

Analysis of The Operational Risk Management of Ethno Bali Foundation Bee Agrotourism in Baha, Mengwi Village

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Abstract

Tourism is one of the largest and fastest-growing economic sectors in the world. One of the areas that has the best potential in terms of agro-tourism is the Bali area. Bali is the area that is most in demand, so it is not surprising that many foreign tourists and local tourists make Bali their favorite tourist destination. The method used in this research is quantitative descriptive research. The total number of respondents in this study was 25. Operational risk of a company to be able to know the right action decisions in minimizing risk needs to process the calculation of the level of impact and the level of possibility through the Godfrey method. These 10 risks are the most intense risks occurring in the Etno Bali Foundation Bee Agrotourism. The risks in the Lebah Etno Bali Foundation Agrotourism occur due to a less than optimal system, both from HR (Human Resources) to the management of the facilities there¹. The results showed that the operational risks identified in the Etno Bali Foundation Bee Agrotourism Unit were 11 types of risks and. Efforts to address operational risk are prioritized have high and extreme levels through preventive and mitigating efforts.

Abstrak

Pariwisata adalah salah satu sektor ekonomi terbesar dan dengan pertumbuhan tercepat di dunia. Salah satu daerah yang mempunyai potensi terbaik dalam hal agrowisata adalah daerah Bali. Bali menjadi daerah yang paling banyak peminatnya, sehingga tidak heran jika banyak wisatawan mancanegara maupun wisatawan lokal yang menjadikan Bali sebagai destinasi wisata favoritnya. Metode yang digunakan dalam penelitian ini adalah penelitian deskriptif kuantitatif. Jumlah responden dalam penelitian ini adalah 25 orang. Risiko operasional suatu perusahaan untuk dapat mengetahui keputusan tindakan yang tepat dalam meminimalisir risiko perlu dilakukan proses perhitungan tingkat dampak dan tingkat kemungkinan melalui metode Godfrey. 10 risiko ini merupakan risiko paling besar yang terjadi di Agrowisata Lebah Yayasan Etno Bali. Risiko-risiko yang ada pada Agrowisata Lebah Etno Bali Foundation terjadi karena sistem yang kurang optimal, baik dari SDM (Sumber Daya Manusia) hingga pengelolaan fasilitas yang ada di dalamnya¹. Hasil penelitian menunjukkan bahwa risiko operasional yang teridentifikasi pada Unit Agrowisata Lebah Etno Bali Foundation adalah 11 jenis risiko dan. Upaya penanganan risiko operasional diprioritaskan mempunyai tingkat yang tinggi dan ekstrim melalui upaya preventif dan mitigasi.

1. Introduction

Tourism is one of the largest and fastest-growing economic sectors in the world. The current tourism sector can be said to be the main source of income for many countries because it can produce rapid economic growth in terms of supply of labor, living standards, and stimulating other sectors in terms of growth (Nuriyev, 2021). Risk is inherent in tourism (Bhatti et al., 2021) both from the point of view of tourists and tourism providers (Mahaliyanaarachchi, 2016). Tourists will be exposed to various risk exposures before making a visit, during the visit, and after visiting tourist attractions. The tourism sector will certainly develop over time, namely by collaborating with the agricultural sector and growing into agro-tourism. Agrotourism is an activity that combines tourism and education related to agriculture. Agro-tourism provides opportunities for farmers to be able to improve their quality of life through their agricultural resources and gives tourists a real picture of agriculture and farming life (Yusnita, 2019). This agro-tourism potential provides benefits to agribusiness development where there are product creation activities so that the product has strong competitiveness in the global market. This is supported by the statement of (Rezvani et al., 2022) that the development of tourism has a positive side in preserving the environment because the attractions of tourism are authenticity, uniqueness, comfort, and natural beauty. In addition, it can improve the regional economy through tourism. One of the areas that has the best potential in terms of agro-tourism is the Bali area. Bali is the area that is most in demand, so it is not surprising that many foreign tourists and local tourists make Bali their favorite tourist destination. Agro-tourism is the prima donna of nature tourism, which is visited by many tourists, so its potential is considered good.

Bagus Agrotourism Pelaga is one of the tourist areas in Badung Regency. The Badung area of Bali has beautiful natural beauty, so many people visit the Badung area just to enjoy the natural attractions that are still beautiful and fresh. Badung Regency is known to have many tourist attractions, so this area is very crowded with tourists. One of the attractive agro-tourism objects that has the potential to be developed is the Etno Bali Foundation Bee Agrotourism. This agro-tourism focuses on beekeeping and natural honey production. Basically, there are five streams that can be analyzed in risk management tourism, namely operational risk, financial risk, information risk, relational risk, and innovational risk (Mikuli et al., 2018). The type of risk that often occurs in the tourism industry is operational risk. Operational and reputational risks in the tourism and hospitality industries can impact other relevant risks (Gede et al., 2020). Operational risks in tourism are caused by humans and nature. Every company, including agritourism, certainly has various risks, one of which is operational risk. Operational risk has a definition according to (Ballotta et al., 2020) as the risk of losses arising from insufficiency or failure of internal processes, human resources, and systems or from external events. Operational risk will certainly occur in a business or several ongoing businesses because every business certainly has risks that must be minimized to be able to optimize the business that has been made.

The operational risk of a company in terms of HR (human resources), facilities, access, infrastructure, maintenance, the environment, finance, and regulations is a concern for the company to avoid unexpected things from happening, whether in the form of complaints or objections from stakeholders. interest. According to (Toader & A, 2020), risk management is one way to minimize things that are not profitable for all parties

involved, especially managers, to provide support to the organization and more effective internal and external risk control for good management in a business. Risk management is important for businesses, especially in the agro-tourism business at Etno Bali Foundation Bee Agrotourism, to avoid significant losses. The right decisions need to be made by companies to minimize the risks that exist in the company. Risks have several levels, and each level requires different treatment. Different treatment in order to maximize the decisions made by the company. Precautions must be given immediately there is a risk that occurs at tourist attractions or companies. The lighter the risk, the company will provide less intense treatment because it is still acceptable to the company and does not cause excessive losses.

The aims of this research include:

- Identify sources of operational risk in the Etno Bali Foundation Bee Agrotourism
- Analyze the level of risk faced by the Etno Bali Foundation Bee Agrotourism based on the levels of possible risk and Occurance
- Develop strategies that can be implemented in controlling the operational risk of Etno Bali Foundation Bee Agrotourism.

2. Method

This research was conducted at the Ethno Bali Bee Agrotourism Company, which is in Baha Village, Mengwi District, Badung Regency, Bali. This location was determined purposefully with the consideration that the Ethno Bali Foundation Bee Agrotourism Object is the first bee agrotourism object in Bali, located in the Badung area, which provides honey bee education supported by tour packages. Another reason is the operational risk of the Etno Bali Foundation Bee Agrotourism, which can have an impact on agrotourism activities. The method used in this research is quantitative descriptive research. The selection of the research location was carried out purposefully with the consideration that Baha Village has great potential from an agro-tourism perspective for further in-depth research on operational risk. The total number of respondents in this study was 25. Operational risk of a company to be able to know the right action decisions in minimizing risk needs to process the calculation of the level of impact and the level of possibility through the Godfrey method. Using the Godfrey method can make it easier for companies to know the steps in dealing with the risks that exist in their company. In the Godfrey method, there is risk mapping where the risks in the company are grouped based on the level of risk that exists, ranging from high to low levels..Determining the likelihood level or the overall level of impact is calculated using the geometric mean formula. According to (Saaty and Vargas., 2006) in their book Decision Making with the Analytic Network Process, regarding how to calculate the aggregate value of the assessments of several individuals, the Geometric Mean (GM) formula can be used. With the geometric mean (GM) formula as follows:

$$GM = \sqrt[n]{(x_1)(x_2)\dots(x_n)}$$

Description:

GM = measured average (geometric mean) n = number of samples

X = measuring data

The level of impact on risk management has a scale from 1 to 5. The level of probability is always given a value of 1 to 5. Number 1 indicates a very rare risk, while 5 indicates a very frequent risk. Likewise, for impacts that have the same value from 1 to 5, 1 is for

negligible impact, while a value of 5 means it has an extraordinary impact on the continuity of the company. These two values (likelihood and impact) were obtained from the phase II questionnaire. According to (Godfrey, 1996) defines the level of risk as the multiplication of the probability score and the overall impact score that have been processed from previous respondents. The risk value is the product of the probability score and the impact score.

Description;

$$R = P \times I$$

R = Risk Level

P = Probability if the risk actually occurs I = Impact if the risk actually occurs

3. Results and Discussion

3.1 Operational Risk Identification

According to (Sante et al., 2021) "operational risk is a risk that generally comes from internal company problems. This risk occurs due to a weak management control system that is unstable or less than optimal by the internal company. The management control system is a very crucial part for determining optimal or not operational in Etno Bali Foundation Bee Agrotourism . Risk is the possibility that it will occur and have an impact where this impact is not in line with the company's targets and goals. If it is further clarified that the risk is not only about universal impact but also in the operational part. Operational risk is the risk that occurs due to failures in internal parts, especially human errors, machine and technology failures, and external elements that can cause financial ruin (Arif and Rahmawati, 2018). Operational risks in can be categorized into 4 parts, namely: human resources risk, system or regulatory risk, facility and infrastructure risk, and external risk. Lam (2014: 241) as the risk of losses arising from inadequate or failed internal processes, human resources, and systems or from external events. Each risk will then be further analyzed to obtain a total of 10 risks.

Operational risks in can be categorized into 4 parts, namely: Human Resources Risk, System or Regulatory Risk, Facility and Infrastructure Risk and External Risk. Each risk will then be further analyzed to obtain a total of 11 risks. These 11 risks are the most intense risks occurring in the Etno Bali Foundation Bee Agrotourism. The risks in the in Etno Bali Foundation Bee Agrotourism occur due to a less than optimal system, both from HR (Human Resources) to the management of the facilities there. Existing risks must be described to find out more clearly regarding the parts that must be considered in order to optimize the existing system at the Etno Bali Foundation Bee Agrotourism. In the human resources category there are four risks, in systems or regulations there are two risks, in facilities and infrastructure there are four risks, and in external there are two confirmed risks as company risks. Risks to human resources can be said to be risks that require special handling so that if a risk occurs, the company must take appropriate fast steps. Because human resources are very important in terms of productivity in the company. Furthermore, on the system or company regulations which concern the safety of visitors and existing regulations in the company that must be obeyed and obeyed. Regulations are made to avoid serious risks that occur in the company. Usually, the company's system includes everything that supports the company, such as packaging production that requires cooperation with other parties. Whether or not productivity within the company is all influenced by human resources.

It is common for a company to have risks within the company; Some of the risks that exist in the Ethno Bali Foundation Agrotourism will be described in terms of risks. Furthermore, on the existing system or regulations in the company that can generate risks if not managed properly. Regulation is more directed to the rules implemented by the company. Regarding infrastructure, of course it will greatly affect the risks generated by the company and finally, the external environment that affects the risks that exist in the company. The risks that exist are of course obtained from the results of the author's observations during a visit to the Etno Bali Foundation Bee Agrotourism. These 11 risks are the most intense risks occurring in the Etno Bali Foundation Bee Agrotourism.

Table 1. Operational Risk Identification Results of Etno Bali Foundation Bee Agrotourism

General Operational Risk Factors	Ethno Bali Foundation Operational Risk Factors
Human Resource Risk	Human Resource Risk
a. Human resource competency	a. Human resource competency
b. Relations between employees	b. Relations between employees
c. Service	c. Service
d. Mastery of foreign languages	d. Mastery of foreign languages
e. Internal organizational control	
Risk System/Regulatory Risk	Risk System/Regulatory Risk
f. Safety Issues	e. Safety Issues
g. Food safety	f. Vendor cooperation
h. Vendor cooperation	
i. Implementation of SOP	
Facility and Infrastructure Risk	Facility and Infrastructure Risk
j. Environmental Security	g. Access roads to between tourist attractions less representative/difficult to reach
k. Access roads to between tourist attractions less representative/difficult to reach	h. Management of tourist facilities
l. Management of tourist facilities	i. Management of public facilities
m. Management of public facilities	j. Technological compability
n. Technological compability	k. Internet

Source: Primary Data Processed (2023)

Based on the results of observations at Ethno Bali Agrotourism, 10 risks have been identified that have various levels of severity. The results of the respondent's assessment show that:

a. Competency of HR

Ethno Bali Foundation Bee Agrotourism is considered to have several high-risk factors based on the results of the respondents, namely 80%. This 80% result shows that the level of risk in "human resource competence" is a part that includes a lot of frequent risks. Risks with frequent occurrence categories certainly need more attention from the Ethno Bali Foundation Bee Agrotourism to carry out evaluations in order to minimize risks to human resources.

b. Employee Relations

Based on the respondent's assessment, the relationship between employees is part of operational risk. The result of the respondent's assessment is 40%, which shows that the risk of "relationships between employees" is not high. The conflict that often occurs in the Etno Bali Foundation Bee Agrotourism lies in employees who do not apply work discipline, which will have an impact on work productivity in the Etno Bali Foundation Bee Agrotourism.

c. Service

Good service is one of the company's success factors. The results of the respondent's assessment produce a percentage of 40%, which is where this percentage has a low level of risk. Related to services at in Etno Bali Foundation Bee Agrotourism has the term public place which consists of the front and back pages of the agrotourism, fish ponds and gardens around the agrotourism whose conditions are required to always be clean, tidy and beautiful. While the area around the agro-tourism location, consisting of seminar rooms, practice rooms, and bathrooms, is required to always be clean, complete, and safe, the facilities can be used optimally. Clean and complete room conditions and the practice of producing honey with sophisticated technology will certainly create a new experience for tourists visiting the Etno Bali Foundation Bee Agrotourism.

d. Mastery of Foreign Languages

Mastery of foreign languages is part of a very important tourist need. The results of the respondent's assessment resulted in a percentage of 40%, where this percentage has a low level of risk. Nature-based tourism is the destination of many foreign tourists, including the Etno Bali Foundation Bee Agrotourism, which is often visited by foreign tourists. Mastery of communication in various languages is needed to support services at the Etno Bali Foundation Bee Agrotourism.

e. Safety Issues

Safety issues are an important part of the components of the Etno Bali Foundation Bee Agrotourism. The results of the respondent's assessment resulted in a percentage of 60%, where this percentage indicates a moderate level of risk. Safety here includes employee work safety and safety in the activities of visitors or guests visiting the Etno Bali Foundation Bee Agrotourism. Regarding the concept of safety, it requires conditions that are free from threats of danger that impact injury, disease, damage, and disturbances that occur in the surrounding environment.

f. Vendor Collaboration

Collaboration with vendors is an important part of the components of the Etno Bali Foundation Bee Agrotourism. The results of the respondent's assessment produced a percentage of 20%, which at this percentage has a mild level of risk. Vendors have an important role in the Etno Bali Foundation Bee Agrotourism, namely as suppliers of goods related to honey production so that it will improve the performance of existing honey products in agrotourism. The risk of "vendor cooperation" is small because vendor cooperation in the Etno Bali Foundation Bee Agrotourism is going well, even though there are several obstacles.

g. Access Road to Tourist Attractions

Access to the inn is still uneven and quite difficult for visitors to pass by by bringing special vehicles that do not support access. There are quite a lot of cobblestone roads at risk of complaints from visitors.

h. Tourism Management

This is related to controlling tourism facilities in open land where there is more risk of damage, while facilities that cannot be reused are left unattended so that these tourism facilities are neglected. Public Facility Management Public facilities in agro-tourism areas are not spread evenly, and a lack of supervision of public facilities can result in damage to the facilities that have been provided.

i. Technical Compatibility

Highland areas can affect the running of internet connections, so there is a risk of server disruption, which results in delays in entering data to the head office. Regarding the technical aspects of the internet, delays often occur because the agro-tourism area is close to the forest and far from the city area. So this is a risk in agro-tourism. Proper handling and having backups are still the mainstay of the company.

j. Level of Possible Risk (p)

Level of Possible Risk The level of possible risk (p) is a measure of how much potential is related to the occurrence of risk. The risk with the greatest potential for occurrence is given a value of 5, while the risk with the least possible potential for occurrence is given a value of 1. Each level of likelihood is categorized into five events, namely: (*frequent*) events with a value scale of 5, frequent events (*probable*) with a value scale of 4, (*occasional*) events with a value scale of 3, (*remote*) events with a value scale of 2, and events that are assumed to never or never occur (*impossible*) with a value scale of 1

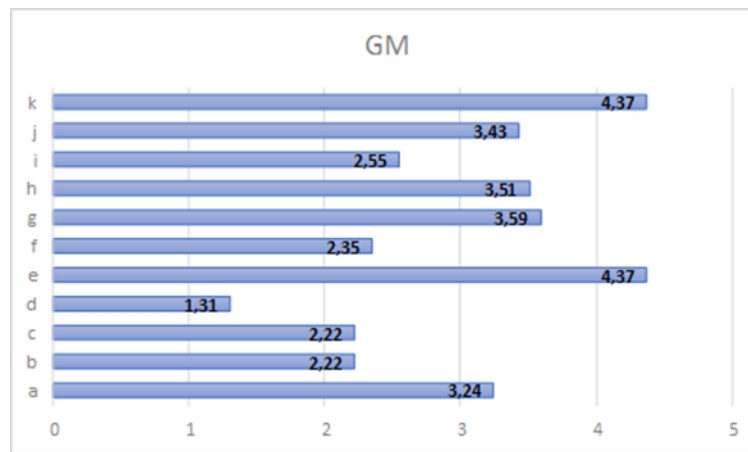


Figure 1. Level of Possible Risk in Etno Bali Foundation Bee Agrotourism

Description:

- | | | |
|------------|-------------------|---------------|
| a.HR | e. Language | i. Technology |
| b.Employee | f. Vendor | j. Disaster |
| c.Safety | g. Gen Facilities | k. Internet |
| d.Service | h. Road Access | |

Based on an assessment of the possibility of operational risk occurring at the Etno Bali Foundation Bee Agrotourism, the average probability of achieving a frequency value of 3.01 or 3 is in the category of possible risks that may occur at some time (occasional).

However, if it is examined more deeply for each factor, the highest possible risk occurs in safety issues (e), namely 4.37. This value in the risk possibility map is categorized as possible in a small number of circumstances (probable). Likewise, other factors that have a value above 2.5 are still included in the occasional category, including HR competence (a), access to roads between places (g), management of tourist facilities (h), and internet server disruption (k). The lowest score factor for the possibility of risk occurring in mastering a foreign language (d) is 1.31, with the category of the possibility of a rare (remote) occurrence. From the value of this possibility, the risk of access roads leading between tourist attractions being less representative or difficult to reach (g) has a higher value compared to other possible risks. This is because road access is very vital to influencing the impression that will appear in the minds of visitors and employees. There are still many damaged access roads that often give a bad impression to visitors, such as certain types of cars that have difficulty crossing agro-tourism roads because the road terrain is steep. Meanwhile, the value of the possible risk of mastering a foreign language

(d) has the lowest value because the average respondent thinks that the basic education or ability of employees related to foreign languages is no longer in doubt. Upon entering the company, employee performance can develop and they will be able to position themselves as professional employees when serving visitors or tourists. Professional service to visitors is certainly the foundation of agro-tourism so that it continues to exist and fact there are many tourists who enjoy the service.

Risk Impact Level

The level of impact (i) is a measure of how much risk can be caused; if the impact of the risk is very large, then it is given a value of 5, otherwise if the impact is very small, it is given a value of 1. Each level of impact is categorized into five, namely: the level of impact is very large (catastrophic) with a scale of 5, meaning the impact is very large and causes total damage; the level of impact is large (critical) with a scale of 4, meaning the impact is very large and causes damage; the level of impact is moderate (serious) with a scale of 3, meaning damage causing delays in implementation and/or requiring insurance claims; A small (marginal) impact level with a value scale of 2 means that it can still be overcome with first aid because there is only minor damage and it can wait for routine maintenance schedules.

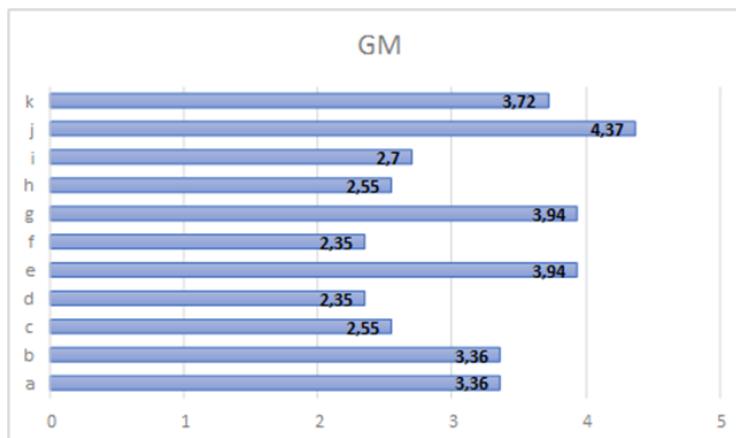


Figure 2. Level of Risk Impact in Etno Bali Foundation Bee Agrotourism

Keterangan:

a.HR	e. Language	i. Technology
b.Employee	f. Vendor	j. Disaster
c.Safety	g. Gen Facilities	k. Internet
d.Service	h. Road Access	

Based on an assessment of the impact of operational risk on the Etno Bali Foundation Bee Agrotourism, after being analyzed there is the highest impact value on risk: natural disaster (l) with a frequency value of 4.37 or meaning the resulting impact is very large and causes damage (critical). Followed by operational risk with a frequency of three impacts, namely HR competence (a) and employee relations (b) with a frequency value of 3.36 or means damage can cause delays (marginal). Frequency three also occurs in operational risk of safety issues (e) and road access to between places (g) with a frequency of 3.94 which has a small or (marginal) impact. Furthermore, frequency three also occurs in operational risk in the server or internet problem section (k) with a frequency value of 3.72 which has a small or (marginal) impact. Operational risk with a frequency value of two includes service (c) with a value of 2.55, mastery of foreign languages (d) with a value of 2.35, vendor cooperation (f) with a value of 2.35, management of tourist facilities (h) with a value of 2.55, and the last one is risk operational conformity to technology (i) with a value of 2.70.

Risk Map

The risk map is a combination of the likelihood and impact of risks that are combined to show the risk categories for each factor. The level of risk is divided into four, namely extreme, high, medium and low. Several risk levels have been set to make it easier to categorize the risks that exist in the Etno Bali Foundation Bee Agrotourism. The level of risk that exists at various levels can certainly make it easier for the Etno Bali Foundation Bee Agrotourism to determine the right steps to take. So that prevention and corrective measures can run optimally. The risk map is intended to see the risk level of something that exists in the company, including the level of risk that is low to extreme so that it can make it easier for the company to make decisions for further handling. Each risk certainly has a different treatment and the treatment given must be appropriate in order to minimize the risk properly.

There are 4 colors that serve as a sign of the level of risk including red, orange, yellow and green. The red color indicates that the existing level of risk has an extreme level or the most extreme risk, for the orange color it is a high level risk because it still has a risk that is quite damaging so that it is included in the high category. Next is the color yellow, which is a medium risk level so it doesn't have a severe impact on the company. The green color indicates a mild risk so that it will not have a serious impact on the company which will change the company's order. through Godfrey mapping it can make it easier for companies to classify the levels of risk that exist in the company. Different scales in different parts will certainly produce different risk outcomes.

The risk value resulting from the multiplication of the probability value (p) and the impact value (i) will indicate the level of risk according to Godfrey's risk acceptance scale in table 3. 4 regarding the risk acceptance scale.

Table 2. Results of the Risk Level in Etno Bali Foundation Bee Agrotourism

Operational Risk						RiskLevel
No.		KA	P	I	R	
a.	HR Competence	SDM	3,24	3,36	10,92	high
b.	Relationship between Employee	SDM	2,22	3,36	7,47	medium
c.	Safety Issues	SI	4,37	3,94	17,26	high
d.	Service	SDM	2,22	2,55	5,66	low
e.	Mastery Foreign Language	SDM	1,31	2,35	3,10	low
f.	Cooperation with Vendor	SI	2,35	2,35	5,53	low
g.	Management Tourism Facilities	S&P	3,51	2,55	8,97	medium
h.	Road Access Towards Tourist Attractions	S&P	3,59	3,94	14,19	high
i.	Suitability Technology	S&P	2,55	2,70	6,89	low
j.	Natural Disaster	EKS	3,43	4,37	15,03	extreme
k.	Disturbance Internet	EKS	4,37	3,72	16,30	high

Source: Primary Data Processed (2023)

The table shows the various levels of risk experienced by each risk identification in the Etno Bali Foundation Bee Agrotourism, and then it is shown using a risk map that refers to (Godfrey, 1996), which places risks based on the multiplication of the probability value and the impact value. The risk map will provide risk placement on the map based on the results of the risk level. The level of risk placed on the risk map will make it easier for the company or the Ethno Bali Foundation Bee Agrotourism to determine further treatment. After knowing the level of risk that exists in the Ethno Bali Foundation bee agrotourism, of course it must be implemented on a risk map to find out whether this risk is dangerous or not for the company. Appropriate handling of course departs from a clear risk map so that it will have optimal results for handling risks. Every company needs a risk map to take preventive actions or minimize risks. The risk map there will be several levels marked with different colors so that it will make it easier for companies to minimize risk. The red color with the most extreme risk to the green color with the lowest level of risk. There are 11 risks that will be included in the risk map to determine if the risks are still classified as low or high. after going through the risk map taps, the company can immediately carry out an analysis of the existing risks. The risk is then graded based on the probability and impact values as shown in the following matrix.

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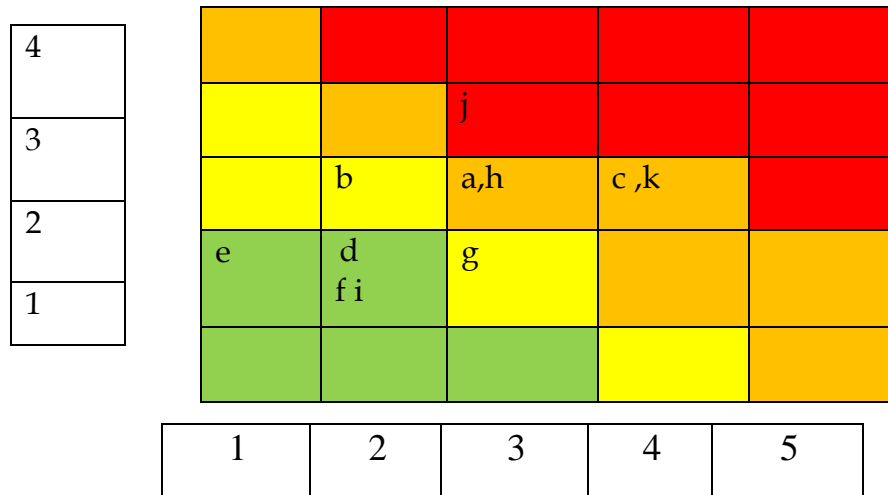


Figure 3. Risk Map in Etno Bali Foundation Bee Agrotourism

Description:

- | | | |
|------------|-------------------|---------------|
| a.HR | e. Language | i. Technology |
| b.Employee | f. Vendor | j. Disaster |
| c.Safety | g. Gen Facilities | k. Internet |
| d.Service | h. Road Access | |

In the figure above, the risks e, d, f, and i that have a low level of risk are placed on the map more or less according to the probability (p) and impact (i) values in figure 15, which are marked in green. Risks b and g have a moderate risk value (medium), which is then marked in yellow on the map. Risks a, c, h, and k have high risks (high), which are then marked with an orange color on the map. Risk j has an extreme risk value, which is then placed on the map marked in red. Each risk that has been graded based on probability and impact will determine what the company needs to do to deal with the risks at the Etno Bali Foundation Bee Agrotourism.

Risk Acceptance and Response

According to (Godfrey, 1996), risk is classified into four parts: unacceptable risk, undesirable risk, acceptable risk, and negligible risk. There is a risk that has been determined, and the level of measurement will be inversely proportional to the level of acceptance of the risk. Inversely proportional has the explanation that the higher the level of risk that exists, the lower the level of risk that will be accepted. Through the level of acceptance and response, it will certainly make it easier for the Ethno Bali Foundation Bee Agrotourism to determine the appropriate mitigation steps in accordance with the risk response. If a company handles risks without guidelines, of course the mitigation process will not be optimal or will not have the right results in terms of improvement. Through the rate calculation process, the probability and level of impact will automatically show a number, which is processed in the risk map to see if the risk level has reached the safe or extreme category so that in taking steps, the company can properly and appropriately correct it so that the risk can be minimized. Regarding risk response, there will be 4 parts where the risk of a company enters which part of the response. four risk responses, namely: risk transfer, risk reduction, risk acceptable, and risk avoidance. Different risk responses are obtained through the possibilities and also the impact of risks that occur in the Etno Bali Foundation bee agrotourism. In addition to risk maps, risk responses are needed to determine the appropriate response by the company.

Table 3. Risk response in Etno Bali Foundation Bee Agrotourism

No	Operational Risk	KA	Risk Level	Risk Scale	Risk Response
1.	HR Competence	SDM	<i>high</i>	<i>undesirable</i>	Risk Transfer
2	Relationship between Employees	SDM	<i>medium</i>	<i>acceptable</i>	Risk Reduction
3	Safety Issues	SI	<i>high</i>	<i>undesirable</i>	Risk Transfer
4	Service	SDM	<i>low</i>	<i>negligible</i>	Risk Acceptable
5	Mastery Foreign Language	SDM	<i>low</i>	<i>negligible</i>	Risk Acceptable
6	Cooperation with Vendors	SI	<i>low</i>	<i>negligible</i>	Risk Acceptable
7	Management Tourism Facilities	S&P	<i>medium</i>	<i>acceptable</i>	Risk Reduction
8	Road Access Towards Tourist Attractions	S&P	<i>high</i>	<i>undesirable</i>	Risk Transfer
9	Suitability Technology	S&P	<i>low</i>	<i>negligible</i>	Risk Acceptable
10	Suitability Technology	EKS	<i>extreme</i>	<i>unacceptable</i>	Risk Avoidance
11	Disturbance Internet	EKS	<i>high</i>	<i>undesireable</i>	Risk Transfer

3.3 Operational Risk Control Strategies Of Etno Bali Foundation Bee Agrotourism

The current handling efforts refer to the risk register of the Etno Bali Foundation Bee Agrotourism Unit. Identified risks are made with the aim of determining countermeasures in order to reduce the value of risks faced by agro-tourism. Efforts (risk treatment) are prioritized at extreme and high risk levels. This is because the function of knowing the value of this risk level is so that the company can carry out risk management optimally and focus on things that are considered if they have the possibility of having a large impact that can be detrimental to the company. Likewise, according to (Pangestuti, 2019), companies do not need to worry about all types of risks. The specified risk level and existing risk categories can certainly guide the company in taking the right steps. Following are the handling measures taken to minimize risk:

Competency of Human Resources

The employees who work in agro-tourism are taken from the community around Baha Village, who, on average, do not have a background in tourism or agro-tourism. This becomes a challenge or a high risk if the Etno Bali Foundation Bee Agrotourism is not able to minimize the risk optimally. Empowerment of the surrounding community is indeed carried out by the company so that the human resources of the surrounding community can be useful and increase income for the village community. However, sometimes the services provided are still not optimal, and some parts still need to be repaired. The step taken by the Ethno Bali Bee Agrotourism is to provide training to employees to improve performance by bringing in a training and rewards team.

Natural Disasters

Etno Bali Foundation Bee Agrotourism is in a mountainous area that has quite a lot of rainfall, especially in the Tabanan area, which is already familiar with areas with high rainfall. Disasters such as landslides, floods, and earthquakes are closely related to mountain ecosystems. The trees in the Baha area are also quite old, so it is not uncommon for trees to fall and endanger anything that is close to the incident, such as damaged vehicles due to being hit by old, fallen trees around the Lebah Etno Bali Foundation Agrotourism. Efforts are being made, namely by preparing regional preparedness in the face of natural disasters. Lebah Etno Bali Foundation Agrotourism Company is prepared to face natural disasters, namely by making evacuation signs around agro-tourism and providing guides with briefings. Tourists are always advised to be careful.

Interference with Internet Servers

The location of Lebah Ethno Bali Agrotourism is a mountainous area, and for internet coverage in the Lebah Ethno Bali Agrotourism area, it is still quite difficult, so the company has to install assistance so that the internet can be installed properly around the agrotourism. Even though assistance is installed so that the internet can be connected properly, it still sometimes experiences interruptions because natural disasters often occur around the Etno Bali Foundation Bee Agrotourism. The source of server outages has something to do with natural disasters, such as a fallen tree hitting a power pole or a bad network signal. The efforts made are benchmarked with other companies located in the same area regarding handling what is usually done when the same problem occurs and having sufficient internet backup.

Lack of Compatibility with Technology

The use of existing technology in the company is when providing education related to honey, where guides must practice honey production methods with agro-tourism visitors and play games that are carried out digitally via the visitors' smartphones. Regarding the services available at the Lebah Etno Bali Foundation Agrotourism, none of them pose a serious risk; however, there are some that are considered less effective and efficient, namely in terms of booking reservations. The risk to technology is low, although it also needs treatment so it doesn't get worse. Efforts are being made, namely by collaborating with IT to create a reservation information system that can be accessed online or offline. It is undeniable that at this time information technology is very close to human life, in line with their desire to make things easier, faster, and more accurate. Technical errors caused by human error can be minimized with the help of technology.

Management of Tourism Facilities

The risk of managing tourism facilities is high and has a large impact on agro-tourism activities. The tourist facilities in question include tourist objects, which are the main attraction for visitors at the Bali Foundation Ethno Bee Agrotourism. Lack of maintenance is one of the factors causing damage to tourism facilities to the point where they are neglected. Suggestions or efforts that need to be made by the company to deal with risks are as follows: Identify which facilities are not and are still suitable for use in the Bee Agrotourism Ethno-Bali Foundation. If there is a facility that needs repair, it is handled immediately to prevent serious damage, and if it is damaged and

repair is not feasible, it needs to be replaced with a new one. Good facilities will certainly make visitors comfortable.

4. CONCLUSION

4.1 The results showed that the operational risks identified in the Etno Bali Foundation Bee Agrotourism Unit were 11 types of risks grouped based on their causes, namely:

- a) Human resource risk, which consists of HR competence, employee relations, service, and mastery of foreign languages.
- b) Systemic or regulatory risks, which consist of safety issues and vendor cooperation.
- c) Facility and infrastructure risk, which consists of: difficult access to roads leading to tourist attractions; management of tourist facilities; management of public facilities; and suitability of technology.
- d) External risks, which consist of natural disasters and server or internet connection disruptions.

4.2 Of the 10 operational risks, there are three at extreme levels, three at high levels, four at moderate levels, and three at low levels.

4.3 Efforts to address operational risk are prioritized to reduce the possibility or impact of risks that have high and extreme levels through preventive and mitigating efforts.

REFERENCES

- Ballotta, L., Fusai, G., Kyriakou, I., Papapostolou, N. C., & Pouliasis, P. K. (2020). Risk management of climate impact for tourism operators : An empirical analysis on skiesorts. *Tourism Management*,77 (July2018), 104011. <https://doi.org/10.1016/j.tourman.2019.104011>
- Bhatti, M. A., Nawaz, M. A., Ekonomi, D., & Bahawalpur, U. I. (2021). Dampak Manajemen Risiko Pariwisata , Adopsi TI , Ketangkasan , dan Ketahanan terhadap Kinerja Rantai Pasokan Pariwisata Berkelanjutan Industri Pariwisata Maladewa Dampak Manajemen Risiko Pariwisata , Adopsi TI , Kelincahan dan Ketahanan terhadap Kinerja Rantai Pasokan Pariwisata Berkelanjutan Industri Pariwisata Maladewa. April. <https://doi.org/10.52131/jom.2020.0202.0020>
- Gede, G., Tnggp, P., & Barat, J. (2020). *Analisis Manajemen Risiko pada Kawasan Taman Nasional Gunung Gede Pangrango (TNGGP) Jawa Barat.*
- Mahaliyanaarachchi, R. P. (2016). Agri Tourism as a Risk Management Strategy in Rural Agriculture Sector: With Special Reference to Developing Countries. *11(1)*, 1-12.
- Mikuli, J., Milo, D., Holi, H., & Prebe, D. (2018). *Journal of Destination Marketing & Management Strategic crisis management in tourism: An application of*

integrated risk management principles to the Croatian tourism industry. 7, 36-38. <https://doi.org/10.1016/j.jdmm.2016.08.001>

- Nuriyev, A. (2021). Identification of the Tourism Risks for Z-Value Based Risk Assessment Identification of the Tourism Risks for Z-Value Based Risk Assessment. January 2020. <https://doi.org/10.26417/ejef.v3i3.p47-55>
- Pangestuti DC. 2019. Manajemen Risiko Bisnis. Jakarta (ID): Universitas Pembangunan Nasional "Veteran"
- Rezvani, M., Nickravesh, F., Astaneh, A. D., & Kazemi, N. (2022). Journal of Outdoor Recreation and Tourism A risk-based decision-making approach for identifying natural-based tourism potential areas. *Journal of Outdoor Recreation and Tourism*, 37(December 2021), 100485. <https://doi.org/10.1016/j.jort.2021.100485>
- Sante, Z. V, Murni, S., Tulung, J. E., Kredit, P. R., Likuiditas, R., Risiko, D. A. N., & Ekonomi, F. (2021). LQ45 , buku iii dan buku iv periode 2017-2019 the effect of credit risk , liquidity risk and operational risk on the profitability of banking companies listed in lq45 , buku iii and buku iv period *Jurnal EMBA Vol . 9 No . 3 Juli 2021 , Hal . 1451 - 1462. 9(3), 1451-1462.*
- Toader, I., & A, D. N. M. T. (2020). the risk management in the tourism , rural tourism and agritourism. 20(2), 477-482.
- Yusnita, V. (2019). pengembangan pariwisata berbasis agrowisata melalui p enguatan peran kelompok wanita tani (studi di desa sungai langka kecamatan gedong tataan kabupaten pesawaran). 10, 9-18.