



Strategies empowerment of simpang empat farmers through horticultural development program (Case of Corporate Social Responsibility (CSR) program of PT Kadya Caraka Mulya (PT KCM)

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Abstract

PT. Kadya Caraka Mulya (KCM) as a natural resources exploration company has an obligation to implement Community Development Programs (CSR) as a social responsibility to the community in the company work area, then formed a Business Development Institute (LPB) namely Banua Prima Persada (Baprida LPB) to carry out CSR in the mining operations area. The objectives of this research are evaluate the planning conformity with the CSR implementation program, identify problems and problem-solving strategies, and analyze the empowerment strategy of the program sustainability in the community. The design was descriptive qualitative research, held in Simpang Empat Village, Banjar Regency from February – April 2018. The activities are interview, observation and documentation to analysis unit LPB Baprida and its farmers group choosed by snowball sampling. The results show that PT. KCM CSR program formed in community empowerment based on horticultural development has been implemented accordance to the plan. Problems were the lack of companions, the lack of community interest with horticulture, the low number of facilities, the short durability of agricultural products and the damage plant caused of pests threat. The strategies have been applied by PT. KCM are cultivated new agricultural areas, added water facilities/drilled wells, establish cooperation with local and modern markets to market the products, rescheduled of training time, increased the number of companion, optimized existing irrigation facilities with pipeline system, maximized the use of funds for self-made fertilizer, increased community participation in new agricultural areas, training, organic fertilizers, and accelerated the process of delivering well-packaged crops to marketers.

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Introduction

Social responsibility is a responsibility and obligation to protect, foster, increase and enhance the benefit of stakeholders and social people. Corporate Social Responsibility (CSR) also was called corporate citizenship. CSR is "a process with the aim to embrace responsibility for the company's actions and encourage a positive impact through its activities on the environment, consumers, employees, communities, stakeholders and all other members of the public sphere who may also be considered stakeholders (Tai and Chuang 2014). PT. Kadya Caraka Mulya is one of the companies engaged in the field of coal mining operating in the Regency of Banjar. According to the Government Regulation especially the Minister of Energy and Mineral Resources Regulation, PT. KCM as a Limited Liability Company have to implemented the CSR program to the communities surrounding the mine as a social and environmental responsibility of the company.

The spearhead of CSR implementation, PT. KCM build a special institution for the implementation of corporate CSR namely Business Development Institute (LPB) named LPB Baprida. Business Development Agency Banua Prima Persada (LPB Baprida) is an institution assigned to implement Community Development Program in mining operational area of PT. Astra Group United, one of them is PT. KCM operating in Banjar and Tapin Regency, South Kalimantan Province. One of the programs of LPB Baprida is the community empowerment of agriculture and horticulture development. The community empowerment activities of farmers through the development of horticulture is very interesting, because this program can make people to be independent and empowered. And this program can be a learning for other people, because this program has been able to move the local economy to the welfare of their family. This activity encourages authors to further examine the strategies implemented by LPB Baprida in order to empower vegetables and horticulture farmers.

LPB Baprida as the implementation of the corporate social responsibility program of PT KCM in general has helped the economy of the farming communities

around the mine. LPB with a partnership pattern helps farmers group by providing capital loans, assistance and assisting the market access of agricultural products to modern and wholesale markets. LPB provide assistance in improving the quality of agricultural products with grading and branding system.

The problems that arise in this assistance are the suitability between planning and implementation of the program implemented by LPB. In addition, the constraints and solutions that arise in the implementation of the program and how the sustainability of this program in the community. The objectives of this research are evaluate the planning conformity with the CSR implementation program, identify the problems and problem-solving strategies, and analyze the empowerment strategy of the program sustainability in the community.

Material and methods

Study areas and time

The research was held in Simpang Empat Village Banjar Regency, South Kalimantan Province in February-April 2018.

Research design

The research design was qualitative descriptive research. Descriptive research is a research method that seeks to describe and interpret objects in accordance with actual phenomena. Descriptive research tries to describe in detail about the portrait program that has been done. This research tries to dig up the data until the last development of the program, because the program under study is a developing, innovative program, where the focus is on program improvement.

Procedure

Data collection techniques are 1). Interview to CSR program implementers, companion officers, motivators, cadres, members of farmer groups, village government officials, administrators of farmer groups, program actors and communities around the program; 2). Observation of village conditions, conditions of farmer groups, superior products, business conditions, agricultural demonstration plots and daily behavior of community activities; 3).

Documentation of program proposals, implementation reports, monitoring reports, village monographs, photos, institutional administration tools.

Analysis

The unit of analysis of this research is LPB Baprida and farmer group which is built by LPB Baprida while the sampel choosed by snowball sampling. The analysis of the research result were using SWOT analysis (Strength, Weakness, Opportunity and Threat) consist of SWOT matrix, scoring and quadrant.

Result and discussion

Compliance of planning with implementation of PT KCM CSR's Program

The focus of agriculture in the empowerment implemented by PT KCM in Simpang Empat Village, Banjar Regency is horticulture. So farmer community is directed to be able to plant and cultivate various types of vegetables with agroforestry method. Agroforestry is a system of land use (farming) that combines trees with agricultural crops to increase profits, both economically and environmentally. Basically agroforestry has the main components of forestry, agriculture, animal husbandry and fisheries. In Simpang Empat Village, Banjar Regency, the combined components are forestry and agriculture or known as Agrisilviculture.

The types of vegetables developed in the empowerment program in Simpang Empat Village, Banjar Regency are cayenne pepper, corn, eggplant, long bean, cucumber and tomato planted in different area and in the same time. To support the development and cultivation of these plants, PT KCM facilitate the implementation of various counseling and training, like Integrated Pest Control Field School or abbreviated (SLPHT). Integrated Pest Control Field School or abbreviated SLPHT is a method of counseling that combines farmer theory and experience in conducting farming activities. This concept is based on the farmer's awareness of the importance of ecological demands and the utilization of human resources in pest control. In principle, Integrated Pest Management (IPM) seeks to cooperate with nature, not against it.

In addition to providing counseling to farmers or farmer groups in Simpang Empat Village, Banjar Regency, PT KCM also provides vegetable seeds for farmers. It is also balanced with the provision of training on methods or ways of planting and care of vegetables, ranging from seeding seeds to harvest. PT KCM also provides training to farmers on how to pack the crops until the harvest is acceptable to the modern market. PT KCM helps farmers to market their farm products, from those originally marketed only to traditional markets, then can be accepted and marketed by modern markets such as Lotte Grosir.

Farmers in the Simpang Empat Village of Banjar Regency have very low knowledge of financial management, which sometimes causes farmers was not separate the finances for households and funds for agricultural operations. Therefore, the empowerment program undertaken by PT KCM also seeks to improve the knowledge of the farm community regarding the financial management embodied in financial management training. In the financial management program, farmers were taught about financial management and making a ledger.

In order to support the farming community and increase the quality products of Simpang Empat Village, PT KCM also works together with the Food Crops and Horticulture Agency of Banjar Regency to provide training to farmer groups in order to make their own fertilizer to reduce the cost of production, because the most cost is to purchase organic fertilizer. Farmers in Simpang Empat Village were taught to make organic fertilizer independently. Communities were taught from the earliest stages of collecting garbage, sorting garbage, chopping waste into smaller parts, to the process of active and passive decay, to make it change and have economic value for the surrounding community. Organic waste from food scraps, livestock manure, leaves and grasses, can be processed to become compost. Gases generated from the waste can also be used to meet fuel needs. The study says, if in one household to keep two cows, the biogas produced from cow dung is enough to meet the fuel needs for cooking for one month.

Successful implementation of empowerment based on horticultural development in Simpang Empat Village, Banjar Regency is also inseparable from the contribution of various facilities and infrastructure supplied by PT KCM such as a wellbore that serves as a source of water to irrigate 12 ha of agricultural land area. So the existence of horticulture empowerment program by PT KCM in Simpang Empat Village, Kabupaten Banjar gives a very positive impact to the community and agricultural economy in Simpang Empat Village.

Empowerment program based on horticultural development as a form of social responsibility of PT KCM to the community in Simpang Empat Village, Banjar Regency has been running well, which can be seen from the following indicators:

- 1) The implementation of productive economic activities in mining operations and community support for mining activities.
- 2) The establishment and development of microfinance institutions by prioritizing local wisdom.
- 3) Preparing the distribution and marketing channels of the superior products.
- 4) Growing new economic hub centers in a number of areas in collaboration with local government.

Based on the description, it can be concluded that empowerment program based on horticultural development as a form of social responsibility of PT KCM to the community around the mine, especially Simpang Empat Village, Banjar Regency, has been implemented accordance with the plan.

Problems faced by PT. KCM in implementing the empowerment program

1. The lack of companion/assistant

Agricultural companions/assistants are people who plays a role in empowering farmers as the main actors of agribusiness so that they are able to develop their farming in accordance with the capabilities and local resources they have (Bahua and Limonu 2016). The assistants also be able to act as liaisons in building collaboration between farmers (farmer groups) with the private sector (private entrepreneurs) who handle the processing and marketing of agricultural processed products (Indraningsih *et al.* 2010).

There are 5 farmer groups in 12 ha area Simpang Empat Village, Banjar Regency and only 2 (two) companion/assistant was available. Its means that the existing number of assistants in the implementation of empowerment programs based on horticultural development organized by PT KCM in Simpang Empat Village, Banjar Regency is still lacking. The number of assistants should be adjusted to the number of farmer groups so that each farmer group is accompanied by an assistant. Besides of the assistant number, the assistant competence, education and knowledge are important to determine the success of the assistance. Agriculture and hortikultura based education must be the main spesifically of assistant of farmers. The high schools of agriculture or hortikultura are well qualified and can skilled not only by long-term (bachelor and master degree) but also with short-term programs like training (Istudor *et al.* 2010) while the characteristics, motivations and independence of assistants influence the competence of agricultural assistants (Bahua and Limonu 2016).

2. The lack of public interest with horticulture

Basically villagers in Simpang Empat Banjar more interested in rubber plantation, which has become the majority of the work of the community Simpang Empat Village Banjar Regency. Their comfortability as farmers, causing the less interested in developing horticultural crops. People maintained the tradition of rubber gardening, assume the tradition can not be changed in absolute and it can lead to inhibition of social change in society. It happens because people are not willing to accept innovation from outside about the horticulture development. In fact, the development of horticulture is one of the factors that can encourage the expected changes in a society and even increase the welfare of the community.

The other caused of the horticulture lower interest, it can be the price fluctuations of horticulture product especially vegetables are generally higher than fruit, rice and palawija in other words the imbalance between supply volume and consumer needs. The margins of vegetable marketing are also relatively high, while on the contrary the price received by farmers and the transmission of prices from the consumer area to the producer area is low (Irawan 2007).

3. *The less of amount of facilities*

Facility agriculture is artificially, constructed through the use of facilities, to change its internal environment element, as planting, breeding and other agricultural areas of production and to create favorable conditions to improve the quality of agricultural and livestock production and increase agricultural production (Guangyong *et al.* 2011) Implementation of empowerment program based on horticultural development in Simpang Empat Village, Banjar Regency, will not succeed without the support of various facilities and infrastructure supplied by PT KCM.

The very important facilities in the empowerment program based on the development of horticulture in Simpang Empat Village, Banjar Regency is a wellbore that serves as a source of water to irrigate agricultural land. However, the number of existing borehole is still very less because there is only 1 (one) drilled well and have to irrigate 12 ha total area. A well-stocked can not be used maximally to irrigate crops because of the large size of the land, so the far fields/lands from drilling wells require farmers to use vehicles or transport vehicles to brought water from wells. The limitation of the borehole becomes a serious problem considering the location or position of the empowerment program based on the development of horticulture in the plains far from the water source. It related with the research result that lack of adequacy of facilities ratio cause the increasing of agriculture costs (Ansari, Gerasim, and Mahdavinia 2011). The drip irrigation shows the good results in the loss of red pepper and melon approximately 35% Jawa Island, although the introduction of drip irrigation has not been fully adopted by farmers but network components such as drip irrigation tank, PVC or tertiary slang can be applied at the farm level (Setiapermas 2013).

4. *The low durability of agricultural products*

The empowerment program based on horticulture development in Simpang Empat Village of Banjar Regency produces agricultural products that have good quality, but unfortunately have a short durability. This means that vegetables quickly withered if not quickly distributed to the market.

Drying the agriculture product like vegetables under controlled conditions of temperature and humidity maybe helps the agricultural food products to dry reasonably rapidly to a safe moisture content and to ensure a superior quality of the product. The choose of right drying system is important in the process of drying agricultural products, and in Indonesia with good sunshine, drying of agricultural food products using solar dryer having solar thermal energy storage can be used by thermal, electrical, chemical, and mechanical methods (Bal, Satya, and Naik 2010).

5. *Short training period*

Education and training related to agriculture has a positive significant relationship with profitability, employment, increasing production and satisfaction (Ansari, Gerasim, and Mahdavinia 2011). The training is part of the horticultural development empowerment program organized by PT KCM in Simpang Empat Village, Banjar Regency. The training have been done was a short-term educational process that uses systematic and organized procedures. Time allocated for the implementation of training related to horticultural development in farming communities Simpang Empat Village is still considered very short and not scheduled, thus causing the level of public understanding of the material presented in each training becomes less optimal and affects the high level of community dependence on the instructor. Actually, the short training will be effective to increase the knowledge, spirit and technically of the farmers if its held continually and used the multiple interactive training materials, case studies, role plays etc (Istudor *et al.* 2010).

Empowerment Strategies for Sustainability of Programs in the Community

Empowerment initiatives such as crowdsourcing, co-creation and brand communities are fast emerging as powerful tools to strengthen the connection between products and their customers, and can be used successfully by brands to initiate dialog with customers for various marketing processes (Acar and Puntoni 2016). The determination of the right strategy in empowerment program based on horticultural development in Simpang Empat Village, Banjar Regency

becomes an important factor as the determinant of the program success. One method to determine strategy is

through swot analysis. As for SWOT matrix in this research can be seen in the following fig. 1.

Internal	Strength	Weakness	
	<ul style="list-style-type: none"> a. Communication and cooperation between farmers (gapoktan) with government and private agencies running well. b. The existence of financial support from companies and government c. The availability of human resources who serve as counselors and extension workers d. Availability of agricultural support facilities 	<ul style="list-style-type: none"> a. Public participation is still lacking, given the public tend to the comfort zone (Comfort Zone) in the rubber plantation business b. The number of counterparts does not match the number of farmer groups c. The farmers' dependence on the instructors is still very high 	
External	Opportunity	SO Strategy	WO Strategy
	<ul style="list-style-type: none"> a. There is still plenty of vacant land available a. The presence of modern market entrepreneurs who are willing to accept the results of farming 	<ul style="list-style-type: none"> a. Use the available funds to cultivate the kosong land into new agricultural areas b. Adding watering facilities in the form of drilled wells c. Establish cooperation with modern market in marketing 	<ul style="list-style-type: none"> a. Increased community participation in the management of vacant land into new land a. b. Increase the number of chaperones coming from the relevant offices
	Threat	ST Strategy	WT Strategy
	<ul style="list-style-type: none"> a. Number of irrigation facilities that are not in accordance with the land area b. Fertilizer prices are increasingly soaring c. Plant pests that often attack the farmers' crops d. Farmer yields that have low endurance 	<ul style="list-style-type: none"> a. Optimizing existing irrigation facilities ie drilling well with pipeline system b. Maximizing the use of funds for self-help fertilizer 	<ul style="list-style-type: none"> a. Increase community participation in training and manufacture of organic fertilizer b. Accelerate the process of delivering well-packaged crops to marketers' partners

Fig. 1. SWOT (Strength, Weakness, Opportunity and Threat) Matrix.

The analysis of internal factors consisting of strengths and weaknesses, as well as external factors consisting of opportunities and challenges of the Community Empowerment Program based on horticultural development as a form of CSR PT KCM produces 4 (four) alternative strategic choices: consisting of SO (Strength and Opportunity), WO (Weakness and Opportunity), ST (Strength and

Challenge), and WT (Weakness and Challenge). Based on the description, the analysis of internal factors (IFAS) and External (EFAS) Community Empowerment Program based on horticultural development as a form of social responsibility of PT KCM to the social environment of the company, especially in Simpang Empat village Banjar Regency can be seen in the following table 1.

Table 1. Internal Factor Analysis Strategy (IFAS) dan External Factor Analysis Strategy (EFAS) of Community Empowerment Program Based on Horticultural Development.

Nu.	Description	Weight	Score	Value (Weight x Score)
I	Strength	100		390
	a. Communication and cooperation between farmers (gapoktan) with government and private agencies running well.	20	4	80
	b. The existence of financial support from companies and government	40	4	160
	c. The availability of human resources who serve as counselors and extension workers	10	3	30
	d. Availability of agricultural support facilities	30	4	120
II	Weaknesses	100		340
	a. Public participation is still lacking, given the public tend to the comfort zone (Comfort Zone) in the rubber plantation business	40	4	160

Nu.	Description	Weight	Score	Value (Weight x Score)
III	b. The number of counterparts does not match the number of farmer groups	35	3	105
	c. The farmers' dependence on the instructors is still very high	25	3	75
	<i>Opportunities</i>	100		460
IV	a. There is still plenty of vacant land available	40	4	160
	b. The presence of modern market entrepreneurs who are willing to accept the results of farming	60	5	300
	<i>Threat</i>	100		320
	a. Number of irrigation facilities that are not in accordance with the land area	35	4	140
	b. Fertilizer prices are increasingly soaring	20	3	60
	c. Plant pests that often attack the farmers' crops	30	3	90
	d. Farmer yields that have low endurance	15	2	30

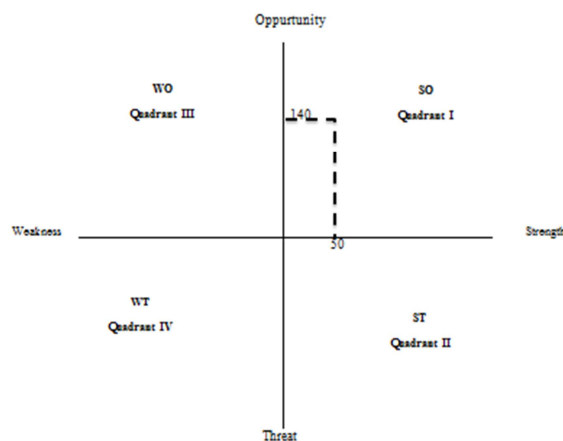


Fig. 2. Analysis and Strategy Choices.

Information :

X axis = Total Strength - Total Weakness = 390 -340 = 50

Y-axis = Total Opportunities - Total Threat = 460 - 320 = 140

The fig. 2 shows that the position of community empowerment program based on horticultural development of PT KCM was in quadrant I. This position proves that the community empowerment program based on horticulture development of PT KCM in Simpang Empat Village Banjar Regency is strong and potentially. The tactical recommendation or strategy given is progressive, its mean that the Community Empowerment program based on horticultural development from PT KCM is in excellent condition and steady. So it is really possible to continue to run the expansion, enlarge the growth and achieve maximum progress. Based on the analysis, then the choice of strategy is the SO strategy used the power to take advantage of opportunities or marriages between strenght and opportunities which

will arise strategy swot matrix model (Zheng and Liu 2013). Some models are quite comprehensive and in detail complete all the above models SWOT analysis so that, the planned opportunities can work well by harnessing the existing forces. So the strategies are used the available funds for cultivating the emty land into new agricultural areas, added watering facilities in the form of drilled wells, cooperated with modern market in marketing the product. SWOT analysis and matrix with SO strategy is also suitable for the historical progress of agriculture and for the further development of multifunctional agriculture (MFA) (Zheng and Liu 2013).

The other country especially Ghana's strategies to achieve sustained agriculture growth and development also contribute to national economic growth, the programs are upgrading human resource development and institutional capacity, increasing farmers' access to financial services through polices and programs that enable growth of the public and private financial institutions, developing appropriate technology for small holder and commercial agriculture sectors, improving infrastructure such as roads, telecommunications, and irrigation and improving access to Ghana's agriculture products to regional and external markets (Babu, Mensah, and Kolavalli 2007).

Conclusion

CSR program in the form of community empowerment based on horticultural development as a form of social responsibility of PT KCM to the community around the mine, especially Simpang Empat Village, Banjar Regency has been implemented in accordance with the plan.

Problems in the implementation of empowerment based on horticulture development in Simpang Empat Village, Banjar Regency were the lack number of companion, the lack of interest of the community with horticulture, the less number of facilities, the short durability of agricultural products and the plant damage caused the plant pests threat.

Strategy that can be applied in the implementation of empowerment program based on horticultural development as a form of social responsibility from PT KCM in Simpang Empat Village, Banjar Regency is SO strategy with work program consist of the using of available fund for cultivating empty land into new agricultural area, the adding of watering facilities in the form of drilled wells, and the establish cooperation with modern market in marketing the product.

Recommendations

Community participation in community empowerment programs needs to be improved, so that the community is not only as the object of empowerment program but the community is also as the subject of the empowerment program.

It is necessary to synergize the Regional Government with the Company. Banjar Regency Government should be actively involved in taking part in empowerment programs implemented by the company through horticultural development programs, for example facilitating extension workers, vegetable seeds, medicines and agricultural mechanization, and the company was hopefully expand the operational area of community empowerment so that its usefulness could be felt more broadly.

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