

Study of the Business Sustainability of Sheep as Leading Export Commodity in Jember Regency

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Study of the Business Sustainability of Sheep as Leading Export Commodity in Jember Regency

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Abstract, Research ¹⁴ been carried out to study the business sustainability of sheep as a leading export commodity in Jember Regency. The study was conducted to reveal the readiness of sheep breeders to avoid resource depletion and extinction of germplasm and to avoid the large number of quality breeds sold, which could weaken the sustainability of the source of sheep breeds in Jember. by considering the capabilities and capabilities they have in providing opinions and assessments. The data obtained were analyzed using Multi Dimensional Scaling (MDS) on 50 attributes from 5 dimensions (ecological dimensions, economic dimensions, social dimensions, technological dimensions, and institutional dimensions). The MDS method used to calculate the sheep business sustainability index is a development of the Rap-fish (Rapid Appraisal-Farming) method. The results showed that the export of sheep in a fairly sustainable status with the key factors that must be considered in sustainability are the factors of seeds and availability of technology packages, the role of government and the existence of farmer groups.

Keywords: sustainability, business, sheep, Jember, multidimensional scaling

1. Introduction

The demand for the sheep business market both regionally and internationally is very open but has not yet been able to fulfill it properly. [1] stated that based on the Analysis of International Trade Data (World Trade Integrated Solution) with the Constant Market Share Analysis (CMSA) Approach for 2013-2017, it was obtained as follows; 1. Live sheep go for market access to Singapore and Malaysia because Indonesian products are competitive, even in Malaysia, their economic growth encourages increased exports of sheep, 2. Live goats that take the market in Brunei market, so far 80% of Brunei imports are from Malaysia, 3. Goat meat is more accepted in the Malaysian market for live goat kids.

It is feared that the wide-open opportunity to export sheep will cause an imbalance between the need and availability of sheep in the Kab. Jember, so that it can have an impact on the implementation of depletion of germplasm resources. Another concern that can push it to become a fact is the standardization of sheep accepted by the exporting party which can cause only good sheep to be sold while the productivity and quality of the sheep produced by breeders are still low so that only low quality sheep are left to be raised, all conditions. It is feared that this could weaken the sustainability of the source of sheep seedlings. Another problem is that there are no local sheep clumps that have specific characteristics that match the type of meat [2]. Based [3] on Permentan No: 51 / Permentan / OT.140 / 9/2011 concerning Recommendations for Approval for the Import and Export of Livestock Seeds and / or Seedlings Into and Out of the Republic of Indonesia, in Chapter I. Article 2 Paragraph 2. Exporting seeds and / or seeds livestock can be carried out if: a. domestic needs have been met; b. does not interfere with the preservation of local livestock in extinction; and c. the status of the domestic livestock breed population is safe. Based on the Ministerial Decree, it is necessary to carry out a study on the analysis of export sustainability in the sheep farming business in Jember Regency to describe or take long-term continuation actions so as to form economic and social growth while maintaining, maintaining and improving the environment so that economic benefits are optimal through social-friendly business implementation. and the environment can be achieved.

If you have a business, surely the businessman wants his business to be sustainable or sustainable. [4] argues that sustainable business describes a process or action of business continuity in the long term, causing or allowing something to continue for a certain period of time, and a process or action that keeps things going. One of the many reasons for the emergence of the issue of business sustainability is the deepening of human awareness of limited natural resources to meet unlimited human needs and the limited ability of nature to neutralize the side effects of all human activities

[5] Business sustainability will occur if it is supported by ecosystem sustainability as a support for the production system. It is in this perspective that the business dimension cannot be separated from the elements of sustainable development, namely economic, social and environmental With environmental issues mainstreaming, the space for business competition is expanding to include non-market areas such as corporate responsibility. Strengthening competitiveness is no longer determined only by price, quality and delivery competition but combines economy, politics, law and ethics in examining managerial issues that arise in the business landscape [6]. [5] states that sustainable business can produce development that shapes economic and social growth while maintaining, maintaining and improving the environment with a business objective of achieving optimal economic benefits through conducting business that is socially and environmentally friendly.

[7] The criteria for sustainable development in principle regarding the ecological dimension, the economic dimension, the socio-cultural dimension, the legal-institutional dimension and the technological dimension. Business continuity analysis can be carried out using a multidimensional scaling (MDS) approach called the RAP Farm method approach (The Rapid Appraisal of the Status of Farming). The Rap-Farm approach is modified from the Rapfish

program (Rapid Assessment Techniques for Fisheries) developed by the Fisheries Center, University of British Columbia [8]. The MDS method is a statistical analysis technique that transforms every dimension and is multidimensional in the dimensions of business sustainability. As a step to facilitate the visualization of the position, the research used ordination analysis. If the analysis of each dimension has been carried out, then a comparative analysis of the inter-dimensional sustainability can be carried out and depicted in the form of a kite diagram.

The low productivity and quality of sheep business, the existence of standardization of sheep requirements accepted by exporters causes only good sheep to be sold, so it is feared that sheep exports can weaken the sustainability of the resilience of seed sources. Therefore it is necessary to readiness in ecological and nursery dimensions, economy, socio-culture, infrastructure and technology, law and institutions in realizing the sustainability of sheep exports

2. Materials and Methods

This research is a socio-economic study with the object, namely breeders who are members of the Indonesian Sheep and Goat Farmers Association (HPDKI) in Jember Regency. Data were obtained from individual breeders who were members of the HPDKI and related institutions. Sheep analysis research is to see an overview of the sustainability of the sheep business carried out by she breeders in Jember Regency in supplying sheep exports, in terms of ecology and breeding. b) economy. c) socio-culture. d) infrastructure and technology. e) legal and institutional.

The research location was conducted in the district. Jember, this is based on the consideration that the Jember area has been designated as a supplier of sheep for export to Malaysia because it has potential in development, capacity in terms of quantity and relatively high quality.

The objective, the research is directed in a descriptive and explanatory qualitative form by conducting a survey to obtain the data. The survey method is used to obtain data by asking questions and analyzing answers based on a structured list of questions that can represent the object under study. Information taken in research is not only in oral or written form, it will also be served from the behavior and social interactions of breeders in their social life.

This study uses primary data and secondary data. Primary data collection was obtained from sheep breeders who were members of the HPDKI, secondary data was obtained from the village, HPDKI managers and other institutions related to this research, either in the form of literature, research results or reports. The number of breeders who served as the primary data source were all HPDKI members.

The dimensions of the sustainability of sheep exports are accessed and quickly (rapid appraisal) by using a non-parametric multi-variable method known as multidimensional scaling (MDS). The MDS method used to calculate the sheep business sustainability index is called Rapid Appraisal-Farming (Rap-Farm).

3. Results and discussion

1. Normality Test

MDS analysis is supported by analysis of the feasibility of the model (good of fit) to determine whether or not it is necessary to add attributes to the model and test the accuracy of the model compared to the actual situation. The feasibility test of the model is carried out by a normalization test based on the stress value (S) and the coefficient of determination (Rsqr).

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Table 1. Value of Stress (S) and Coefficient of Determination (Rsqr) of Each Dimension

Dimensions	value	Status	Rsq	Stress
Ecological	0,214	52,32	0,951	0,141
Economic	0,119	28,98	0,928	0,174
Social	0,204	49,85	0,935	0,179
Technological	0,214	52,19	0,948	0,150
Institutional	0,249	60,88	0,949	0,146

6 The stress value of all dimensions is less than 0.25 and the RSQ value is approaching to 1, so the model attribute used is good and can represent the problem being discussed, meaning that the data obtained from the survey results are suitable for the MDS analysis process. The coefficient of determination with a value of Rsq approaching to 1 or 100% means that the variant proportion of the optimal scale of data contributed 17 the MDS scaling procedure has the right and good size (goodness of fit measure) in terms of the ecological, economic, social, technological, and institutional dimensions. Thus there is no need to add attributes to approach the actual situation.

13 2. Analysis of the Sustainability Status of Sheep Exports

The scale of the sustainability status index value ranges from 0–100%. The categories of sustainability [8] are as shown in Table 2.

Table 2. Category of Sustainability Status Based on the Rapfish Analysis Index Value

Indeks	Categori
< 25.00	Bad Sustainable
25.00 -49,99	Less Sustainable
50.00 – 74,99	Sufficiently Sustainable
75.00 >	Sustainable

Overall, the sustainability status of sheep exports in Jember Regency is illustrated by means of a kite diagram. The kite chart will show how much the sustainability index value of a dimension is. If the kite point of a dimension gets closer to 0, the smaller the sustainability index. On the other hand, if the kite point of a dimension approaches 100, the greater the sustainability index. The overall status of the 5 dimensions of sustainability that has been analyzed can be seen in Table 3.

Table 3. Sheep Export Sustainability Index in Jember Regency

Dimensi	Value	Status	Intervensi		Value		
			Prioritas	Progresif	Status	Prioritas	Progresif
Ecological	0,214	52,32	60,17	66,97	11,21	12,89	14,35
Economic	0,119	28,98	33,33	37,09	3,44	3,95	4,40
Social	0,204	49,85	57,33	63,81	10,18	11,70	13,02
Technological	0,214	52,19	60,02	66,80	11,15	12,83	14,28
Institutional	0,249	60,88	70,01	77,93	15,18	17,45	19,43

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