ENTREPRENEURIAL EMPOWERMENT OF AGRICULTURE AND INDUSTRIAL SECTOR IN RURAL AREAS OF SEMARANG REGENCY INDONESIA

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ABSTRACT

Sources of income of farmers not only from the agricultural sector, but farmers often also work in other sectors such as in the non-agricultural sector. In this regard, the economic empowerment of farmers should also consider the development of the capacity of farmers outside the agricultural sector. This research aims to develop a general model of entrepreneurial empowerment in agriculture and non-agriculture industry based on factors that affect economic welfare of farmers who sought in agriculture and non-agricultural industries in rural areas in Semarang Regency. The study was conducted by distributing questionnaires to 342 farmers who only work in agriculture and farmers have a second job in the agro-processing industry sector. The analysis was performed by multiple linear regression analysis approach. The results found in this study is the empowerment of poor rural farmers not only can be done by increasing the capacity of physical resources (land tenure, irrigation networks), but also non-physical resource capacity (capacity management, social capital, entrepreneurship), and the relationship between business sectors farmer. The implications of the results of this study are farmers with low agricultural land tenure and no access to irrigation should be encouraged to self-employed in the industrial sector in addition to the agricultural sector to increase their revenue through the development of management and entrepreneurial capacity

Keywords: Agribusiness, Agro-industry, Empowerment, Social capital, Entrepreneurial culture.

1. INTRODUCTION

Semarang Regency is one of the growth areas in Central Java Province, Indonesia. Based on the data of the Central Bureau of Statistics (2014b), the number of poor people in the Semarang
Regency is 28.80% of the total population. Most poor people are located in rural areas. Most of the population of the Semarang Regency working in the agricultural sector (48.28%). Various forms of national and local government programs have been implemented to help the community. Various aid schemes have also been carried out starting from the means of production subsidies, capital assistance, training numbers are very diverse. Various efforts to empower the poor productive economic activity or economic people, often fail because of the complexity of the problems faced. One problem faced not only increasingly limited resources, but also because of the limitations of the farmers (Syahyuti, 2012).

In terms of resource and infrastructure capacity, in general the Semarang Regency is a fertile area, but most farmers have a narrow land tenure is less than ¼ hectare (Kurniati, 2013). This lead to the production cost per unit is higher and difficult to produce efficiently, so that agriculture can no longer provide for the family. The increase of population affects the availability of agricultural land is increasingly limited, so mastery of agricultural land by farmers to be very narrow. Extensive wetland in Semarang Regency reduced an average of 1.6% during the years 2009-2013 agriculture. Besides, not all farmers have access to irrigation networks (44%) (CBS, 2014b). Most of the agricultural and industrial businesses that occupied by the general public is still dominated by small-scale enterprises, the technology is simple, highly influenced by the season, and the results of limited production for local consumption (Syahyuti, 2012). This will lead to lower farm income in agriculture. Most poor rural farmers trying sector agro-processing industry in addition to the main work in agriculture to increase revenue, however, business is still done traditionally, hereditary, or do anything that can be done and not the usual market-oriented and characterized by a lack of managerial capacity and entrepreneurship (Kurniati, 2013). Lack of education and the ability to access the production technology is also a problem. Traditional businesses with low tech, easy to imitate cause that low bargaining position of the parties who have access to the market (Tambunan, 2006).

Farmers need to improve skills in entrepreneurship, as in post-harvest handling and processing of agricultural products, because of agricultural products that are sold as raw material, will get a low price. Agricultural products are not durable products. The production of abundant, lower resale prices. Entrepreneurship in agriculture, especially with regard to the processing of agricultural products needs to be improved before the sale so they can get a higher price. Industrial processing of agricultural products with an entrepreneurial-based in addition to providing value-added agricultural products, also can increase the demand for agricultural products, and employment opportunities. The motor of the agricultural sector should be changed from farming to industrial processing of agricultural products (agro). Agro-industry development in rural areas as agribusiness support necessary to increase the added value and demand for agricultural products, so it can indirectly increase farmer welfare (Department of Agriculture, 2008).

In addition to physical capital and economic capital, social capital such as local institutions, local knowledge, norms and local customs are also seen as an important component for the development of community economic empowerment (Fukuyama, 2000). Social capital such as
mutual cooperation, mutual help, and mutual remember reminds between individuals within an entity villagers and taste and passion for each other, mutual trust is an important model in the empowerment of farmers in the countryside. Social capital is accompanied with high integrity will create synergies in community empowerment-based bottom-up, but high social capital with low integrity will create inefficiencies (such as corruption, manipulation and culture which is not good) so that it is not effective empowerment program. The failure of some government empowerment programs is because the people who still think the old pattern, namely cultural expect help with the relief formation (Syahyuti, 2007).

2. THINKING FRAMEWORK

Community empowerment means an effort to improve the dignity of society are in a state of not being able to escape from the poverty and backwardness (Mubyarto, 2000). Empowerment is the process: (1) awareness, (2) capacity, and (3) deception to achieve the goal. Awareness of "enlightenment" in the form of awareness that people have the right to have something. Capacity or often referred to as the "capacity building", or in simpler language means enabling or enabling. Deception is the process of power or authority in accordance with the receiving skills (Randy and Dan Riant, 2007).

Based on Classical Production Theory approach (Smith, 1776), empowerment of poor rural farmers can be done by increasing the capacity of the physical resources (such as land tenure, ability to labor, financial capital, irrigation networks, production machines). Based approach Neo-Classical Theory of Production (Cantillon, 1755), the Schumpeterian theory (Schumpeter, 1934) and the Social Capital Theory (Bourdieu, 1986), empowerment of poor rural farmers not only can be done by increasing the capacity of physical resources, but also non-resource capacity physical (such as capacity management, entrepreneurial capacity and social capital). Neo-classical theory of which is expressed by Cantillon (1755) describes the entrepreneurs in business management not only as a factor of production, but as an agent who took the risk and thus balance supply and demand in the economy. Cantillon (1755) sees entrepreneurs in the process of exchange (transactions) in the supply chain from producer to final consumer and affect the balance of supply and demand. Schumpeter (1934) describes entrepreneurship as a driver of market-based system. When a static market, entrepreneurs through the process of innovation introducing new products, methods of production, markets, sources of supply, or a combination of industry that affect the economy out of the previous equilibrium (Schumpeter, 1934). Further, entrepreneurs find opportunities to meet the demand to achieve a new balance (Kirzner, 1993). In a resource-based view approach (Resource Based View / RBV), entrepreneurs create 'core competence' (Hamel and Praharad, 1994), the dynamic ability to change (Dynamic Capability) (Teece et al., 1997), creating valuable products, unique, not easily imitated (Barney, 2002), 'lifecycle capability' (Helfat and Peteraf, 2003), and prioritizing skills than routine skills (Nelson and Winter, 1982). Management and entrepreneurship important role in the empowerment of small and medium enterprises such as small and medium enterprises in the agricultural and industrial sectors. UNDP (Tachiki, 2004)
describes seven key areas that are important to increase the capacity of small and medium enterprises which consists of: access to finance, access to markets, access to promotion, infrastructure access, network access, access to technology and innovation. While according to the APEC meeting in Ottawa September 1997 (Harvie, 2004), there are five key areas that are important to increase capacity which consists of: market, technology, human resources, finance, and information.

Bourdieu (1986) describes the importance of the role of social capital in the social structure other than economic capital. Fukuyama (2000) explains that in the implementation of community development (economic), social capital such as local institutions, local knowledge, norms and local customs are also seen as an important component for the development of economic empowerment in addition to natural capital and economic capital. Empowerment requires the interaction mechanism between the concept of top-down and bottom-up, between the growth strategy and people centered strategy. The concept of empowerment includes the notion of community development and community based development. Community development is a process involving the business community with others (outside the social system) to make the public system as a pattern and order of a better life, develop and enhance the independence and community care in understanding and overcoming problems in life, develop facilities and technology as a step increase initiatives, community service and so on. Philosophically, community development implies 'help people to help themselves', which means that the main substance in community development activities is the community itself (Suharto, 2005).

3. RESEARCH METHOD

Research conducted by share questionnaire to 342 farmers. One group of the questionnaire used for the interviews with farmers who only work in the agricultural sector. One group of other questionnaires used to for interviews with farmers who work/have sideline jobs in the manufacturing sector of agricultural products other than farmers. The welfare of farmers in this study measured from net income of farmers. Factors that affect the welfare of farmers in this study can be grouped into: personal characteristics of farmers, agricultural environmental characteristics, socio-cultural characteristics of farmers and farmers' management capacity. Personal characteristics of farmers consists of the age and education of farmers. Characteristics of agricultural environment consists of factors of land, land ownership and access to irrigation networks. Socio-cultural characteristics consist of factors of social capital and entrepreneurial culture. Capacity management is the management capacity of the farmers' access to markets, access to finance, management skills, access to technology and innovation. Analyses were performed with a descriptive approach and multiple linear regression analysis.

4. RESEARCH RESULTS AND DISCUSSION

Factors that affect the welfare of the farmers in this study can be seen Tabel 1. Model I is a model of the factors that affect the welfare of farmers in all the samples. Model II is a model of the
factors that affect the welfare of farmers in the sample group of farmers working in the manufacturing sector than in the agricultural sector. Model III is a model of the factors that affect the welfare of farmers in the sample group of farmers who only work in the agricultural sector. Model have a probability of F statistic = 0.000 (<0.05) (Table 1), so that the model fit to the data. In model, the coefficient of determination (Adjusted R-squared) as much 0.359 or 35.9%, means that the independent variables in the model can explain the dependent variable bound to the farmers’ welfare (WEALTH) of 35.9%, the remaining 64.1% is influenced by another factor out of the model. Based of model from Tabel 1 obtained that Land variable (SIZE), Access Irrigation Network (IRIG), Social Capital (SOCIAL_CAP), Entrepreneurship Culture (ENTRC), and capacity management to market access, access to finance, management skills, access to technology and innovation (KAP) a significant effect on the welfare of farmers (WEALTH) at the 5% significance level. Variable age of farmers is not significant in the models, while the farmer education variables affect the welfare of farmers (WEALTH) at the 5% significance level only in Model I (the entire sample). All variables have a positive coefficient indicates Land size, Irrigation Access, Social Capital, Entrepreneurial Culture, and capacity management, followed by increasing the welfare of farmers and arable land otherwise increasingly narrow, unavailable of irrigation access, more low the social capital, cultural entrepreneurship, management capacity followed by more low the welfare of farmers. Based on the results obtained from the test results as Table1, then the efforts to empower farmers to improve economic welfare (measured from the income of farmers) can be developed as Figure 1. Efforts to improve the welfare of farmers can be done by involving the 3 (three) factors, namely: (1) empowerment factors: awareness, capability and fraud, (2) the inclusion of the role of social capital factors, (3) the development of an entrepreneurial culture factor. These three factors also need to consider the characteristics of the agricultural environment.

<table>
<thead>
<tr>
<th>Variable</th>
<th>MODEL I</th>
<th>MODEL II</th>
<th>MODEL III</th>
</tr>
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<tbody>
<tr>
<td>Constanta (C)</td>
<td>-2013.49</td>
<td>-2175.27</td>
<td>-1926.8</td>
</tr>
<tr>
<td>A. Characteristic of Farmer Personal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Age (AGE)</td>
<td>-2.639</td>
<td>-2.295</td>
<td>-3.266</td>
</tr>
<tr>
<td>2. Farmer Education (EDU)</td>
<td>0.596</td>
<td>1.273</td>
<td>65.8</td>
</tr>
<tr>
<td>B. Characteristic of Agriculture Environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Land Size (SIZE)</td>
<td>0.503</td>
<td>0.692</td>
<td>0.376</td>
</tr>
<tr>
<td>2. Access to Irrigation (IRIG)</td>
<td>0.280</td>
<td>0.298</td>
<td>0.217</td>
</tr>
<tr>
<td>C. Characteristic of Socio-Culture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Social Capital (SOCIAL_CAP)</td>
<td>0.299</td>
<td>0.304</td>
<td>0.248</td>
</tr>
<tr>
<td>2. Entrepreneurship Culture (ENTRC)</td>
<td>0.311</td>
<td>0.327</td>
<td>0.263</td>
</tr>
<tr>
<td>D. Management Capacity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Management capacity to access markets; access to finance, management skills, access to technology and innovation (KAP)</td>
<td>174.133</td>
<td>3.314</td>
<td>2.552</td>
</tr>
</tbody>
</table>

R-squared | Adjusted R-squared | Durbin-Watson stat | F-statistic | Prob(F-statistic) |
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<tbody>
<tr>
<td>0.372</td>
<td>0.359</td>
<td>1.781</td>
<td>28.267</td>
<td>0.000</td>
</tr>
<tr>
<td>0.321</td>
<td>0.295</td>
<td>1.923</td>
<td>12.362</td>
<td>0.000</td>
</tr>
<tr>
<td>0.429</td>
<td>0.402</td>
<td>2.09</td>
<td>15.375</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Based on the results obtained from the test results as Table1, then the efforts to empower farmers to improve economic welfare (measured from the income of farmers) can be developed as Figure 1. Efforts to improve the welfare of farmers can be done by involving the 3 (three) factors, namely: (1) empowerment factors: awareness, capability and fraud, (2) the inclusion of the role of social capital factors, (3) the development of an entrepreneurial culture factor. These three factors also need to consider the characteristics of the agricultural environment.
Empowerment is not only to do with the top-down mechanism (through awareness, capacity and deception) but also requires the active involvement to the community (bottom-up) to include environmental aspects of agriculture, social and cultural rights of farmers. Community empowerment will fail without realizing the importance of including the cultural dimension and leverage the growing role of social capital in the communities in accelerating and optimizing the outcome of the empowerment process itself. Social capital consists of: the spirit of mutual cooperation, mutual assistance, and mutual trust between individuals remember, remind, reciprocities, social norms and ethical values are the foundation of the support that will determine the development and sustainability of diverse business activities in various sectors of life.

Empowerments also need to inculcate entrepreneurial culture in society. Culture is difficult to accept reform ideas from outside groups and social environment of a social entity has hindered the public to make an appropriate adjustment of values, norms, and group behaviour. Entrepreneurial culture of dependency culture change (such as expected on aid), and change the culture of rural communities that still resistance to change, leading agents to change.

Environmental characteristics of agriculture in Semarang Regency was marked by a factor of ruler ship status of agricultural land by small farmers. Wide narrow land ownership policy implies that rural areas do not give opportunities for improving the welfare of farmers as land is limited and does not own their own land, the farmers in the push for entrepreneurship in sectors other than agriculture industry to increase their income, such as through training, internships and market development.

![Figure 1. Model Entrepreneurial Empowerment in Agriculture and Industry](image-url)
In some agricultural areas still presents a good opportunity to entrepreneurship in the agricultural sector, as supported by the fertile land and sufficient peasant land tenure, the government can encourage farmers to remain entrepreneurship in agriculture or entrepreneurship in other sectors, as well as improving the understanding and skills of farmers that entrepreneurship in the agricultural sector is not only understood as a process of production but also the entrepreneurial spirit needs to be invested in the agricultural sector. On the acquisition of agricultural land is narrow (less than ½ ha) and not own agricultural land owned by the farmers need to be encouraged to entrepreneurship in industry sectors other than agriculture, land means that there is no opportunity again in favour of the welfare of farmers in subsistence to-day. In this case the government needs to encourage the growth of new businesses in addition to the agricultural sector, such as in industrial sectors other than agriculture to support agricultural activities. Policies to encourage entrepreneurs in the industrial sector not only provide added value of agricultural output and value added for the income but can also create new job opportunities in addition to the acquisition of agricultural land is getting narrower.

Semarang Regency is generally a fertile area. Main commodities produced in the framework of agricultural development are: rice, corn, and soybeans. Horticultural commodities are also widely available in Semarang district, such as fruits, vegetables and ornamental plants. Fruit crops such as banana, avocado, long an, durian, salak and jackfruit. Vegetables such as: cabbage, tomatoes, vegetables, leeks, carrots, chillies/peppers and celery. Ornamental plants are: gladiolus, tuberose, chrysanthemum and aster. Agricultural production in the country is only intended for export only, while yet to be fulfilled. Integration of agriculture and processing industry needs to be done to increase the added value and demand for agricultural products. Results commodity fruits consumed either fresh, cooked, canned, in juice form, are found in a variety of food-desserts, fruit salad, jam, yogurt, ice cream, candy and as a complement to meat dishes. Meat and pineapple juice are used in cuisines around the world. In many tropical countries, commodity fruits prepared, and sold on the street as a snack. Commodity fruits are not only used in desserts such as fruit salad, but also as a main ingredient in cooking, such as hamburger, and a pizza. Some commodities are milled fruits used in foods: yogurt, jam, candy, and ice cream. Pineapple juice is served as an aperitif, and also as a main ingredient in cocktails like coladas. Horticultural commodities consumed either fresh, cooked, canned food or raw materials used for industrial types, namely: (a) the food industry, as food additives (food supplement), products for direct consumption and flavour, (b) the pharmaceutical and healthcare industries, (c) Cosmetic industry, (d) the agricultural industry, as fertilizer, hydroponic supplements, supplements for tissue culture media and animal feed supplement your diet.

In order to improve the welfare of farmers in the rural area of Semarang Regency, a synergy between rural and urban industrial industries is needed. Based on the report of the Department of Agriculture of Regional Planning Bureau (2009), the industry in Semarang Regency is located in rural or sub-urban is an industry based on agriculture or agro-processing industry. There for, Semarang Regency in agricultural development policies oriented on industries based on agriculture.
These based on the following reasons: 1) that the raw materials available to the agricultural industry in Semarang Regency abundant in rural areas. 2) Labour is available in rural areas of Semarang Regency can be empowered to provide employment opportunities to prevent urbanization. 3) Urban industry in Semarang Regency is a large industry can combine various components for industrial enterprises in rural areas make optimum profits. In order to create synergy between rural and urban industries, the government of Semarang Regency has a policy to improve the innovation and creativity through training and education for supporting group industries that produce components and parts as well as the industry results as supporting other businesses that can be grown in rural areas. Entrepreneurship policy development in rural industrial sector is indispensable in improving the welfare of the communities in Semarang Regency (RPB, 2009).

The results found that the constraints of farmers who entrepreneur in industry sectors, such as: marketing and market access factors (71%), followed by capital access (11.76%), scarcity of raw materials (9.66%) and production technology which still traditional (81.93%), such as in the food and beverage industry, handicrafts, and woven bamboo. Capacity development includes access to: markets, technologies, human resources, finance, and information (UNDP, 2004).

a. Access to markets. Farmers face specific problems related to the size and in the context of rapid trade liberalization, they need to develop the capacity to take advantage of opportunities arising from regional trading system more open.

b. Access to technology. In a knowledge-based economic environment, the application of information and communication technology can be a hub for agriculture and rural industry. However, when farmers have limited access or understanding of this technology, their prospects to acquire and exploit the advantage is reduced. The role of local government is needed (in terms of infrastructure improvements, costs, and training, as well as information relating to business opportunities).

c. Access to human resources. Development of human resources in rural areas requires a comprehensive approach including: structures and social systems as a broad education reform, encouragement of entrepreneurship, business skills acquisition and innovation in society, mechanisms for self-learning and ongoing training and improvement of human resources, and government support appropriate program.

d. Access to funding. Opportunity to access a small amount of financial capital can be important for small businesses to gain access to the resources they need. Many agricultural businesses and industries in the rural areas have less awareness of the financial resources. Programs are available from commercial banks and other private sector and government funding sources had difficulty defining and articulating their financing needs. Financial institutions should be responsive to their needs and to continue the simplification of trade documentation.

e. Access to information. Information is accurate and timely, for example, market opportunities, financial aid, access to technology is very important for farmers to compete and grow in a
global market environment. This is an important role of government and relevant business organizations.

Beside the satellites areas for capacity building, other thing relate to the development of business, including the development of partnerships, strategic alliances, and innovation (Harvie, 2004). Network includes agreements with research and educational agencies, training institutions and public authorities. Better network more commercially focused, which involves a number of selected companies, sometimes formally and closely linked through joint ventures / strategic alliances. Networks can enable the acceleration of learning. Network overhead can allow sharing and economic exploitation of certain scale appear in the particular collective activity. Network does not need to be geographically concentrated.

The study found that social capital in rural community is still high. Passion of mutual cooperation, mutual assistance, and mutual reminding among individuals in a rural community entities also sense and spirit of giving (reciprocity), trust, and stature of social networks in rural areas.

Review from the culture of entrepreneurship, the average farmer had low entrepreneurial culture. The study found that rural people in general still resistance to change, which is contrary to the spirit of entrepreneurship that require elasticity to changes in the environment is always dynamic. Cultural orientation inward looking and hard to accept renewal ideas from outside groups and social environment of a social entity has hindered the public to make an appropriate adjustment values, norms, and group behaviour. Entrepreneurship is often seen as a function that involves the opportunities through resource management, capabilities and trait also reference held in a market. In improving its function as the manager of the production factors, entrepreneurship requires experience and knowledge gained through both formal and non-formal education. Entrepreneurial have a role of information for decision-making process on the opportunities and risks. One innovation in the agricultural sector can be measured by the progress of science which understood by the farmers. Recently the farmers besides having minimal knowledge of the agricultural sector also turned out to have constraints in terms of capital and diminishing of labour absorption, a low income due to the development of technology that is more capital intensive.

5. CONCLUSIONS

The results of this study are: (1) Factors that affect the welfare of a good farmer who only sought in the agricultural sector and the business in the manufacturing sector in the rural area in Semarang Regency are: land, access to irrigation networks, social capital, entrepreneurial culture, and management capacity, (2) develop a model of entrepreneurial empowerment in agriculture and industry are through: the development of an entrepreneurial culture in addition to the increase in capacity management (access to markets, access to finance, management skills, access to technology and innovation), social capital, as well as the relationships between sectors farming.

The implications of the results of this study are farmers with low agricultural land tenure and no access to irrigation should be encouraged to self-employed in the industrial sector in addition to
the agricultural sector to increase their revenue through the development of management and entrepreneurial capacity. Farmers who are having fertile land, no irrigation network access as well as having sufficient land tenure can keep trying in the agricultural sector through awareness, pengkapasitasan and deception that entrepreneurship in the agricultural sector is not only understood as a process of production but also the entrepreneurial spirit needs to be invested in the agricultural sector.

Empowerment also need to instill a culture of entrepreneurship in society. Culture is difficult to accept the ideas of renewal that comes from outside groups and social environment of a social entity has hindered the community to make adjustments values, norms, and group behavior. Entrepreneurial culture change dependency culture (such as expected on aid), and change the culture of rural communities still resistance to change, to the agent to change. Empowerment not only be done by top-down mechanism (through awareness, capacity and deception) but also requires the active involvement of the community (bottom-up) with the involvement of the environmental aspects of agriculture, social and cultural rights of farmers. Community empowerment will fail without realizing the importance of including the cultural dimension and leverage growing role of social capital in the community to accelerate and optimize the results of the empowerment process itself. Containing social capital: the spirit of mutual cooperation, mutual help, and mutual trust between individuals remember remind, reciprositas, social norms and ethical values are the foundation of the support that will determine the development and sustainability of diverse business activities in various sectors of life.

REFERENCES


