designed so that the community can participate in the planning and implementation of rural ecotourism. By strengthening the community, it will help underprivileged individuals become capable with a joint movement in the tourism village community. In the aspect of market and business culture, it is necessary to provide training and guidance from existing stakeholders such as the government, universities and private institutions.

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