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Feasibility Analysis of Rumah Produksi Bersama (RPB) for Chili Commodities as Investment Promotion in Batubara Regency, North Sumatra

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ABSTRACT

Chili is a strategic agricultural commodity that has high economic value and makes a real contribution to the national economy. The biggest problem in the chili trade system is price stabilization. Unstable prices occur when there is a change in supply volume. Based on BPS data in 2021, North Sumatra is the largest chili center outside Java with a contribution of 14.16%. Followed by West Sumatra and Aceh contributing 8.27% and 4.6% respectively. The center for red chili production in North Sumatra Province is Batu Bara Regency, which has an area of 982 ha with a productivity of 8 tons/hectare for red chilies, apart from Karo, Simalungun and Dairi.

One way to overcome the chili problem in Batu Bara Regency is with the Rumah Produksi Bersama (RPB) program, which is a place for micro and small business actors to carry out joint production activities with similar product commodities, dependence on similar workforce skills, or the use of complementary technologies. Apart from that, RPB is a promotion for regional government investment in developing their region (Regional Branding) in addition to differentiating products and increasing value. For this reason, a Feasibility Study Method for the RPB KUKM for chili commodities in Batu Bara Regency, North Sumatra Province is needed, including through location, Production, Marketing, Financial and Management analysis as well as reviewing the regional image.

Based on the results of the feasibility study, it was found that the location of the RPB is in chili, Lubuk Cuik Village, Limapuluh Pesisir District, Batu Bara Regency, North Sumatra Province, which is not far from the chili center in Batu Bara Regency. To achieve feasibility in accordance with the capabilities of RPB cutlery, it must be able to produce a minimum of 20 tons per month or around 240 tons per year with this production NPV, IRR and PP can be said to be feasible. Meanwhile, marketing is carried out B2B and B2C for potential offtakers, apart from building public-private partnerships and involving all key stakeholders, with the main player being the government.

1. INTRODUCTION

Chili is a strategic agricultural commodity, meaning that this commodity has high economic value, making a real contribution to the national economy. The chili commodity occupies an important position in the food menu, even though it is only needed in small quantities, namely only 3.00 kg/capita/year, almost all cooking menus in Indonesia use chilies therefore, product diversity, high quality and consumption characteristics are needed. fancy. High fluctuations in selling prices have caused chili commodities to become one of the commodities contributing to inflation. Inflation generally applies to fresh commodities. Processed chili products do not affect and are influenced by inflation. The biggest problem in the chili trade

system is price stabilization. Volume decrease which increases inflation occurs because production decreases, which encourages middlemen/traders to hoard or sell. Production factors that influence red chili production are land area, seeds, labor, and inorganic fertilizer, while organic fertilizer and pesticide production factors have no influence on red chili production volume. Price stabilization from the supply side occurs when the allocation of the use of production factors is carried out optimally, while from the demand side it can be done by downstreaming processed chili products, which currently Indonesia is still lagging behind other ASEAN countries. North Sumatra is the largest chili center outside Java by contribution 14.16%. Followed by West Sumatra and Aceh contributing 8.27% and 4.6% respectively. The center of red chili production in North Sumatra Province is Batu Bara Regency, which has an area of 982 ha with a productivity of 8 tons/hectare for red chilies, apart from Karo, Simalungun and Dairi. Chili plants are plants that can grow in various agricultural land conditions. The need for red chilies continues to increase along with population growth and various needs and the price of chilies fluctuates along with the productivity and availability of chilies [2]

The main problem on the supply side during chili cultivation in Batu Bara was the wilt of chili plants due to Fusarium fungus attacks, this was because the soil in Batu Bara was acidic and contained high levels of metals, the only way was to neutralize the soil by applying organic fertilizer. Integrated handling with other production factors is needed to ensure optimum supply. On the demand side, as with other regions, supply chain issues and further processing/downstreaming within the district itself are still lacking. The chili distribution pattern is through several methods: (a) local retailers in the district who will later sell directly to consumers; (b) wholesalers between districts who will later sell to retailers in their respective districts to meet consumer needs; and (c) traders supplying processing industries to process processed products and finally market them to consumers. Several technological innovations in chili processing that can be applied at the home industry or mini-industry level include candied chilies, dried chilies, chili flour, chili paste and block chilies. The technology in question can increase the shelf life of chilies and add value as well as increase the income of chili farmers. One of the efforts made by the government is through integrated management of MSEs as mandated by PP Number 7 of 2021, namely a model for managing micro and small businesses in an integrated, systematic, accountable and sustainable manner towards a common product chain, dependence on similar workforce skills, and the use of complementary technology includes: business establishment or legality, curation, provision of raw materials, production processes, human resource development, financing, technology and marketing which are integrated in one central area or cluster.

In other research, many have discussed problems related to individual chili plants as micro and small business actors, but in this research it is more about micro and small businesses carrying out joint production activities with similar product commodities or what is known as Rumah. Joint Production (Factory Sharing). The Rumah Produksi Bersama Program (Factory Sharing) is a place for micro and small business actors to carry out joint production activities with similar product commodities, reliance on similar workforce skills, or the use of complementary technology. In recent years the terms "sharing economy" or "collaborative economy" have also emerged. These terms are usually used to refer to the use of digital platforms in collaborating various groups from various sectors with various kinds of resources to exchange, share or synergize in various ways. New collaborative platforms are continually being launched by companies, non-profit organizations, informal groups, and operating locally, nationally, or even globally. The idea underlying the collaborative economy is that many existing resources are still underutilized by their owners, even though those resources could have higher value if shared or exchanged with other parties who may have more constraints. One of the most important social benefits of the sharing/collaborative economy is the creation of new entrepreneurs and regional branding. This research was conducted for the Feasibility Study of the RPB KUKM for chili commodities in Batu Bara Regency, North Sumatra Province, including through location, Production, Marketing, Financial and Management analysis as well as reviewing the regional image, for micro and small business actors in carrying out joint production activities. with similar product commodities and increasing the shelf life of chilies and added value will also increase the income of chili farmers.

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2. LITERATURE REVIEW

2.1. National Policy Concerning MSMEs, Cooperatives and Chili Commodity Development

The high role of MSMEs in the national economy and absorption of domestic labor encourages the government's commitment to developing MSMEs. In the 2014–2019 National Medium Term Development Plan (RPJMN), MSME development policies are encouraged to increase the competitiveness of MSMEs and cooperatives so that they become sustainable and large-scale businesses. Meanwhile, in the 2020 – 2024 period, the direction of MSME development policy is to strengthen entrepreneurship and MSMEs in order to increase economic added value, employment, investment, exports and economic competitiveness through five priority areas, namely developing human resources (HR), increasing access to financial services, increasing the added value of MSME products in domestic and international markets, strengthening partnerships, and improving regulations and policies that influence the sustainability of MSMEs.

2.2. Regional Policy Regarding MSMEs, Cooperatives, and Development of Chili Commodities and Their Processes.

Batu Bara Regency, through the Department of Cooperatives and Small and Medium Enterprises, will be responsible for empowering, developing and increasing the potential of Cooperatives and MSMEs will be the coordinators of the Red Chili Cluster Rumah Produksi Bersamaprogram. There are several activity programs that have been carried out by the Batu Bara Regency Cooperatives and UMKM Service, such as facilitating assistance with production equipment, training in making liquid organic fertilizer, organic fungicides, organic pest control, training in improving cooperative institutions, cooperative managerial training, training in improving human resources for cooperative administrators and managers. , cooperative digitalization training. As a commitment to supporting the integrated MSME program, namely the Chili Cluster Joint Production House, the Batu Bara Regency Government will assign the Berkah Abdi Jaya Agricultural Producers Cooperative as the manager. This cooperative was established on February 10 2021 based on Legal Entity Number AHU-0008486.AH.01.26 of 202

1. This cooperative is located in Dusun IV Lubuk Cuik Village, Limapuluh Pesisir District. This cooperative business unit includes pre-harvest, post-harvest, marketing and distribution of chilies.
2. A Rumah Produksi Bersama is a place for micro and small business actors to carry out joint production activities with similar product commodities, reliance on similar workforce skills, or the use of complementary technology.
3. A cooperative is a business entity consisting of individuals or cooperative legal entities that bases its activities on cooperative principles as well as being a people's economic movement based on the principle of kinship.
4. Micro Business is a productive business owned by an individual and/or individual business entity that meets the criteria for Micro Business as intended in the laws and regulations in the field of Micro, Small and Medium Enterprises.
5. Small businesses are productive economic businesses that stand alone, which are carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned, controlled or are part, either directly or indirectly, of medium or large businesses that meet the criteria Small Business as intended in the laws and regulations in the field of Micro, Small and Medium Enterprises.

3. METHOD

3.1. Study Framework

In the study of location selection and feasibility study of the KUKM Rumah Produksi Bersamafor chili commodities as well as Investment Promotion in Batu Bara Regency, North Sumatra Province, it

started with the need to manage chili micro and small businesses in an integrated, systematic, accountable and sustainable manner on a general product chain, dependence on similar workforce skills, and complementary use of technology. The potential for chili commodities in Batu Bara Regency is quite large, so the opportunities for business development are greater. The construction of the Chili Cluster Rumah Produksi Bersama (RPB) is a KUKM development program that will be implemented by Batu Bara Regency. The development of the Chili Cluster RPB in Batu Bara Regency must be studied first, with a review of laws and policies, SME and sustainable development approaches, factory sharing, and business feasibility as well as using methods with location selection analysis Business feasibility study analysis, Infrastructure Requirements Analysis, Business Model Analysis, Institutional, Management and Financing Schemes, and Site Plan and Factory Sharing Visualization. The output of this study is a document on the exact location and feasibility of business development, business models, institutions, management and funding schemes for the development of a KUKM Rumah Produksi Bersamafor chili commodities in Batu Bara Regency, North Sumatra Province. The outcome is a policy for developing a KUKM Rumah Produksi Bersamafor chili commodities in Batu Bara Regency, North Sumatra Province.

3.2. Land Analysis

a. Land Use Land use is used to see the carrying capacity of the land, namely to find out the extent of the capacity of land resources for production houses with chili clusters. The land in question is land that is not located in a densely populated area.

b. Soil characteristics that are suitable for production houses with chili clusters are medium to coarse textured.

c. Hydrology Hydrology in question is the availability of water sources. Areas that have high water availability make it easy to provide water for production houses and chili clusters, because water is very necessary for the process of a series of industrial activities. This water availability can be in the form of raw water sources, secondary water sources or independent water sources.

d. Road Accessibility The accessibility referred to is the transportation route at the location where the production house will be built along with the chili cluster. Road accessibility is differentiated based on the condition of the road, whether the area has road access that can be passed at any time, in certain seasons, certain weather or whether road access is not yet available and cannot be passed at all.

e. Topography Topography also has an important influence on the smooth process of production house activities with chili clusters. The higher the location that will be used, the more it will hinder industrial activity. The criteria for altitude are that the area has an altitude below 100 meters above sea level.

3.3. Business Feasibility Analysis

Business feasibility analysis is a comprehensive assessment to assess the success of a business. This analysis aims to avoid over-investment in activities that turn out to be unprofitable. This method was used to obtain the results of a feasibility study for Business Development through the KUKM Joint Production House for chili commodities, Batu Bara Regency, North Sumatra Province. The business feasibility aspect in this research is more about financial feasibility, especially for the development of a KUKM Joint Production House for chili commodities in Batu Bara Regency, North Sumatra Province which includes NPV, IRR and PP.

1. Net Present Value (NPV) Method

This method is a capital budgeting technique for predicting the present value of the cash flows generated from a proposed venture.

Jurnal Logistik Indonesia Vol. 8, No. 1, April 2024, pp. 18-30

The formula for this method is: NPV = (C1/1+r) + (C2/(1+r)2) + … + (Ct/1+r)t) - C0

Information: NPV = Net Present Value in rupiah, Ct = cash flow per year in period t, C0 = initial investment value in year 0 in rupiah R = interest rate in %.

2. Internal Rate of Return (IRR) Method

This method is a technique for calculating income levels or what is usually called investment rate (yield rate) which describes the level of profit from business or investment in percent (%) at NVP equal to zero. IRR to estimate potential investment profits. The formula for this method is: IRR = rk + (NPV rk/(TPV rk – TPV rb)) x (rb – rk)

Note: rk = smaller interest rate, rb = larger interest rate NPV, rk = NPV at a small interest rate TPV, rk = Total Present Value of Proceeds at a small interest rate TVP, rb = Total Present Value of Proceeds at a large interest rate.

3. Payback Period (PP) Method

This method is a technique for assessing the feasibility of a business over the period of time (period) a business can return on investment. This time period is in months or years.

4. Results and Discussion

a. Selection of Location for Planned Bersana Production House (RPB)

After conducting field studies using several methods, including collecting both primary and secondary data as well as provisions based on Kemen-KUKM No. 6 of 2022, the following location assessment matrix for the Chili Cluster Sharing Factory in Batu Bara Regency is obtained:

Table. 1 FS Location Assessment Matrix for Chili Clusters in Batu Bara Regency

Based on Kemen-KUKM No. 6 of 2022

Criteria Based Kemen-KUKM No. 6 Year 2022	Alternative Land Locations			
	1	2	3	4
1. Provincial or district/city regional government land equipped with a valid certificate of ownership and a statement that it is not in a state of dispute signed by the governor or regent/mayor	Available	Available	Available	Process
Value	10	10	10	5
Note: The 4 location plans are for the regional government of Batubara district				
2. Have a vacant land area of at least 5,000 (five thousand) square meters.	Available	Available	Available	Available
Value	10	10	10	10
Description: All locations have land above 5,000 (five thousand) square meters				
3. Location in accordance with the integrated Spatial Plan in one central/cluster area with the following criteria:				
a. An area or place that is fixed and does not move	Available	Available	Available	Available
Value	10	10	10	10
Note: All areas are fixed areas and do not move				
b. Have access to the provision of raw materials, production processes, human resource development, financing, technology and marketing.	Not Available	Available	Available	Available
Value	0	5	10	10

Note: For land 1 it does not meet the criteria, for land 2 – 4 it has access to raw material supply, production processes, human resource development, financing, technology and marketing, only locations 2 and 4 are closest to access to raw materials, namely only 3 km from Location, but Location 2 is too close to residential areas and schools.

4.	Prepare the necessary supporting facilities before the Rumah Produksi Bersamais built, at least in the form of:				
	1) Land development	Not Available	Not Available	Available	Available
	Value	0	5	10	10
	Note: Land 3 and 4 are land in the form of land development so they are good enough for Factory Sharing				
	2) Road access to the joint production house	Not Good	Good	Good	Good
	Nilai	5	5	5	10
	Note: For location 4, access on the main road and from the raw material center is also quite good. Meanwhile, for the other 3, land one is quite far and access to raw materials is not good, land 2 is only a problem in residential areas which are quite dense and close to schools, while land 3 takes 30 minutes to travel from the raw material center to the location.				
	3) Availability of electricity network	Not Available	Available	Available	Available
	Value	0	10	10	10
	Note: Locations 2-4 have electricity network available				
	4) Availability of clean water	Not Available	Available	Available	Available
	Value	0	10	10	10
	Note: Locations 2-4 have clean water available, but drilled wells are required for all three				
	5) Telecommunication network	Not Available	Available	Available	Available
	Value	5	10	10	10
	Note: Locations 2-4 communication networks are very good, only location 1 is not so good				
5.	5. Location with residential areas and schools	No	Yes	Yes	No
	Value	10	0	5	10
	Note: For 1 and 4, not too close to residential areas, while 2 and 3 are quite close to dense residential areas				
6.	Locations prone to flood disasters	Yes	No	No	No
	Value	0	10	10	10
	Keterangan: Lokasi 2-3 tidak terlalu rawan dengan banjir, hanya Nomor 1 yang sangat rawan banjir				
	Total Value	**50**	**85**	**100**	**105**

Based on Table 1, alternative location 4 (four) has the highest score, namely 105, however for alternative 4 land certification it is only in the process of establishing a regional regulation, while the land acquisition plan is still in the form of a budget application and the application letter has been submitted to the Regent with No. Letter: 900.1.2/1942 until the final report is made, while for alternative location 3 (three) with a score of 100, the actual assessment is quite good and has great potential, only the distance outside the area is around the next location, 2 (two) is 85 and the last is the 1st (one) location is 50.

b. Production Aspects (Products, Raw Materials, Production Process and Machine Tools)

Production aspects are described in terms of the products that will be made in the Chili Cluster Joint Production House, analysis of the main raw materials in the form of fresh red chilies, the

production process for chili paste products, as well as the tools and machines used in the Chili Cluster Joint Production House.

1. Products

The main products that will be made in the Chili Cluster Joint Production House is chili paste. The choice of chili paste was based on the consideration that the need for chili paste on the market was still high. Processed food industry players have stated that they are ready to accommodate the excess supply of chilies.

The domestic food industry prefers domestically harvested fresh chili commodities. Because, if you import chilies in fresh form, either paste or powder, obtaining permits is very difficult. Previously, the price of chilies, which continued to fall to IDR 5,000 per kilogram, apparently did not provide long-term benefits for the industry. Because, this condition will cause farmers to be lazy about planting due to losses, so that the supply of chilies will decrease disturbed in the future. One solution to overcome this problem is for farmers to develop their own processing industry. Among other things, farmers can process chilies into chili paste, powder, or dry, so that they can be stored under a cooperative scenario with a minimum price of IDR. 20,000 per Kg.

2. Raw materials

The main raw material in the Chili Cluster Sharing Factory or Rumah Produksi Bersama (RPB) in Batu Bara Regency is red chili. The Batu Bara Regency red chili center is in Lubuk Cuik Village, Limapuluh Pesisir District. Batu Bara Regency produces 15,654.80 tons of chilies every year, with a harvest period of two harvests per year where the planting area is 1,069 hectares and the harvest area is 1,017.75 hectares. The number of chili farmers also supports the availability of raw materials. The number of chili farmers in Batu Bara Regency can be seen in Table 2.

Table 2. Location and Number of Chili Farmers in Batu Bara Regency

NO	VILLAGE	SUBDISTRICT	AMOUNT FARMER
1	Titi Merah	Lima Puluh Pesisir	123
2	Pasir Permit	Lima Puluh Pesisir	36
3	Pematang Tengah	Lima Puluh Pesisir	110
4	Titi Putih	Lima Puluh Pesisir	25
5	Tanah Itam Ilir	Lima Puluh Pesisir	57
6	Perupuk	Lima Puluh Pesisir	379
7	Gambus Laut	Lima Puluh Pesisir	359
8	Lubuk Cuik	Lima Puluh Pesisir	462
9	Bulan-Bulan	Lima Puluh Pesisir	105
		JUMLAH	1656

Source: Dinas Agriculture and Plantation in Batu Bara Regency, 2022

Table 3. Data on planting area, harvest area and red chili production Batu Bara Regency, 2020-2022

YEAR	PLANT AREA (Ha)	HARVEST AREA (Ha)	PRODUCTION (Ton)
2020	1.428	1.428	19.992
2021	1017,75	1017,75	15.654,80
2022	1.199,16	1.199,16	16.787,40

Source: Dinas Agriculture and Plantation in Batu Bara Regency, 2022

3. Production Process

The production techniques in the Sharing Factory/Rumah Produksi Bersamaas outlined in the Batu Bara Regency RPB proposal submitted to the Ministry of Cooperatives, Small and Medium Enterprises are related to making chili paste. The main raw material in the activities of the Rumah Produksi Bersamais fresh red chili which comes from Batu Bara Regency. From the production aspect, making chili paste is carried out with consideration of utilizing the abundant chili harvest with a production process that is quite simple but produces a product with a longer shelf life than fresh red chilies. Making chili paste can be done based on the composition of the raw materials used, which are as follows:

Table 4. Composition of Raw Materials for Processing Chili Paste

No	Composition of ingredients for making tomato sauce	% komposisi
1	Fresh Chili	83,3
2	Salt	16,67
3	Na Benzoat	0,0083

The chili paste processing process design proposed by the department can be described in more detail through a process using several machine technologies with a production process design as in Figure

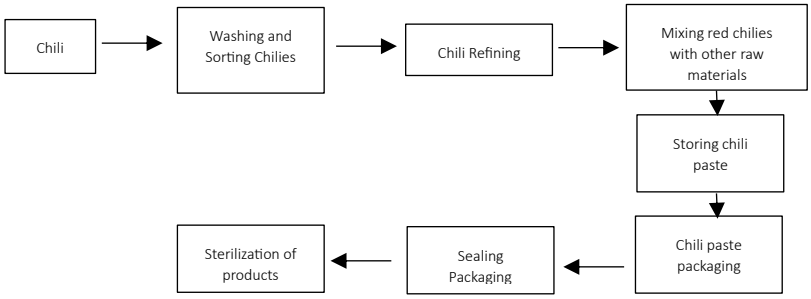

Figure 1. Production Process Design

Based on the proposed machine, the processing stages of chili paste can be analyzed. First, the fresh red chilies that are harvested go through the washing process in a washing machine. The washing process is carried out using water with the assumption that the dirt lost is around 1% and the water content that allows it to be included in the chilies is assumed to be 5%. The clean chilies then enter the colloid mill to undergo the process of grinding and refining the chilies. Next, the process of mixing the milled chilies with salt and sodium benzoate is carried out in a double jacket mixing tank and continues with the cooking process so that the chilies are more mature assuming the water content has decreased by 20%. The chili paste then goes into the storage tank to be stored, then goes to the filling machine to be packaged. After packaging, the paste is closed using a sealer and then sterilized in a retort tank using a steam source from a boiler.

4. Marketing Aspect

The explanation of marketing planning for the chili cluster Factory Sharing is a written plan which contains several marketing components for processed chili products which include analysis, targets, activities and marketing budget. The marketing plan for processed chili products for RPB outlines a detailed description of these components so that internal and external parties understand the business.

Jurnal Logistik Indonesia Vol. 8, No. 1, April 2024, pp. 18-30

Furthermore, the market price of processed chili products as a market determinant will be predicted for the feasibility of the chili cluster Factory Sharing business by analyzing the cost of production and product selling prices. Market segmentation analysis or division of buyer segments in a market for processed chili products needs to be elaborated in order to find the right buyers. In general, demographics, income level, psychographics and social class are the basis for market segmentation. Apart from that, by segmenting the market, Factory Sharing of chili clusters is expected to achieve maximum profits and the marketing strategy will run smoothly.

a. Supply Chain

Analysis of the supply chain and product distribution flow from the Chili Factory Sharing cluster is certainly influenced by the length and shortness of the distribution channel chain and the large profit margin applied by that chain. The shorter the distribution chain and the smaller the profit margin set, the more efficient the distribution activities carried out by the chili cluster Factory Sharing will be. Several elements involved in the red chili commodity supply chain in Batu Bara Regency certainly provide an idea of how many elements or actors are involved and will influence the supply chain in chili cluster Factory Sharing activities. An overview of the chili commodity supply chain in Batu Bara Regency can be seen in Figure 2.

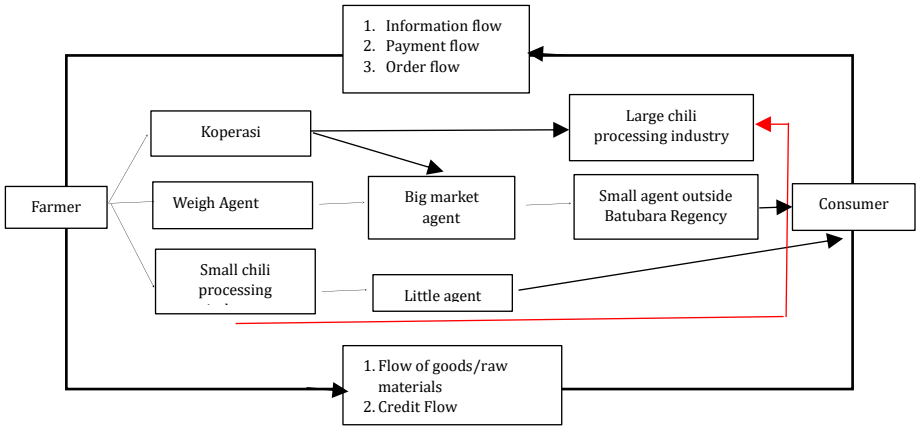

Figure 2. Supply chain in Batu Bara Regency

The existence of a chili cluster Rumah Produksi Bersama (RPB) in Batu Bara Regency can increase the added value of the products produced and improve the welfare of farmers. The following is an overview of the chili supply chain if the RPB is functioning.

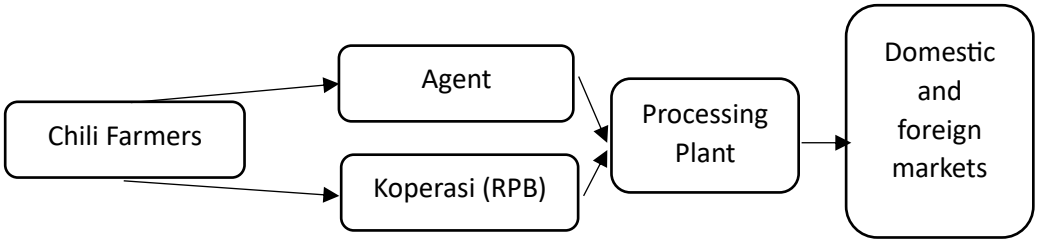

Figure 3. Supply Chain with Chili Cluster Rumah Produksi Bersamain Batu Bara Regency

The cooperative not only produces chili paste, but also helps other chili SMEs who want to process it during sorting, washing and milling. Apart from that, it is easier for farmers to sell fresh red chilies at closer distances

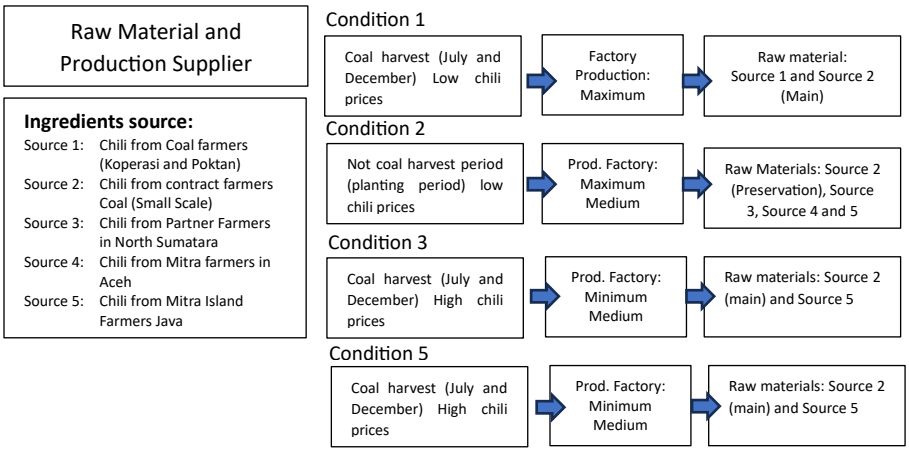

Figure 3. Co-Production Home Supply Chain Strategy Chili cluster in Batu Bara Regency

b. Marketing

Marketing of the red chili harvest in Batu Bara Regency is usually carried out traditionally and all chilies are sold in the form of fresh chilies. Farmers who have picked their chilies will immediately sell them to weighing agents in each hamlet. From the weighing agent, the chilies will be sold again to large agents in each village. Large agents already have connections with large market agents in areas that have market centers. The market agent distributes these chilies to every small market agent. Chilies from Batu Bara are usually distributed to various regions such as Aceh, Medan City, Riau, West Sumatra and Jambi. A general description of the marketing channels of red chili farming actors can be seen in Figure 4.

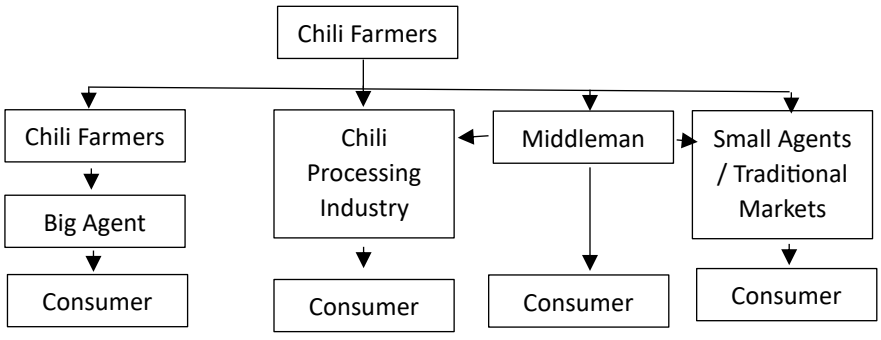

Figure 4. The marketing channels of red chili farming actors

The data obtained shows that, from 2017 to 2019, the volume of chili imports was still high compared to exports, meaning there is still an opportunity to meet the needs of the domestic and foreign chili market. Later, after the RPB is built, off takers both B2B and B2C must be carried out immediately.

Jurnal Logistik Indonesia Vol. 8, No. 1, April 2024, pp. 18-30

c. Financial Aspect

Financial aspects are very important in analyzing the feasibility of this FS, especially in determining the investment (CAPEX) and company operations that will be carried out or in another term called OPEX. OPEX refers to the costs incurred by a company on an ongoing basis to run its business. However, unlike CAPEX, OPEX has a tax-deductible nature, which means companies do not need to include OPEX when calculating annual taxes.

Meanwhile, on the other hand, OPEX is often the type of regular expenditure most frequently incurred by companies. Not a few company management are finally trying to find ways to reduce OPEX. Of course, this method is done without having to sacrifice the quality of the products or services they produce.

Operational expenditure does not include dalam capital costs or costs incurred in the implementation phase for new business products. These costs are daily business expenses that are needed by the company and are often listed in the profit and loss report.

It is recorded every year by reviewing several broad financial indicators. Starting from the cost of goods sold, operating costs and net profit, as well as revenue.

Paying attention to the operational description of Factory Sharing planned in Batu Bara Regency, taking into account the planned investment value (CAPEX) of Rp. 9,313,501,874, then of course an adequate operational budget is needed so that the production process can be covered with sufficient financial support. The following are the results of an analysis of the costs incurred for the Factory Sharing operational plan in Batu Bara, as follows:

Components of Cost of Production and Additional Costs

1. Cost of goods sold

No	HPP components	Total	Unit/Pcs
1	Main Raw Material Costs	4.951.483.300,00	24.271,98
2	Additional Raw Material Costs	156.000.000,00	764,71
3	Labor costs	635.040.000,00	3.112,94
4	Operating costs	486.624.000,00	2.385,41
5	Operating Expense Costs	7.650.000,00	37,50
Cost of goods sold 1 Kg			**30.573**
Cost of goods sold		**Netto 500 gram**	**15.286**

2. Additional cost

No	HPP components	Total	Unit/Pcs
1	Transportation	0,05	764,31
2	Promotion Costs etc	0,1	1528,63
3	Tax 11%	0,11	1681,49
		Amount	3.974,43
Additional cost			19.260,70
Profit MarkUp		100%	19.260,70
Selling price			38.521,40
Selling Price in the Market (Rounding)			40.000,00
Profit Per Product			20.739,30

3. Feasibility Assessment

Feasibility Analysis	Provision	Results	Information
NPV (Net Present Value) 30 Year	9%	27.789.732.714	feasible, > 0
NPV (Net Present Value) 30 Year	12%	19.051.896.126	feasible, > 0
Perhitungan IRR (Internal Rate of Return)	9%	18,54%	BEP
	12%	18,54%	BEP
Calculation PI (Profitability Index)	Not Feasible, < 1	3,47	feasible, > 1
Calculation ARR (Accountting Rate of Return)	Not Feasible, < 1	3.948.763.187,6	feasible, > 1
Calculation PP (Payback Periode)		Year to	7 Year

d. Promotion Aspect

Promotion is very important to be carried out by the District Government. Coal and Cooperatives as managers, in various ways both domestically and abroad. Managers should not be satisfied with the conditions that have been achieved at this time. Promotion involves all key stakeholders, especially the government, business world and society. There are many various ways, including using the internet, exhibitions, exhibitions, festivals, etc.

The Batu Bara Regency Government together with cooperatives as managers prepare promotional materials in the form of multi-media, booklets, dance groups, and items to be promoted.

That the location of the RPB is in Chili, Lubuk Cuik Village, Limapuluh Pesisir District, Batu Bara Regency, North Sumatra Province, which is not far from the chili center in Batu Bara Regency. To achieve feasibility according to the capabilities of the RPB machine it must be able to produce a minimum of 20 tons per month or around 240 tons per year with this production NPV, IRR and PP can be said to be feasible. Meanwhile, marketing is carried out B2B and B2C to prospective offtakers, in addition to building public-private partnerships and involving all main stakeholders, with the main player being the government.

5. CONCLUSION

Based on the results of the feasibility study, it was found that the location of the RPB is in chili, Lubuk Cuik Village, Limapuluh Pesisir District, Batu Bara Regency, North Sumatra Province, which is not far from the chili center in Batu Bara Regency. To achieve feasibility according to the capabilities of the RPB machine it must be able to produce a minimum of 20 tons per month or around 240 tons per year with this production NPV, IRR and PP can be said to be feasible. Meanwhile, marketing is carried out B2B and B2C for potential offtakers, apart from building public-private partnerships and involving all key stakeholders, with the main player being the government.

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