The Empowerment of Small-Scale Beef Cattle Farmer Households: Case Studies of Csr Ptpn Xii Program, East Java, Indonesia

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Abstract

This study aims at determining the empowerment of small-scale farmer as the participant of CSR PTPN XII program. The study used qualitative approach with case study strategy. The selection of the subjects was done through the combination of purposive and snowball sampling methods. Based on the result, there are two types of small-scale farmer empowerment namely innovative and conventional empowerment types. The innovative household has the characteristics of high accessibility toward human assets, being responsive to innovations, and using economic calculations as a consideration in decision making. Innovative household generally has a high empowerment rate, as it is shown by its balance accessibility toward all household assets. On the contrary, conventional household tends to have a low empowerment rate for it has low accessibility toward human assets as well, and it affects the accessibility toward all assets. There is a household which owns low human assets, but it has a high social asset between these two household types. This type of household tends to be responsive toward innovations.

Key words: accessibility, conventional, innovative

Introduction

National demand toward beef highly depends on beef cattle. Beef cattle become the second largest source of meat supplier in Indonesia after the poultry chicken (Ngadiyono, 2004; BKPM, 2012). Beef is one of the commodity priorities in the development of national food sustainability, especially the cattle (Daryanto, 2009). The self-supporting beef, planned on 2010 and revised in 2026, had not achieved its optimal performance since Indonesia still have to import beef cattle to fulfill the national demand toward beef (Maluyu, *dkk*, 2010). The gap between beef production and meat consumption in Indonesia opened up the opportunities of beef cattle farmer. The fulfillment of national beef demand can be done from two sources namely private companies including state enterprises and local farms.

Beef cattle farm business in Indonesia are dominated by small-scale farming enterprises with the number of 4,204,213 farmers' households who control more than 98 per cent livestock in Indonesia (Ditjennak, 2015). These local farm business still becomes the important support for the national economy since it is the livelihood of most people in the country side. Local

farm generally has a relatively small-scale business, limited capital budget, traditional maintenance system both in breeding and fattening (Talib *et al*, 2007; Ashari *et al*, 2012). The limitations to develop the business of traditional small-scale farmers to larger business scale are on the access to the production facilities and limited human resources of the owner (Saragih, 2009).

The potential of small-scale farmers as the support of Indonesian people to supply animal comestibles is in need of attention of all stakeholders. The development of livestock industry is a shared responsibility between the government, local society, and also private companies. Those three components of the managerial need to synergize each other to build well-structured institutional in order to optimize the utilization of various resources in the development of prospective farm system. This became the basis of PTPN XII farming business in allocating half of their CSR fund for cattle farm sector by giving loans to beef cattle business. Through CSR program, the companies gave their contributions toward the development of farms through the empowerment of farmers around their operational area.

CSR program was done through the partnership program and environmental development (PKBL) in accordance with the regulations of state enterprises (BUMN) ministry. This program consisted of partnership and community development program. The partnership program is focused on beef cattle business for the plantation community. Agro ecosystem background, livelihood, culture and character development would affect the lending capital that aims at improving the productivity of beef cattle and increasing household income. Therefore it is necessary to learn the condition of the farmers' empowerment based on their accessibility to household's capital.

Theoretical Concept

Empowerment points out personal ability, especially the vulnerable and poor groups so they could have access to productive resources that enable them to increase their income and obtain goods and services they need (Mardikanto, 2010; Muhammad, 2012). In this case, the access to productive resources is farmers' access to natural, economic, social, human, and physical capital which could be called as assets (Kranz, 2001; RakodidanLlyod-Jones, 2002; Ellis, 2007; Maksimilianus, *dkk*. 2013).

Ellis (2000) defined assets as various forms of capital, such as social, physical, human and financial capital owned and used for the lives of individuals or households. Livelihood strategies include aspects of choice on several sources of livelihood around the community. The more diverse the selection, the more possible to the livelihood strategies to occur. The field of agriculture is clearly illustrated by the intensification and diversification. Livelihood strategies can also be reviewed from an economic point of production through the efforts of cost minimization and profit maximization (Ihromi, 2004; Ellis, 2007; Scoones, 1998 dalam Eneyew, 2012). In addition to their selection, livelihood strategies require human resources and capital. The pattern of social relations also gives variations in livelihood strategies.

Conceptually, according to Chambers and Conway in Ellis (2000) and Krantz (2001), there are five types of capital which are owned/controlled by the household for the achievement of livelihood, namely:1) human capitals including the quantity (human population), level of education and skills owned and their health, 2) nature capital including all natural resources that can be utilized by humans for survival. It can be in the form of water, soil, animals, air, trees and other sources, 3) Social capital in the form of social networks and institutions in which people could participate and gain support for their survival, 4) financial capital in the

form of accessible credit and supply of cash for the purposes of production and consumption, 5) physical capital or various items needed during the production process, including machinery, tools, instruments and various other physical objects. Farmers' accessibility toward household capital or asset needs to be known to grasp the condition of targeted empowerment, so it can be used as the empowerment plan in the future.

Research Method

This research was conducted at the plantation unit Blater city with the main consideration that Blater city plantation becomes the center for pioneering CSR PTPN XII program, with the establishment of cluster farms (PTPN XII, 2011). Blater city plantation unit consists of 3 (three) *Afdeling* or region namely Afdeling Blater, Afdeling GuciPutih and Afdeling Terate.

The present research used qualitative approach which is supported by quantitative data with case study research strategy. The data collections were in the form of primary and secondary data. The data collected by interviewing were also comprised with key informants namely; CRS officer, deputy manager, and rancher leaders. The collection of secondary data was obtained from the documented company records, both from central and branch division.

The subjects were small-scale beef cattle farmer households as the participant of the partnership. Sampling system as described above were using *purposive* and *snowball sampling*. The key informants in this study were the head of CSR, CSR staff, plantation deputy manager, and leaders in Afdeling Blater, Afdeling Guci Putih and Afdeling Terate Blatter city PTPN XII. Furthermore, based on the report from the aforementioned informants, some informants were selected based on their knowledge on current problem, associated problem, and etc. Thus, out of the total 40 partnership participants, 15 people were taken as sample.

Data analysis was done interactively and repeatedly up until it finished and already saturated. The stages in the data analysis are data reduction, data display, and data conclusion or verification. The data validity was accomplished through triangulation in the form of triangulation of sources and methods. The measurement of each household empowerment was done through pentagon or the cobweb, by making categorization of capital and scoring scale from 0 to 100.

4. Result.

Farmer's empowerment as the participant of the partnership is based on the accessibility toward productive resources such as farmer's accessibility to nature, economic, social, human resources, and physical capital.

Nature Capital

Plantation potential as the green forage feed is very large because of the vast empty land or on the sidelines of plantation crops, forest nearby plantation, lane-side of the road, and other facilities especially in rainy season. The availability of natural green forage resources and the synergy between the ranch and the plantation are the reasons why this kind of partnership mostly given onto cattle farm business. As stated by head of CSR program Drs. M. Rokib as follows:

"The considerations of giving more partnership to this farming business is because it still synergizes with plantation business. Cattle are producing manure which are needed for the

crops and the availability of fodder in the form of grass is precisely the weeds for plantation crops"

Plantation prospective in the supply of forage is quite large, amounting to 5, 9 Ha. The entire state is able to support as many as 2957 adult cattle per year. The availability of natural green forage grass actually could be accessed freely by the public.

There are two ways in which the farmers could do in the utilization of the natural resources forage grass; farmers who depend entirely on natural forage grass and provide additional fodder beside green grass. Most of the farmers are very dependent on nature capital, only a few who cast off technology support with the additional fodder in the use of nature capital as cattle's food. Likewise in the use of the breeds, some farmers use supreme breed such as Limousin, Simental or the result of cross-bred, and some use local breeds such as hybrid Ongolecow (PO) and Blateran.

Economic Capital

Economic capital can be in form of credit card that can be accessed from the existing financial institution and cash that can be accessed via household income. Financial institutions which can be accessed by plantation community with the status of non-permanent employees are cooperative employees firm and social institutions such as social gathering and PKK. Financial institutions which can be accessed by employees (permanent workers) are cooperative employees firm, BRI and Agro bank with collateral SK. Corporate partnership with cattle farmers by providing loans with low interest could improve farmer access to economic capital. Based on in-depth interview with the participants of the partnership, most of the income sources in Blater city plantation unit can be derived from: 1) field crops, 2) livestock, 3) agriculture fields, 4) broker and cattle trader services, 5) non-farm enterprise. Based on the processed result of the interviews, it is known that the income of farming is in the second ranks after the wages of field jobs itself. Non-farm enterprises is also a major component of the livelihood of partnership' participants, but out of 40 only 2 people who have secondary jobs in non-farm enterprises with huge capital amount. Others are stalls which become the livelihood sources of many partnerships' participant housewives. In addition, many housewives become freelancer or contract workers at the plantation. The largest expenditure component is food, followed by transport cost, education cost, etc.

Farming business is attached to the social and cultural life of local communities, so the ownership of livestock has become a symbol of social status. Livestock are very valuable in the life of society as referred as "*rojokoyo*" in society. Therefore the quantity of animals is often more important than its economic value, and it mostly happens to a less educated farmer. It is as stated by key informants as follows,

"That's how it is... The people sometimes think that quantity is more important than its economic value."

Social Capital

Social capital can be in the form of networking, social institutions and collective actions in which everyone is participating and gaining support for their own survival.Net-working or social network which can be accessed by farmers' household besides plantation companies' staff, fellow employees and people outside the plantation. Company's staff tends to have more interaction than the others, because of their leadership duties at company and relation

with the people around plantation. In addition, there is a profit sharing arrangement for the maintenance of beef cattle that has been rooted around the society called "gaduhan".

Based on the ownership, cattle can be distinguished as:a) *menggaduhkan*, b) private property and *menggaduhkan* (entrusting), c) private property, d) private property and *menggaduh* (entrust), d) *menggaduhkan* (entrusting). This hierarchy describes the social status of the owner in the society, where the number of ownership defines his/her social status. Someone who is already wealthy enough, usually no longer wanted to maintain the cattle by themselves, they will entrust their farms to their employees. A well-established participant once said:

"...most of the people here entrust their cattles to the employees who live in the plantation, as what I do now... my house is inside Keraton (palace)."

Physical Capital

The amount of livestock authorization by the partnership participants is able to determine the physical capital or household capital which can be obtained from their farm. Land ownership, rice fields, and houses are also the yields of household assets accumulation process from different livelihood (from the result of in-depth interview with the sample farmer). Table 1 shows the total of the authorization of the partnership participants.

Tabel 1: The total of farming households authorization

| Blater | | | | Guci Putih | | | | | Terate | | | | | | |
|--------|-----------|-----------|----|------------|-----------|----|----|----|--------|-----------|---|----|-----------|---|-----------|
| Heads | B1 | B2 | В3 | B4 | B5 | G1 | G2 | G3 | G4 | G5 | T | T | T3 | T | T5 |
| | | | | | | | | | | | 1 | 2 | | 4 | |
| Cattle | 4 | 1 | 4 | 2 | 5 | 3 | 1 | 2 | 1 | 2 | 2 | 3 | 10 | 2 | 2 |
| K/D* | - | - | - | - | - | - | - | | | | | 4 | - | - | 16 |
| Chicke | 10 | - | 7 | 5 | 3 | 5 | 2 | 2 | 10 | 7 | | 10 | - | - | - |
| n | | | | | | | | | | | | | | | |

B1...T5 means households code

Tabel 2: The Total of House, land, and rice field ownership

| | Blater | | | | Guci Putih | | | | | Terate | | | | | |
|----------------------|--------|--------|--------|-----------|------------|----------|----------|----------|----|--------|----|----|----|-----------|----|
| | B1 | B 2 | В 3 | B4 | B 5 | G1 | G2 | G3 | G4 | G5 | T1 | T2 | Т3 | T4 | Т5 |
| House | 1 | 1 | 2 | - | 1 | 1 | 1 | 1 | - | - | - | - | 1 | - | 2 |
| Land, Ha | - | - | - | - | - | - | 0,2 5 | 0,3 5 | - | - | - | - | - | - | - |
| Rice field, Ha | 0,5 | - | - | - | - | 0,2 5 | 0,2 5 | - | - | - | - | - | - | - | - |
| Motor- bike | 3 | 1 | 2 | 1 | 3 | 10 | 2 | 1 | 1 | 2 | 3 | 3 | 3 | 1 | 1 |

B1...T5 means households code

Table 2 shows that there are many households who already owned their houses outside the farm; 15 out of 9 sample subjects have their own houses while 4 subjects have their own rice

^{*}K/D means Goat (K) or Sheep (D)

field and land. The total of household assets authorization would influence the choice of occupation as well.

Human Capital

The secondary data points out that the total number of partnership participants of Blatercity farming unit year period 2013- 2015 are 40 people. Their ages range from 25 - 62 years old for all the three sections, with the average of 46 year old. Most of their educational backgrounds are also considered as low, ranging from elementary school, senior high school, and only two subjects who obtained their bachelor's degree. Meanwhile, the most educational background earned by the partnership participants' head of the households is elementary school with the total of 28 people, 9 people with SLA degree, 1 person with junior high school degree and 1 person with bachelor degree. In one household of partnership participants, there are six members the most and it was only one family, two members the least, and most of the households have four members which include the parents and two children.

Based on the accessibility characteristics of household assets, it can be concluded that:

Table 3: The empowerment of household (HH) farmer of the partnership participants of CSR programs

| - | <u> </u> | Modal | | | | | | | | | |
|---------------|---------------|------------|-------------------|--------------|----------|-------------|--|--|--|--|--|
| Code of HH | Age (year) | Human | Nature | Social | Physics# | Financial * | | | | | |
| B4 | 25 | SD | Depends on nature | Sdr, 2N | 0,2 | 1 | | | | | |
| G3 | 51 | SD | Depends on nature | gd + sdr, 2N | 2,3 | 1 | | | | | |
| G4 | 26 | SD | Depends on nature | gd, 2N | 0,1 | 1 | | | | | |
| T4 | 31 | SD | With technology | gd, 3N | 0,2 | 1 | | | | | |
| B5 | 52 | SD | Depends on nature | Sdr, 2N | 1,7 | 3 | | | | | |
| T5 | 55 | SD | Depends on nature | gd+sdr, 2N | 2,7 | 3 | | | | | |
| T1 | 38 | SD | With technology | gdk+sdr, 3N | 0,4 | 1 | | | | | |
| T2 | 53 | SD | Depends on nature | Sdr, 3N | 2,8 | 1 | | | | | |
| B3 | 50 | SD | With technology | gdk+sdr, 3N | 3,5 | 3 | | | | | |
| B2 | 52 | SLP | With technology | Gdk, 2N | 1,1 | 1 | | | | | |
| G5 | 53 | SLA | Depends on nature | sdr, 3N | 0,3 | 3 | | | | | |
| B1 | 52 | SLA | With technology | gdk+sdr, 4N | 2,6 | 5 | | | | | |
| G1 | 52 | SLA | With technology | Gdk+sdr, 4N | 3,2 | 4 | | | | | |
| G2 | 35 | S 1 | With technology | Gdk, 3N | 3,5 | 3 | | | | | |
| T3 | 48 | SLA | With technology | Gdk, 3N | 1,2 | 4 | | | | | |

SD means elementary school

SLP means junior high school

SLA means senior high scholl

S1 means bachelor

Gdk (menggaduhkan)means entrus

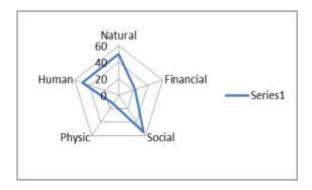
Gd (menggaduh)means entrusting

Sdr (milik sendiri)means private property

N means net working

means value of assets equivalent house

^{*}means income level



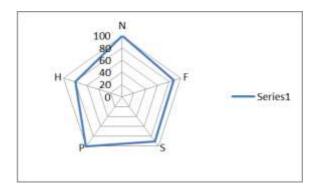


Figure 1. Household Empowerment of Conventional farmer

Figure 2. Household Empowerment of innovative farmer

Discussions

As it can be seen in Table 3, household capital accessibility depends on the type of the empowerment: 1) conventional empowerment type which has a low accessibility to the human assets, 2) innovative empowerment type or the household with a high accessibility to human assets. Table 3 also shows the tendency that high formal education has direct proportion to farm management, the amount of household income and assets owned. The amount of assets is associated with a high amount of household income and the age of the farmer. It can be estimated because of the influence of years of service and the times spend for farming businesses.

Human capital is an intrinsic capital which will affect the ability to access to other capitals (Munkager and Oskjear, 2013). A good education provides a good position in the company and a better salary. A good education also affects the mindset and livestock business competence. They tend to be responsive to new innovations, so that the productivity of livestock is also more efficient. These causes the households have the ability to perform the accumulation of household assets and resources used to supplement their livelihoods, so that these households have a business opportunity that is better any way. Aviati (2015) stated that education is an attempt to make changes based on the science of behavior and experiences that have been recognized and sanctioned by the society. Low education will be associated with low competence which causes low farm productivity as well, because of its inability to reach out and adopt resources, technology and management skills. The higher the person's level of education, the more rational and competent the mindset and insight will be, especially in applying the technology of farming. On the influence of human capital on the adoption of fattening management, as stated by Nur and Sugiarto (2015) about the importance of human resources from their study that farmers who did fattening business have higher education from Elementary than those in livestock breeding (dropout). Similarly to the young farmers doing cattle fattening business while breeding business is mostly done by older farmers. Farming business using fattening system is a farming business system which has full capital and technology. Therefore, human capital affects the accessibility of other household capital and the characteristics of farmers' households.

Farmers' households with good accessibility to education are more open and receptive to new innovations, capable of accessing the technology and use economic considerations in

decision making. Therefore, this type of household empowerment is called as innovative empowerment. Different things happen to the households with less education accessibility as they do their businesses for generations from their parents and ancestors, less responsive to innovation and change, and settle their cattle have inherited in their cultural value. This type of household empowerment is called as conventional empowerment.

Scott (1976) mentioned that subsistence farmers do farming based on hereditary habit (conventional), put aside the economic considerations and unable to receive innovation. Conventional farmers with these traits have low accessibility to the human capital. Contrary to the conventional type, innovative empowerment type is based on the economic calculations in decision for their farming operation. Popkin (1976) suggested that rational society like transformations, in needs of market, have exploitative relationships. Hadisaputro (1970) in Mardikanto (2013) stated that rational society who still has simpler technology is categorized as an independent subsistence society.

The categorization of beef cattle ranchers' household empowerment type (Table 3) presents a general categorization, but it has the opposite reality. A household with low educational assets sometimes has higher economy assets. This condition is probably because of their hardworking mindset and a good household financial management. It could be the other way around in which the household with a higher human asset has a low economy asset because of the high household amenability too. The categorizations of social reality are not always applied exclusively and overlapping as the categorizations proposed by Scott (1976) about the conventional hierarchical status of a small farmer in the village: small landowners, tenant farmers, and labors.

Social capital is closely linked to the amount of assets and income. B2 and G3 with low social capital and B3 with higher social capital can be seen from B3 which has income and higher assets, with the same age. The households with social capital and higher networking are more successful in running the business as they tend to have higher income as well. The head of T1 and T4 households who have low accessibility toward education are more responsive since they have changed their way of feeding and supreme seeding recognition in the cattle business after the intervention of fattening beef cattle management. Social capital could increase the benefits in improving economic efficiency, management of nature capital and use of infrastructure (Physical capital) (Munkager and Oskjear, 2013). Subaris (2016) stated that social capital is a resource that can serve as an investment to acquire new resources. To improve the competence of farmers in managing the business and low education level could be overcame by increasing the interaction of farmers with other agencies or other communities. This can be done by providing training opportunities and improving interaction with other farmers through increasing the capacity of the group. The high accessibility of human capital and social capital will lead to the accessibility to nature, economic, and physical capital. Human and social capitals which support each other affect the accessibility toward other capitals. Tomatola (2008) suggested that there is a real influence among human, physical, social capital and the empowerment of cattle farmers in the development of beef cattle business.

The households with high accessibility of human capital will show the balance of the five capitals if it is drawn into the pentagon. Through the figure of graphics and cobwebs, the empowerment condition of one of the partnership participant household (B4) with conventional and innovative type (household G1) are illustrated in Figure 1 and Figure 2.

Figure 1 is the pentagon of one of conventional type farmer household, while Figure 2 is the innovative empowerment type. Pentagon could be used as the representation of the society's empowerment performances. The imbalance and low accessibility toward the five capital show their susceptibility (Rakodi and Lloyd-Jones, 2002; Maximilianusdkk, 2013).

Conclusion

- There are two types of small-scale beef cattle farmers' empowerment based on the accessibility to the household assets, which are conventional and innovative.
- Innovative farmers tend to be more capable in gaining their household assets and deciding their occupations, represented by the pentagon graphics which show the balance of all assets accessibility.
- There is a household which owns low human assets, but it has a high social asset between these two household types. This type of household tends to be responsive toward innovations.

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