

LEARNING STRATEGIES OF THE TRADITIONAL FARMERS HOUSEHOLD IN SURVIVING THE ECONOMIC AND ECOLOGICAL CHANGE

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Abstract

The prosperous future household means that the one who can manage their financial through saving money and investment. However, households are always limited by the budget, there their consumption tends to be bigger than their saving. The household lower income, they tend to face difficulties in saving money. This article aims to explore the household economic behavior and the pattern it regards the consumption, investment and production. Additionally, this study discusses the changing of their attitudes and behavior due to economic and ecologic changing. This research is located in Mapattunggul Selatan, Pasaman. The results showed that there is a changing of the attitude and behavior agents of transportation and information. The learning process of the society did not consistently give an effect to the investment behavior. This was due to limitation of learning facilities and facilitators. The level of society education was able to affect the investment decisions. The education influenced positively to the investment

Keywords: Learning Strategies of Traditional Farmer Households, Survival of Traditional Farmer Households

INTRODUCTION

A household is the smallest society in an organization of social life. Besides its consuming activities, households also play the rule as one of the economic actors of a capital provider, in form of human capital and investments. However, in reality, the households investing behavior is often tarnished by consumerism culture. The revenue earned by households is often used for expenditures which could not provide the future's returns of investment. Households tend to buy goods without consideration of needs as in priority scale and even purchase goods that sometimes will not be utilized. This behavior is culturally caused the households to saving less. Therefore, the processes of learning to have financial literacy by households will be important and interesting to be studied.

The household characteristics are mainly influenced by the geographical layout of the household itself. South Mapattunggul Subdistrict is one of the subdistricts that has the characteristic of traditional agricultural economy which income depends on natural conditions. The number of the Family Head in the subdistrict is 1,931 KK, inhabiting area of 471.72 square kilometer. Most households' income relies on agriculture and traditional plantations but some households are traders and civil servants.

Based on the analysis of the household profile, the level of education of population with age over 15 years old, almost 90% do not finish Elementary education. Thus, it will be very interesting to examine how the people in Mapat Tunggul Selatan District learn to adapt

with the environmental change. Prior to the year of 2004, while other sub-districts in Pasaman regency have been using modern transportation, this sub-district was still isolated by hills and inaccessible for automotive transports, so the only main transportation was the work horses. It caused low consumption pattern for the economies of scale and the economic behavior of the household. The agriculture system they've used was semi-intensive with nomadic cultivation and subsistence economies. This causes low investment in financial assets as well as education.

After the year of 2004, the access to this Nagari area started to be more accessible by modern transportation, causing all the community production, such as rubber, betelnut, coffee, cocoa, even for the gemstones, to become valuable and could be sold outside with higher price in local commodity markets. Therefore, the households consumption patterns are also changing and some households tend to increase their spending in food, electronic goods, furniture and automotive.

The phenomenon on how the households learn their economic behavior, and how their pattern of economic behavior relates to consumption, investments, including education investment especially for their offspring, and production, will be an interesting case to be studied. So far, there is a tendency that they are reluctant to send their children to school, due to their financially limited ability and also the low awareness and knowledge in education.

DISCUSSION

Household Behavior

Essentially, the consumer households and producer households' objectives are to achieve wealth at a desired level. The consumers should achieve maximum level of satisfaction and the producers should achieve the maximum level of profit. Then, both economic actors play their role in the market, creating economic transactions and flow of economic circulation. Consumer's households buy goods and sell production factors while the producer's household sells goods and buys factors of production (Samuelson 1993: 47). Thus, the market is a mechanism when buyers and sellers of a commodity interact to determine price and quantity (Samuelson 1993: 44).

Basically, the market's objective is to achieve prosperity of market participants. Nicholson (2003: 299) describes the market participants' prosperity as a situation where there is a consumer surplus and producer surplus. The achievement of surplus levels over consumers and producers is strongly influenced by the market forces themselves. Samuelson (1993: 47) stated that the market economy is dominated by two things, namely consumers and technology. This belief is based on the concept of capitalism which refers to the effort to maximizing profit and continuous capital accumulation, giving extended possibilities towards private property right.

In real world, there is no clear demarcation between producers household and consumer households. Sometimes the consumer's household acts as a producer and sometimes the producer's household also acts as a consumer. However, basically their

objective is to achieve wealth or prosperity. Economists sometimes agree that welfare is measured in terms of income received or ownership (Samuelson 1993: 419).

Revenue is the total income or cash earned by a person or household for a certain period of time and wealth is the net worth of the assets held at a given time (Samuelson 1993: 417). Some economists stated that the wealth accumulation in cash are accepted, both classical and Keynesian agree that money has two basic functions : as a means of exchange and to store the value, which then developed in two additional functions namely as unit of account and standard for deferred payment (Budiono, 2005: 10 and 12).

Survival desire is a genuine instinct of humans, either to survive at present time or in the future. Capitalists utilize capital and labor to create economic surplus or capital accumulation, while labors use received wages to survive today and tomorrow. In globalization era, life survival is different compared to how it was in the past. In the globalization era, the households who own money are equal to those who own lands to plant, have a hunting grounds, a mining land, a river, a rice granaries, and other forms of wealth. Technology innovation and producer motivation to maximize profit, have become the driven factor to provide various types of products and services needed by mankind.

On the other hand, the problem is how many households are financially wealthy, so they could survive daily, weekly, monthly, yearly and over period of time. As in the human lifecycle, men play roles according to their age, starting from infant, children, adolescence, early adult, adult, until elderly. Demographically, population is categorized into productive age and non-productive age. The Central Bureau of Statistics usually categorizes the productive age in the range of 15 years to 65 years and the age of 0-14 years and 65 years and above is categorized into non-productive age.

There are premises that in developing countries especially in Indonesia, there is low potential savings. The premises suspected that households' income is majorly used for meals. One of survival methods according to Scott (1983) can be done through *tightening the belt*, which is by replacing daily meal with low quality food. On the contrary, Nurkse (in Jhingan, 2003) explains that the causal factor is not only to meet the needs for food, but also involve the culture of imitating the behavior of higher economic class. This culture is known as the "demonstration effect".

Franco Modigliani (1950, in Mankiw, 2000; 413) describes that the income in one's life is varied as depicted in curve cycle theory of income consumption. Savings could drive revenue during life period, while the process of living in high incomes and living in low incomes is known as life cycle hypothesis. Most people want to stop working at age 65, and expecting no big declination in standard of living, especially in consumption of goods and services. To maintain steady consumption after stopping work, people have to save. So the question is, in what level of consumption that consumer should choose if he wants to maintain a fluent consumption level during his life.

Consumption Behavior

The household consumption is mainly determined by how much income is received by the household (Nicholson, 2002: 143). This means that changes in income level will affect the

total consumption of the household. Case (2005: 59) explained that the household decisions about the quantity of products requested, purchased or consumed depends on several factors including the product price, household income, wealth accumulation, price of other products, tastes, and expectations on product prices, income, and wealth in the future.

Keynes (1930, in Mankiw, 2000; 399) describes that the marginal propensity of consume with ranges from zero to 1, is in line with revenue inclination, but the increase is not proportional to the increase in revenue. Thus, the marginal propensity to saving also increases.

Irving Fisher tried to examine and analyze how rational the consumers will see the future in making choices for different time periods. The Fisher method does not include the constraints faced by consumers, consumer preferences and how these constraints together will influence choices about consumption and savings. In deciding on how much to consume today and how much is used for saving for the future, consumers will face budget constraints – an inter-temporal budget constraints. To simplify the study, he assumed that the consumer will face two periods: youth period (C1) and elderly period (C2) with youth income (Y1) and elderly income (Y2). Since the consumers have the opportunity to lend and save, consumption in single period could be more or less than their income.

RESEARCH METHODS

This research is designed using Mixed Method Research: "The combination between quantitative and qualitative approach, which will give better understanding to the problem than using only one approach". Mixed Method Research objective was to overcome the weaknesses that exist in both quantitative and qualitative approaches (Creswell, 2003). Quantitative data explained how the household behavior in consumption, investment and production was. While the qualitative data is concerned with how household patterns learn and adapt with the changing environments.

This research was a social science study, designed with a focused study approach through in-depth interviews and focused discussions (FGD) using qualitative data, so it is called qualitative research (Moloeng, 2005), In this research, it is necessary to formulate a research focus on how the culture and local wisdom of *Nagari* society install the integrity values and what the meaning of integrity in *Nagari* society is.

This research is in form of a constructivism paradigm, which process is to gain a mutual thinking process during the production of a data set, information and science which then create a mutual transformation in the process for researchers and research subjects (Ian, 2009). New knowledge emerges to produce a new attitude about integrity. The perceptions, knowledge and experiences of the informant will be constructed into thought, ideas and sets of knowledge that are constructed and arranged in organized categories.

Observation was derived through focused interviews with key informants that are considered to have sufficient knowledge and experience in explaining the research problem, at least in each village is expected to have 3 key informants (data triangulation) to maintain the validity of obtained information.

Data analysis consisted of three main activities; data presentation, data reduction and conclusion / verification, which is a series of activities that are not separated from each other. In this research, data presentation is based on similarity, difference, relevance, category, main themes, concepts, ideas and analysis of initial logical result, and weakness or data gap. This step was data reduction i.e. selection, focusing the attention on simplification, abstraction and transformation of obtained rough data.

At the next phase, the data were summarized; the major things were selected and focused on important things to find the theme or pattern that could assist in providing code towards certain aspects. As a form of analysis, data reduction also sharpens, classifies, directs, discards unnecessary data and organizes the data in such a way to draw and verify final conclusion. Thus, the reduced data will give a sharper view of the observed results. All of these steps will be able to simplify all collected data, present it systematically, then process, interpret, and give meaning to the data.

Implementation of Mapattunggul Community Focus Group Discussion

1. Household Production of Kecamatan Mapattunggul.

The average production behavior of the community that work as farmers are by choosing seeds to be planted from their own seeds or taken from other lands around their garden. The plantation was processed by the owner of the community. Plantation care was commenced mostly only once a year or when the plantation is already over-stocked. Most plants / seeds such as rubber, cocoa, gambir and others were not fed with fertilizer. The plants were grown on their own. The average income of South Mapattunggul society from rubber production is only Rp, 200.00- 600.000 / month. The harvest is sold to the existing market or the collector who is domiciled in the village. The harvest management was done by the plantation owner without using paid workers. For agricultural land, most people never feed fertilizer on their land. Planting new seeds were done if the plant were unable to be harvested. There was also no regular schedule for breeding. South Mapattunggul people mostly do not use thickening materials / fluids for optimizing the rubber weight to increase sales.

One of the activities in Nagari Sungai Lolo was land processing, so they can plant rice and also cultivate the land. According to the *Walinagari* (Head of Nagari) of Muaro Sungai Lolo, Ogi Arianto (2015), 70% of people live from rice fields and cultivating land. In cultivating lands for farming, the people of Nagari Sungai Lolo rely on simple tools, such as machetes, plow and hoes.

After the land was cleared then the rice-field was usually rectified with a hoe. Then once the seedlings emerged, and a few weeks after the rice seeds grew, the seed was planted. Maintenance is made by weeding the weeds in the fields, usually using plow as the tools. After the grain "*tabik*" or arised then it was time to "*manggoro*" or dispel the bird. After the paddy became yellowish, then the harvesting was done by reaping. The tools to separate the grain from the straw used to be done by the "*iriak*" way, but now they use machines for it. Time for planting on their own land or tribe-owned land was determined by *niniak mamak* or the respected elderlies (Gomok, 2015). Gomok further states that after the "*Totaw*" or marking the land, they would start cleaning the land that

has been marked. Once the wood cropped then cut in "*porun*" the large wood was set aside so that the area was ready to be planted with paddy, and the wood was then burned. A few days after cleaning, they got ready to *menuga* or plant the paddy. Paddy and other plants can be planted in intercropping, for example rubber and chocolate.

2. Nomadic Planting Customs and its Method.

According to Yunus (2015) nomadic planting becomes customs since the people are not financially able enough to maintain the dry-field. Based on their experience, if land was planted more than twice sequentially, then the next result will decrease. So with this assumption, they argued that the land-fertility is reduced. With assumption about the age of dry-fields paddy is approximately 8-10 months, they would move from the area to survive. They move elsewhere, and after the next five years, just moved back to the original place. This how is the nomadic cycle continues to be a living pattern in the community.

Furthermore Idrus (2015) said that they were moving after planting the dry-field paddy in two consecutive years in one place. When they were planting dry-field paddy they are also intercropping, planting the dry-field paddy and rubber simultaneously. They also clean the field from weeds simultaneously. After two years, they moved away because the paddy harvest is reduced. They switched their plantation to another place.

Along the same line, Yunus (2015) also said that they moved because they assumed that a forest that has been planted twice has become a young forest that will be hard to clean with simple tools. Meanwhile, when it came to 6 times, they move back to the first place because the forest has become old and easy to clean since the weeds under old forest trees are cleaner and cleaner.

Now many people no longer practice the nomadic planting because they think that nomadic planting is not profitable. They always intercrop paddy with rubber; when the paddy is still in maintenance, the rubber will also maintain. If they move, the rubber planting will not be well maintained. On the age of two years old, rubber plants will be consumed by other pests (Mansur, 2015). It will also interfere with the schedule for paddy planting, rice fields, rubber, gambir or other commodities.

Agricultural life in Nagari Muaro Sungai Lolo area is very simple, and they naturally read the nature sign. For example, when they want to plant the paddy, they always examine the season, using dry months -usually in June- to clear the land, and use July and August until mid-September to December for planting the paddy, and it is the right time when crops in the forest grow, and flowers or wood are blooming. September until December are planting months because it is the rainy season and also time for fruit trees as well as forest flower to bloom (durian, mangosteen, mango, rambutan and fruit trees are also blooming during this time). Hence, the pest will disregard the paddy and choose the tree, since the pests prefer fruit and fruit wood to the rice, and the rice is protected from pests.

Mr. Idrus Tuanku Malin Sati (2015) explains that: *“ The guide for paddy planting time from previous generation was the time when fruit trees were blooming, so when paddy were graining, the less pests will attackthe paddy*

since they would prefer trees and forest fruits" or "six months the rice in the house and six months the rice on the ground"

RESULTS AND DISCUSSION

The routine habits of Mapattunggul society when resting from work were through gathering and chatting with their fellow. From that forum, they shared information and experiences. It was a center for information wide spreading. Investment decisions both in terms of education or economic, were usually based on information in there. People who want to make investment decisions would collect all information in a gathering place called the Balai. Becker (1975) describes that individuals or households who have a better time period to study and search for information on price and product quality will choose more effective economic decisions including in investment. This is supported by research results of Hilgret & Jeanne (2003), who state that there is a relationship between a person's financial knowledge with a person's ability to manage finances. The higher a person's knowledge on finance then the better he will be able to manage income for both consumption, savings and as an investment. Balai will be the place for the community to learn and to add knowledge and skills.

From the data of *Walinagari* Muaro Sungai Lolo, Ogi Arianto (2015), educational facilities in *Nagari* Muaro Sungai Lolo consist of 8 units of elementary school and 3 units of junior high school. In general, the children in *Nagari* Muaro Sungai lolo studied until Junior High school. After completing Junior High school, some of them will continue to High School located in Silayang, the capital of Mapattunggul Selatan district. Some will attend high schools in Rao and Panti. In general, Muaro villagers have relatives in rural and urban areas. If they do not have relatives there, they have no choice but to rent a room or live at the orphanage in that area. Because of the lack of access to higher education, a small number of the children in *Nagari* Muaro only attend Elementary or Junior High school.

Meanwhile, Idrus Tuanku Malin Sati (2015) said that The Old Generation also learned, they learned from their own experiences and the experiences of other communities. How they had done it, was by telling one another and sharing their experiences, and took positive lessons from the experience. Balai was the media to share these experiences. Usually, every Friday was off-day, where they sit in Balai, and tell everyone about their experiences in all fields including indigenous issues, social, economic and farming, planting and political problems. However, since the facilities for organized learning are not accommodated, the process was not so strong enough to affect the investment activity. Moreover, Yunus (2015) said that, for those who are unable to send their child to school, or those whose child do not want to go to school, they will teach them to farm and to plant based on their experience. They teach farming or planting procedures by bringing their children directly to the field. They expect that someday their children could comprehend and participate in farming and cultivating by their own, and when they have their own family they could apply the knowledge they have gained from their parents.

CONCLUSION

Based on the collected data, data analysis, findings and discussion, this study can be concluded as follows; There was a change in economic attitudes and behavior due to increased access to transportation and information in the district, and higher consciousness to children education, and a greater the desire to learn and a higher level of competition, causing a competitive price in purchased good and good sold by traders. Learning process in society does not consistently affect investment behavior due to limited learning facilities and facilitators, so this variable could not have the ability to describe the investment level of society. The education level of the society would influence the investment decisions. The higher the education, the higher the desire to invest.

Based on the conducted research, investment is a behavior to generate income in the future, so the study suggested the households to improve the consumption fulfillment by using the environment support capacity as an effort to reduce spending and to increase the savings rate to improve investment. Domestic investment level also could be increased through knowledge about pricing, investment and education. To create a desired level of investment in future, it also suggested that the households improve those three previous factors. For policy makers, it is recommended to increase savings of the parents' and investment in the future, and there should be events or interventions to improve the level of knowledge, education and the access to information dissemination for public.

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