

DEVELOPING MARKETING INNOVATION PEATLAND AREA THROUGH PINEAPPLE LOCAL FARMERS IN TANGKIT BARU VILLAGE

Hario Tamtomo, S.El., MM.

Manajemen, Universitas Muhammadiyah Jambi, Indonesia

Agesha Marsyaf, S.I.Kom., MM.

Manajemen, Universitas Muhammadiyah Jambi, Indonesia

Arniwita, S.Pd., MM.

Manajemen, Universitas Muhammadiyah Jambi, Indonesia

Siswoyo, S.I.Kom., MM.

Ekonomi Pembangunan, Universitas Muhammadiyah Jambi, Indonesia

Email Correspondence: h4rio.35@gmail.com

ABSTRACT

The purpose of this research is to reveal the strategic development innovation of pineapple's agroindustry, to identify the strength, weakness, threath, and opportunity on peniepale's agroindustry development based on local farmers at Tangkit Baru Village, Muaro Jambi District. The data were collected by purposive sampling and used SWOT analysis. Thisresultshowed that there are seven farmer group, as a part of Mina Sukses cooperative. The respondens research were 35 members of and 22 were members agroindustry's entrepreneurs. The strength menawhile the weakness comes from a less creative syroup action and lack of facilities and infrastructures. The opportunity is the ability to let a group help each others in need, for instance, when one member doesn't has enough assests whilethe threats are concerned with dynamic maret demands and tastw and lack of communication among farmer groups as member of Mina Sukses cooperative. Designing a sub products strategy would be able to develop agroindustry based on farmer grouos in Tangkit Baru village. In addition it would increase the member of various and innovative pineapple products. However the government should play their significant role to help develop the farm and agroindustry. The strenght of the community comes from the land materials arround them in this case, the pineapple as the resources of their livelihood.

KEYWORDS: Development Innovation Strategy, Pineapple's, Anas Comosus, Fram Groups And Mina Sukses Cooperative.



Introduction

Wetlands provide important natural resources, for 19.3 million ha or more than 10% of the total land area. In Indonesia peatland existed mostly in Sumatera 6.4 million ha (43%), 4.8 million ha (32%), in Kalimantan , and 3.7 million ha (25%) in Papua Island. The largest peatland is located in Riau region reach out Sumatera Province (4 million ha). In Indonesia, wetlands provide a wide range of tangible and intangible benefits to various communities. The tangible benefits include water for locals use and watering of livestock, support to pineapple agriculture, and food resources such as fish, vegetables, medicine and etc. The non-tangible benefits include, carbon stock, purification of water, maintenance of the water table, and storm protection. Wetlands also serve as habitats, ecosystem, flora and fauna, heritage values, and biodiversity of potentially high pharmaceutical value. All these benefits have a bearing on food security. Livelihoods of Indonesian smallholders in peatland areas are diverse. They are mainly based on natural resources including forestry, fisheries, agriculture and mining; with a share of these activities varying widely across regions (Noor et al. 2005). Local communities commonly extract timber and non-timber forest products, such as wild honey, resins and rattan (Anshari and Armiyarsih 2005).

They provide many substantial benefits not only to local society, but also to the people who live far away from them. They are recognised globally for their vital role in sustaining a wide array of biodiversity and providing goods and services and also as important sources of natural resources, upon which the rural economies depends. Jambi Province has a peatland area ± 900,000 ha, spread over 3 districts, namely Tanjung Jabung Timur, Tanjung Jabung Barat, and Muaro Jambi which require management priority. Muaro Jambi is a district has the widest peatland area, over 258 thousand Ha (35,9%). As one of the largest peatland, Muaro Jambi also developing pineapple agriculture. Tangkit Baru as one of the villages became the largest pineapple produce in Jambi and Indonesia.

Tabel 1. Pineapples Productivity in Indonesia

No	Province	Productivity	Percentage (%)
1	Lampung	453.812 ton	32,50 %
2	Jawa Barat	209.348 ton	14,99 %
3	Sumatera Utara	165.304 ton	11,71 %
4	Jawa Tengah	102.426 ton	7,43%
5	Riau	94.129 ton	6,74 %
6	Nusa Tenggara Barat	75.640 ton	5,42 %
7	Jambi	66.094 ton	4,73%
8	Provinsi Lain	231.200 ton	16,57%

Source: BPS, 2016

Pineapple peatland cultivation in Jambi province can only be found inTangkit Baru village, Muaro Jambi district. Tangkit baru has a of 1,800 ha peatland area, with a depth of 1.25 meters (Patolai, 2017). Patolai, is one of the pioneers in pineapple's plantation development. He

DEVELOPING MARKETING INNOVATION PEATLAND AREA THROUGH PINEAPPLE LOCAL FARMERS IN TANGKIT BARU VILLAGE

chose 'pineapple' as a staple plant to maintain peat ecology in addition to its economic value. Peatland is a soil that has more than 65% organic material (dry weight) and peat thickness of more than 0.5 m (Driessen, 1978). The unique nature of peatland can be seen from its chemical and physical properties. The chemical nature of peatland refers to its various fertility conditions, but generally it has low fertility. It is specified by acid soils (low pH), availability of a number of macro nutrients (K, Ca, Mg, P) and low micro (Cu, Zn, Mn, and Bo), toxic organic acids, and High Cation Exchange (CEC). The physical properties of peat that need to be understood include maturity, color, specific gravity, porosity, dryness, subsidence, and flammability. Peat material is either fibric, hemic, or sapric. Fibric peats are the least decomposed and consist of intact fibre. Hemic peats are partially decomposed and sapric are the most decomposed, because its formed from different materials, environmental conditions, and times. Sapric type will tend to be smoother and more fertile. Fibric type, contains a lot of crude fiber and less fertile (Najiyati, et.al., 2005). More over 80% of villagers were living in peatland area and depend on pineapple farm as livelihoods and food security needs. The pineapple production in Tangkit is still meets major problems in Tangkit Baru, particularly in, in marketing system which rapid changes both in customer needs as well as in the nature of the markets. So, the local farmers must be competitiveness and improves their performance, to develop new products and new strategies to attract a customers and satisfies existing ones. That's why the product innovation of pineapple is important, which moves a community forward. Innovation can generally be characterized as creating something new, not yet existent, which potentially, ability to attract a customer's attention (Pitra, 1997).

Pineapple now transformed become to be a prime commodity of the village and even a promising province, with a pineapple population between 11-13 million clumps. All of households in Tangkit Baru has pineapple farm average 600-800 hectares and can produce of 20,000 fruits per day (Daeng Pallalo, 2017). Raw pineapple is sold directly to wholesaler, at an average price Rp. 500-Rp.1,000/piece, although the pineapple's price at Angso Duo Jambi retailer market range from Rp.2000-Rp. 4,000/piece. Pineapple agro-industry is still only for pineapple jam production and traditionally marketing which has weaknesses in quality and distribution. Lack of knowledge farmers or producers about product innovation, quality improvement, distribution techniques, and marketing leads to a high price gap, between the prices of farmers, production prices and market prices by wholesaler. The most disadvantaged are pineapple local farmers as producers. Therefore, the concept of product innovation is needed in pineapple agribusiness management to be pineapple syrup, as well as consumption drinks on going and building sustainability of peatland commodities. This study aims to examine and determine innovation strategies in of agribusiness and marketing of pineapple as a natural resource for the developing of local farmers, so in the future they are be able to drive sustainability. This study highlight relating to sustainability, economy, empowerment and management of sustainable peatlands, which are used for farmers, managers, and policy makers in the management of peatland, as a basis for guiding decision making on peatland agriculture conservation.

Method

The aims of research is to identify the strategy for developing agribusiness dan marketing innovation for local farmers. The first step was to carry out a pilot survey as a necessary means for basic orientation in the examined issues and for obtaining elementary statistical characteristics, enabling the subsequent selection of suitable methods and procedures for data processing. The pilot survey was conceived as an intentional selection of 35 local farmers that, according to available information, use marketing innovation in their practice and present themselves through the introduction of innovation in their agribusiness and marketing. This research was conducted too using quantitative (survey) and qualitative methods, namely direct observation in the field by interviewing respondents. Sampling is carried out purposive sampling. Sampling criteria for each farmer group that has also joined the pineapple syrup making business at the Mina Sukses cooperative in Tangkit Baru Village, Muaro Jambi district, namely the management of the farmer group (chairman, treasurer, secretary) and two members farmer groups taken randomly. Of the 35 respondents taken for each farmer group in it, it included members of the farmer group who tried pineapple agroindustry in Tangkit Baru Village, so the total number of respondents who were sampled were 35 people from seven farmer groups in Tangkit Baru Village. The data used analyzed by path analyses of IBM SPSS 24.

Result

Profile of the Mina Sukses Farmers and Farmers Group

The farmer groups in Tangkit Baru village are 7 groups who are also part of the Mina Sukses members.

Figure 1. Profile of Mina Sukses farmer groups

Parit Makmur 2 23%
Cahaya Sulawesi 14%
Usaha Mandiri 18%
Parit Makmur 1 14%
Bangkit Lestari 4%
Sepakat Tani 14%
Maju Jaya 13 %



Source: Primary data (2018)

Farmers who were sampled in this study, who tried to cultivate pineapple and became members of the Mina Sukses cooperative. But within the group there are also members who are pineapple agroindustry entrepreneurs. The reason for this group was formed because of the same interests to develop members in the group both in cultivation activities and pineapple agroindustry. As an example of the existence of interests among members in the group in the supply of raw materials for the agro-industry activities. Where usually if there is

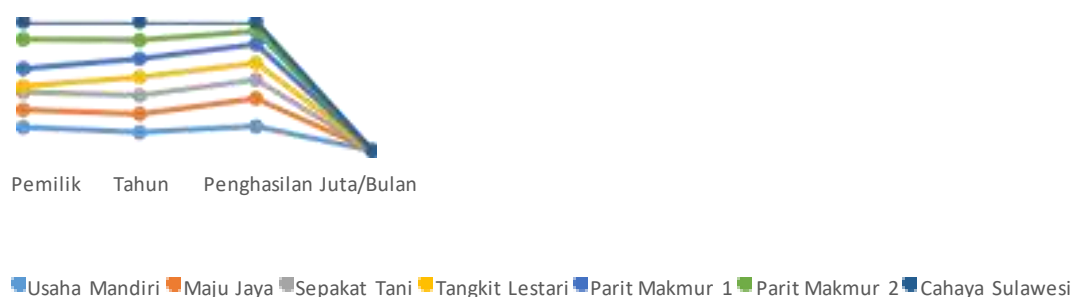
DEVELOPING MARKETING INNOVATION PEATLAND AREA THROUGH PINEAPPLE LOCAL FARMERS IN TANGKIT BARU VILLAGE

a shortage of raw materials members of farmer groups who become agro-industrial entrepreneurs take the shortage of raw materials from members of other farmer groups, so there is a dependency between members who have agro-industrial businesses and members who do not have agro-industry businesses in terms of procurement of raw materials. So that there is an element of mutual benefit between the farmer group members. With the existence of this farmer group, will be provide benefits to Mina Sukses cooperative members in the marketing for fresh pineapple, harvesting, and can sell pineapple to the agro-industry entrepreneurs in their groups to be processed into pineapple juice. One of the elements of the farmer group is the motivation of local community leaders to support the program that has been determined. But the pineapple farmer group in Tangkit Baru village is still having trouble dealing with packing problems that are worth selling with the on the go model. In addition innovation in the marketing process is also a problem.

Profile of Pineapple Agroindustry in Tangkit Baru Village

In Tangkit Baru village, there are 22 entrepreneurs who try to process pineapple products into fruit juice with traditional packaging for glass bottles and plastic bottles which are currently limited to local marketing and availability in the fasting month and Eid. Income distribution is also very varied from 5 million/month to 10-15 million /month. The year of establishment began in 2002 and began to be fostered by Disperindagkop Jambi province until 2013. Cahaya Sulawesi and Parit Makmur are owners who have the highest income of 13-15 million / month or around 85-100% as the highest income compared to other groups.

Figure 2. Profile of percentage income of pineapple agroindustry business owners



Source: Primary data processed (2018)

Productivity

Pineapple fruit is the main raw material for making fruit juice. Although still using a small-capacity blender, this group on average is able to produce 150-300 cartons to meet the needs in the fasting month and Eidul-Fitr.

Packaging

Pineapple juice is packaged using glass bottles or plastic bottles that have been branded, with varying weights ranging from 100 ml, 250 ml, 600 ml to 1000 ml by weighing. Then the bottles are closed using a press. The stage in the process of making pineapple juice until packaging takes \pm 4 hours.

DEVELOPING MARKETING INNOVATION PEATLAND AREA THROUGH PINEAPPLE LOCAL FARMERS IN TANGKIT BARU VILLAGE

Marketing

Marketing is still done in personal selling by entrusting various products in grocery stores or small retail outlets in Jambi starting from Mandala to Trona Mini Market. Distribution channels still use agents. In addition, the exhibition is also used as a marketing channel to promote products.

Developing Strategy of Pineapple Agribusiness Innovation

Table 1. SWOT analysis in the development of pineapple fruit 'juice' agribusiness

Strength		Weakness	
Raw material is the potential of Tangkit Baru Village.		Lack of facilities and infrastructure 2. Limited in marketing reach	
The quality of raw materials for the manufacture of pineapple juice is good (without preservatives and original fruit-based ingredients).		No taste different innovations such as milk, chocolate, are still limited to the original taste	
The role of members of the farmer group, if there is a shortage of raw materials and the same interests among members of the farmer group.		There are members of the farmer group who are less active and do not trust each other among the members of the farmer group	
The role of farmer groups to facilitate assistance.			
The location of the strategic Tangkit Baru Village, close to the City of Jambi (15 KM with a distance of 42 Minutes) and there is route to Palembang city			
Opportunity		Threats	
Making pineapple derivative products aside from pineapple syrup, pineapple chips, pineapple jam, such as pineapple brownies and pineapple cake.		Market demand and consumer tastes that are always changing and fluctuating.	
Prices affordable by consumers.		No good communication between farmer groups and other farmer groups in the village.	
The opening of a modern market for pineapple juice products and the marketing range of pineapple juice can be expanded again.		Fruit import circulation in Jambi market	
The role of the government in the development of pineapple farming and agro-industry.			
Limited group members of capital form group businesses			

Table 2. Assessment of SWOT components

Strength		Weakness		Opportunity		Threats	
component	Score	Component	Score	Component	Score	Component	Score
S1	3	W1	3	O1	3	T1	3
S2	2	W2	3	O2	2	T2	2
S3	3	W3	3	O3	3		
S4	3			O4	2		
S5	3			O5	3		

Description: grade 3 = important, 2 = quite important, 1 = not important.

DEVELOPING MARKETING INNOVATION PEATLAND AREA THROUGH PINEAPPLE LOCAL FARMERS IN TANGKIT BARU VILLAGE

Table 3. SWOT components Marketing Innovation Strategy of developing pineapple agroindustry in Tangkit Baru Village

Strategi	Linkage of SWOT Components	Strategi	Weight	Rank
SO1	S1, S5, O1, O3	SO1	12	1
SO2	S2, O2	SO2	4	6
SO3	S3, O3, O4	SO3	8	3
SO4	S4, O4	SO4	5	5
SO5	S5, S3, O5	SO5	9	2
ST1	S2, T1	ST1	5	3
ST2	S3, T2	ST2	5	5
WO1	W1, W2, O4	WO1	8	3
WO2	W2, O2	WO2	4	6
WO3	W2, O3	WO3	5	5
WO4	W3, O5	WO4	6	4
WT1	W1, W2, T1	WT1	8	3
WT2	W2, T1	WT2	5	5

Source: Primary Data Processed (2018)

Based on the weighting value of the existing alternative strategies, the priority of the innovation strategy for the development of pineapple agro-industry can be determined: the peatlands of Tangkit Baru village are :

- 1) Great potential in pineapple agroindustry development and it will be even better if the derivative products, such as pineapple chips, pineapple juice so more product diverse.
- 2) Strategic location, if there is a shortage of raw materials, one of group members can be stockist to another groups in business circulation.
- 3) Increase capital to optimizing production, and expand to reach of marketing and establish cooperative relationships with agro-industry entrepreneurs in Tangkit Baru Village.
- 4) The government's role in developing of pineapple agroindustry, especially in the provision of facilities and infrastructure.
- 5) Added for capital and expand marketing reach
- 6) Establish good relationships between farmer groups and cooperative for developing of farming and agro-industry.

Figure 3. Matriks SWOT

Internal	<p>Strength</p> <ol style="list-style-type: none"> 1. Raw material is the potential of Tangkit Baru Village <ol style="list-style-type: none"> a. The quality of raw materials for making pineapple chips is good 2. The role of farmer members, if there is a lack of raw 3. materials and the same 	<p>Weakness</p> <ol style="list-style-type: none"> 1) Facilities and infrastructure are still lacking 2) Unlimited marketing reach 3) The function of farmer groups is less active and does not trust each other among members of farmer groups
Eksternal		

DEVELOPING MARKETING INNOVATION PEATLAND AREA THROUGH PINEAPPLE LOCAL FARMERS IN TANGKIT BARU VILLAGE

	<ol style="list-style-type: none"> 4. interests among members of the farmer groups. <ol style="list-style-type: none"> a. The role of farmer groups to get help 5. Strategic location 	
<p>Opportunity Making derivative products and innovations of pineapple syrup or pineapple chips that already existed before Affordable prices for consumers and taste like The opening of a modern market for pineapple chips The role of the government in developing Innovation of pineapple agroindustry Limited group members of capital form group businesses</p>	<p>SO</p> <ol style="list-style-type: none"> 1. Raw material is a potential area so that it is easy to obtain, and will have an opportunity if the product is made 2. The quality of raw materials is good, and the original taste is preferred by consumers and affordable prices. 3. The role of farmer groups if there is a shortage of raw materials 4. The role of farmer groups to facilitate obtaining assistance for developing of pineapple agro-industry businesses. 5. Strategic location 	<p>WO</p> <ol style="list-style-type: none"> 1) The role of government in the development of pineapple agroindustry, especially in the provision of facilities and infrastructure. 2) Affordable prices and taste that people like, so that the marketing range of pineapple juice can be expanded to the city of Jambi. 3) Expand the reach of marketing to modern retail. 4) The function of the farmer group is carried out, so the limited group members can form a group effort
<p>Threath Market demand that is always changing and volatile follows consumer tastes The absence of good communication between farmer groups in Tangkit Baru Village</p>	<p>ST</p> <ol style="list-style-type: none"> 1. Maintain quality 2. Establish a good relationship between farmer groups so that there is collaboration between groups for the 3. development of agro industry business innovation 	<p>WT</p> <ol style="list-style-type: none"> 1. Increase capital and expand marketing reach, so as to maintain market stability. 2. Establish good communication between farmer groups so that cooperation can be done together

Result of Hypotesis Testing

The result of hypothesis model is :

Table 4. Path analyses of three variables

Exogen Variable	Endogen Variable	Beta	t-value	Probablity	Sig
Product Innovation : Agribusiness	Marketing Innovation	0,484	6,162	0,000	Sig
Marketing Innovation	Farm Competitiveness	0,317	4,727	0,000	Sig
Product Innovation : Agribusiness	Farm Competitiveness	0,472	4,720	0,000	Sig

DEVELOPING MARKETING INNOVATION PEATLAND AREA THROUGH PINEAPPLE LOCAL FARMERS IN TANGKIT BARU VILLAGE

The results shows that all hypothesis is accepted. Variable one with variables others have a linear relationship and have significant influence both directly or indirectly.

Business Drivers of Sustainability Innovation For Pineapple's Local Farmers in Tangkit Baru Village

Creating value for customers as major food brands establish their own sustainability frameworks, they present agri-businesses with the opportunity to create long-term client relationships by looking after sustainability priorities in their supply chains. For example, straightening relationship to company and shared commitment to improving local farmers. Responding to consumer needs Agri business clients are responding to the growing consumer focus on health and nutrition. Increasing the nutritious value of food commodities is opening new business opportunities for manufacturers, in both developed and developing countries. These demands are also pulling agribusinesses to systematise and improve information about production processes, impacts, and supply chains. In Tangkit Baru village, pineapple must be increasing to different product on food commodities, like pineapple syrup 'on the go' in different packaging to allow middle consumers. Increasing productivity addressing the social aspects of agribusiness sustainability, such as the productivity and incomes of farmers, is important to achieve greater supply chain resilience. Technology advances are helping agri businesses increase productivity while having positive social and development impacts. So, the organization of Mina Sukses cooperative can endorse a young influencers to promote their peatland product on social media, so become competitiveness and creative in marketing innovation.

Discussion

The results of this study raise that : a) The number of members of the seven farmer groups is 35 people, with a land area of 16 Ha-67Ha. (b) The binding element of the agro industry business group is the same interest among members, especially in obtaining government institutions, and the relationship of interdependence between pineapple farmers and agro-industry entrepreneurs in the supply of pineapple chips, in addition there is a shared responsibility in the group for jointly developing sustainable peat commodities (c) The function of the farmer group as well as membership in the Mina Sukses cooperative as a forum for the learning process in the presence of groups, each member exchanges information. The vehicle for cooperation if there is a shortage of raw materials for the agro industry of pineapple, the entrepreneur takes the power of the group members. Strengths are: 1) raw materials as the potential product Tangkit Baru Village. 2) The quality of raw materials for making pineapple chips is good. 3) The role of farmer group members if there is a shortage of raw materials. Weaknesses are: 1) Lack of facilities and infrastructure 2) Less extensive marketing range. 3) The function of farmer groups as members of Mina Sukses cooperative is less active. Opportunities are: 1) making innovative products from pineapple ranging from fruit juice to pineapple chips that previously existed. 2) affordable prices by consumers. Threats are: 1) Market demand is volatile and always changing because it follows consumer tastes. 2) The

DEVELOPING MARKETING INNOVATION PEATLAND AREA THROUGH PINEAPPLE LOCAL FARMERS IN TANGKIT BARU VILLAGE

absence of good communication between farmer groups as members of the Mina Sukses cooperative. The strategy of developing farmer group-based agroindustry in Tangkit Baru village is fruit juice agroindustry as one of the derivative products of local peat commodity, it will be better if it is developed again, by makes derivative products from pineapple are more diverse.

Conclusion

There needs to be government attention to help farmers or pineapple agro-industry entrepreneurs for capital assistance in developing their businesses. 2. Establishment of a group effort for pineapple agro-industry activities for members who are members of the Mina Sukses cooperative who lack capital to make pineapple agroindustry individually, through cooperative management. Corporate partnerships with NGOs and Universities to tackle food and livelihood securities also focus on holistic development strategies, to increase farmers' productivity, market access and livelihoods, improve nutrition security, community governance and education resources.

Reference

- Ahmadi. (2001). Ali,J; Delis, A; Hodijah, S. (2015).Amir Amri, Junaidi, Yulmardi. (2009).Amir Amri, (2007). Anisa Kusuma. (2012). BPS, (2016). Baker, W. E., and J. M. Sinkula. (2002). Boer, H., and W. E. Daring. (2001). David, F.R. (2009). Dinas Pertanian Tanaman Pangan Provinsi Jambi. (2014). Erfit, E; Bhakti, A; Yacob, S. (1995). Hovgaard, A., and E. Hansen. (2004). Hult, G. T. M., R. F. Hurley, and G. A. Knight. (2004). Hurley, R. F., and G. T. M. Hult. (1998). Mardikanto, T. (2008). S. M. Mwakubo and G. A. Obare, (2009). T. V. Ramachandra, B. Alakananda, A. Rani, and M. A. Khan, (2011). Rangkuti, F. (2005). Zulgani,Z; Syaparuddin,S; Parmadi, P. (2014).