

Internal and External Factors in the Development of Teaching Farm

Inda Ilma Ifada¹, Suslinawati², Siti Erlina³
¹²³(Agribusiness Department, Islamic University of Borneo MAB, Indonesia)

Abstract:

Uniska's teaching farm is located in Bentok Village, Bati-Bati District. Teaching farms are divided into several concentrations in the field of science, including laboratories for dairy cattle, poultry, feed, forage, tissue culture nurseries, farming and agricultural integration as well as community service counseling. The purpose of the development is to serve as a practicum for students from the Faculty of Agriculture. In addition, according to the teaching farm concept, it is a combination of learning media for academics and business people in the agricultural sector which is expected to become a business in the long term and can contribute to society. It's just that in its implementation there are several problems that occur that need special attention related to plants and livestock such as pests and diseases. Therefore, this research was conducted to identify strengths, weaknesses, opportunities and threats and to formulate strategies for developing teaching farms. The method used is purposive sampling with data analysis using SWOT. The highest strength possessed by the teaching farm is the large area that can be used for 8 hectares. The weakness is the use of inorganic production facilities (seeds, fertilizers, feed) which is quite high so that it requires large funds to carry out activities. The biggest opportunity is the support from the Foundation and the local government. The biggest threat to the teaching farm is the broken access road leading to the main road. Strategies to develop teaching farms can be done by optimizing production factors to increase production and productivity, expanding cooperation networks with partners, optimizing the cultivation of superior products in Tanah Laut Regency according to local government policies such as corn and dragon fruit and cattle as superior livestock, strengthening synergy between the team, universities, companies and agencies, farmers and empowering alumni.

Key Word: Teaching Farm;SWOT;Development strategy;Field Laboratory.

Date of Submission: 06-06-2021

Date of Acceptance: 20-06-2021

I. Introduction

Faculty of Agriculture, Islamic University of Borneo (UNISKA) in 2011 built the faculty garden as a field laboratory facility called "uniska teaching farm". The Faculty of Agriculture has two Study Programs, namely the Animal Husbandry Study Program and the Agribusiness Study Program which has a number of active students according to the 2020 Ministry of Education data, which is 756 people.

Uniska's teaching farm is located in Bentok Village, Bati-Bati District, with a land area of 8 hectares. The teaching farm is divided into several concentrations in the fields of science, including laboratories for dairy livestock, poultry, feed, forage, tissue culture nurseries, farming and agricultural integration as well as community service counseling. The purpose of the construction of the teaching farm is as a place for practicum students from the Faculty of Agriculture. In addition, according to the teaching farm concept, it is a combination of learning media for academics and business people in the agricultural sector which is expected to become a business in the long term and can contribute to society.

So far, there are several plants and livestock that are cultivated in this place, including Dragon Fruit, Corn, Chili, Cattle and Duck, but the management is not optimal. There are several problems that occur that need special attention related to crops and livestock such as pests and diseases. This is inseparable from the nature of agricultural commodities which are influenced by nature. Therefore, we conducted a study entitled "Uniska Teaching Farm Development Strategy in Bentok Village, Bati-Bati Subdistrict, Tanah Laut Regency" with the aim of identifying strengths, weaknesses, opportunities and threats and being able to formulate strategies for developing the teaching farm so that in the future it becomes more effective.

According to Rangkuti (2005), SWOT is the systematic identification of various factors to formulate service strategies. This analysis is based on logic that can maximize opportunities but at the same time minimize weaknesses and threats. SWOT analysis compares external and internal factors.

II. Material And Methods

This research was conducted in Bentok Village, Bati-Bati Subdistrict, Tanah Laut Regency. The research time starts from November 2020 to October 2021.

Study Sample Design: Purposive sampling

Study Location: This research was conducted in Bentok Village, Bati-Bati Subdistrict, Tanah Laut Regency (10)

Study Duration: November 2020 to October 2021.

Sample size: 30 respondent

Subjects & selection method: The research method used is quantitative and qualitative research. The sampling method used in this study is the purposive sampling method or deliberately in Bentok Village, Bati-bati District. The research sample consisted of parties involved in the management of the Teaching Farm according to the Rector's Decree (22 people). In addition, samples were also taken from the agricultural office of Tanah Laut Regency (2 people), the village head and his apparatus (3 people) and farmers (3 people). Data collection techniques by conducting interviews and questionnaires.

Type and Data Source: Primary and secondary data

Data analysis:

The data collected was processed by tabulation and then analyzed. To find out the first and second objectives, a descriptive analysis was carried out based on the information and data obtained in the field and a SWOT analysis.

III. Result and Discussion

Teaching Farm is a field laboratory of the Faculty of Agriculture which is a place for students and lecturers to carry out tri dharma activities of higher education. This is in accordance with the Minister of Education and Culture Regulation No. 49 of 2014 which states explicitly in Article 31 that the laboratory is one of the standards for learning infrastructure. Still under the same regulations, in contrast to the standard of learning, the function of the laboratory is not mentioned at all in the section on research standards and community service. This can be interpreted that the function of the university laboratory is currently still interpreted as a place to carry out practicum and learning experiments only. In other words, the meaning of the laboratory as a learning resource is more on the use of the laboratory as a place of learning (lecture) (Utari, 2017).

According to Gupta (2008) concretely EU means,

1. the first college can become an entrepreneurial institution as an organization with make optimum use of resource efficient (particularly HR) owned. The first meaning can be implemented in real in the form of taking advantage of opportunities by producing goods and services by using optimal and efficient all sources resources, such as money, raw materials, technology, machines, skills and workforce to produce competitive products and profitable.
2. Second, students, staff integrated faculty and faculty with business institutions, industry, and community (stakeholders) through innovation and knowledge introduction knowledge and cooperation with industry.

This happens because knowledge management is proven to increase organizational innovation which in turn has an impact on strengthening the competitiveness of institutions. Knowledge management is a series of activities to manage knowledge for the benefit of the organization, including increasing the creation, innovation, and competitiveness of institutions (Suharsaputra, 2015).

Internal and External factors in developing the Teaching Farm of the Uniska Faculty of Agriculture located in Bentok Kampung Village consist of Strengths, Weaknesses, Opportunities and Threats. SWOT stands for the Internal Strengths and Weaknesses environment and the external Opportunities and Threats environment faced by the business world. SWOT analysis compares external factors of opportunities and threats with internal factors of strengths and weaknesses (Rangkuti, 2014).

SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis is a tool to identify the company's strengths and weaknesses as well as existing opportunities and threats. Strengths and weaknesses are factors caused by the company's internal while opportunities and threats are factors caused by the company's external or external environment (Sudirman, 2013). Internal factors can be seen in Table 1.

The highest strength possessed by the teaching farm is the large area that can be used for 8 hectares. So far, the land has been used for cattle and crop cultivation. On the land also built a hall and room for living. The next strength possessed is human resources who have expertise in agriculture and animal husbandry. It is hoped that with the strength of human resources, namely from lecturers as experts, research and practice activities can be carried out there. In addition, problems especially regarding crops and livestock can be addressed and handled properly in accordance with their respective fields of competence. The capital for the Teaching Farm activities was obtained with financial support from the Uniska Foundation and not as a loan.

Table 1. Assessment of Internal Factors

Strength Indicator	Weight	Rating	Score
availability of land area of 8 hectares	0.156328	4	0.562779
Human resources with expertise in agriculture and animal husbandry	0.146402	3	0.505087
Availability of water	0.124069	4	0.440447
Internal capital and debt free	0.138958	3	0.444665
Sufficient facilities and infrastructure are available	0.019851	1	0.009926
The land is far from settlements, so its sustainability does not disturb the community	0.027295	1	0.020471
Amount	0.612903		1.983375
Weakness Indicator	Weight	Rating	Score
Coordination with field staff is not optimal	0.086849	4	0.30397
Delegation and responsibilities are still unclear	0.086849	4	0.30397
Lack of cooperation with external parties	0.081886	3	0.278412
The use of inorganic production facilities (seeds, fertilizers, feed) is quite high	0.111663	3	0.385236
Amount	0.367246		1.271588
IFAS		1	3.254963

The weakness of the teaching farm is the use of inorganic production facilities (seeds, fertilizers, feed) which is high enough to require large funds to carry out activities. The next weakness is that coordination with field staff is not optimal and delegations and responsibilities still overlap. Lack of coordination and responsibilities that are less directed causes frequent misunderstandings in communication for handling and management in the place. In addition, the lack of cooperation with external parties and damaged road access add to the weakness of the teaching farm. Because it is expected that there will be cooperation and synergy with these partners, including additional capital for the development of teaching farms, for example through the company's CSR funds.

The External Factors of the teaching farm which consist of opportunities and threats can be seen in the assessment of the weights and ratings in Table 2. The biggest opportunity is the support from the Foundation and the local government. The full support provided by the Foundation for the teaching farm as a forum or field laboratory for the development of knowledge (a place for research and practical activities) and can help empower the surrounding community. Support from the local government is obtained from the existence of a land permit that can be used by Uniska.

In addition, public demand for agricultural and livestock products is also quite high. In Tanah Laut Regency, the main commodities are dragon fruit and corn. In 2014 to 2016, the bentok teaching farm had cultivated dragon fruit and the results were sold. The dragon fruit produced is very good and tastes sweet so the demand is quite a lot. It's just that the production is only able to meet the demands of the campus. Market potential and community income are also opportunities that can be followed up by selling products that are in demand and needed by the community. The development of science and technology also provides opportunities for teaching farms by applying the results of expert research related to agriculture and animal husbandry.

The biggest threat to the teaching farm is the broken access road leading to the main road. Because the damaged access road will affect the implementation of each activity and will increase costs. The high price of fertilizer and feed is also a threat because so far the teaching farm has not been able to make its own fertilizer and feed according to needs.

The SWOT matrix is used to formulate alternative teaching farm development strategies. The total value of internal and external factors can be described in the SWOT analysis diagram. Alternative strategy is an alternative used in developing a teaching farm.

Table 2. Assessment of Eksternal Factors

Opportunity Indicator	Weight	Rating	Score
Market demand for agricultural and livestock products is quite high	0.132267	3.3	0.436483
There is support from the Foundation and local government	0.145349	3.466667	0.503876
Development of Science and Technology	0.109012	3.3	0.359738
Market potential and local community income	0.126453	3.2	0.404651
Amount	0.513081		1.704748
Threat Indicator	Weight	Rating	Score
Extreme weather changes	0.116279	3.133333	0.364341
Damaged road access to the main road	0.12064	3.733333	0.450388
The high price of fertilizer and feed	0.122093	3.133333	0.382558
Market Competition	0.127907	2.866667	0.366667
Amount	0.486919		1.563953
EFAS	1		3.268702

According to Richard L. Daft (2010) defines strategy (strategy) explicitly, namely an action plan that explains the allocation of resources and various activities to deal with the environment, gain competitive advantage, and achieve company goals. Competitive advantage is what distinguishes a company from other companies and provides a hallmark for the company to meet the needs of the consumer market. The essence of strategy formulation is to determine how our company will differ from other companies.

The results of the research conducted on the teaching farm state include quadrant I which in the SWOT analysis diagram includes an aggressive strategy. This is a very favorable situation. The strategy implemented is to support an aggressive growth policy (growth oriented strategy). The strategy set according to the strategic management theory in SWOT, for quadrant I is related to the strategy of optimizing strengths by taking advantage of opportunities. The alternative strategies that can be applied for the development of teaching farms are:

1. Optimization of production factors to increase production and productivity
2. Expanding the network of cooperation with partners
3. Optimizing the cultivation of superior products of Tanah Laut Regency according to local government policies such as corn and dragon fruit and cattle as superior livestock.
4. Strengthening the synergy between university teams, companies and agencies, farmers and empowering alumni.

This is in accordance with Utari's research (2017). To encourage laboratory development, not only by changing the paradigm, but also by strengthening the initiative and collaboration of departmental lecturers. Not only internal, the department needs to strengthen external cooperation with potential partners. In addition, of course, university policies themselves need to be flexible and conducive.

Strategies to reduce weaknesses by take advantage of opportunities (WO) consist of:

1. Improving the skills of field personnel
2. Improve teaching farm management between the Teaching Farm team according to the Chancellor's Decree and the university leadership so that whenever there is a problem they can quickly take a policy.
3. Promote and introduce products to the public
4. Plan the activity schedule at the teaching farm regularly for the team and the training schedule for the community

Alternative strategy using power to prevent threats (ST) consist of:

1. Integrating agriculture and animal husbandry
2. Optimizing the application of technology and lecturer research results

3. Improving teaching farm supporting facilities and infrastructure such as road repairs, electricity and water circuits that can be used in all areas.

Strategies to reduce weaknesses and avoid threats (WT) consist of:

1. Honest and committed to developing teaching farms and able to maintain market trust and funders
2. Carry out activities in accordance with SOPs and existing bureaucracy

Commitment to all members of the academic community positioning universities as entrepreneurial university. This matter be a prerequisite if you want education administration successful and capable entrepreneurship print entrepreneurs who come from campus (Jamaludin, 2021).

This research is also in accordance with Sari (2020) The commitment and support of the regional head of South Sumatra Province in the implementation of the synergy of the use of research results with universities, R&D institutions and the business world in South Sumatra Province as stated in the MOU and PKS which is an important stage of implementation of the development strategy South Sumatra STP.

IV. Conclusion

1. The highest strength possessed by the teaching farm is the vast land that can be utilized of 8 hectares. The weakness of the teaching farm is the use of inorganic production facilities (seeds, fertilizers, feed) which is high enough to require large funds to carry out activities. The biggest opportunity is the support from the Foundation and the local government. The biggest threat to the teaching farm is the broken access road leading to the main road.
2. Strategies to develop teaching farms can be done by optimizing production factors to increase production and productivity, expanding cooperation networks with partners, optimizing the cultivation of superior products in Tanah Laut Regency according to local government policies such as corn and dragon fruit and cattle as superior livestock, strengthening synergy between university teams, companies and agencies, farmers and empowering alumni.

References

- [1]. Gupta, Asha. 2008, "Entrepreneurial University : India's Response", Research & Occasional Paper Series, CSHE.2.08, University of California, Berkeley, <http://cshe.berkeley.edu/publications/docs/ROPS.Gupta.3.5.08.pdf> [2 Juni 2021].
- [2]. Jamaludin, masran mutakim, Nurmin Arianto, Suryadi marthadinata dan Nahoras bona simamarta. 2021. Simposium Tentang Pentingnya Pendidikan Tingkat Tinggi Untuk Meningkatkan Kapabilitas Diri Dalam Dunia Usaha Pada Siswa Kelas Xii Madrasah Aliyah Pondok Pesantren Al-Manar Cibeuteung Udik, Kecamatan Ciseeng, Kabupaten Bogor. *Jurnal Abdimas* vol. 2, No. 2, April 2021, Hal (68-79). <http://dx.doi.org/10.32493/ABMAS.v2i2.p68-79.y2021>. [2 Juni 2021]
- [3]. Rangkuti, Freddy. 2004. *Analisis SWOT Teknik Membedah Kasus Bisnis*. Jakarta: Gramedia Pustaka utama.
- [4]. Rangkuti, Freddy. 2005. *Analisis SWOT Teknik Membedah Kasus Bisnis*. PT. Gramedia Pustaka Utama. Jakarta
- [5]. Richard L. Daft, 2010, *Era Baru Manajemen*, Edward Tanujaya, Edisi 9, Salemba Empat
- [6]. Sari, Nila Mayang dan Ekowati Retnaningsih. 2020. Strategi Pengembangan Science Techno Park Melalui Ekosistem Inovasi Dalam Rangka Peningkatan Daya Saing Daerah Provinsi Sumatera Selatan. *Publikasi Penelitian Terapan Dan Kebijakan* 3 (1) (2020) : HLM. 01 – 20. <https://doi.org/10.46774/pptk.v12i1.114>. [2 Juni 2021]
- [7]. Sudirman, 2011. *Analisis SWOT Untuk Menentukan Strategi Pemasaran Pada Harian Fajar Di Makasar*. *Jurnal Manajemen dan Akuntansi* Oktober 2011 Volume 12 Nomor 2.
- [8]. Suharsaputra, U. (2015). *Manajemen Pendidikan Perguruan Tinggi*. Bandung: Refika Aditama.
- [9]. Utari, Rahmania. 2017. Penguatan Dan Perluasan Fungsi Laboratorium Pada Rumpun Ilmu Sosial Di Perguruan Tinggi. *Dinamika Pendidikan* Vol XXII No.1 Mei 2017. <https://journal.uny.ac.id>. [28 November 2020]

Inda Ilma Ifada, et. al. "Internal and External Factors in the Development of Teaching Farm." *IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS)*, 14(6), 2021, pp. 15-19.