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Research Article

Participatory Action Research For The Sustainable Utilization Of Rice : A Case In Thailand

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ABSTRACT

The objectives of research were to study the sustainable development through a community participation process, how to make the sustainable utilization of rice Thailand, and the goals and benefits from participation the group. Data is collected from entrepreneurs in Chai Nat, Thailand, conducted in-depth interviews, participatory observation, and focus group discussion. The results showed that the seven steps in sustainable development through a community participation process like (Introduce research team and objectives, study and analyze community problems, fill the knowledge gap to local residents, search for suitable model of community enterprise, develop action plan, implementation, and follow up and evaluation) has positive impact on the sustainable utilization of Thailand rice like (the integration of sustainable utilization of rice, grouping causes save cost (Cost Sharing), economic benefits such as additional income from agricultural products, reduce expenditures and support by consuming own produce etc., social benefits such as Participatory Action Approach to exchange knowledge and create a sustainable household economy, reduce health problems for growers and consumers etc. and environmental benefits such as reduce the use of chemical contaminants in nature and improve nature with organic farmers.)

Key word: Thailand, rice, sustainable utilization, participatory action research.

Keywords: Sustainable Utilization of rice, Participatory Action Research, Organic Farmer, Cost Sharing

INTRODUCTION

The Thai government has continually focused on solving the problems of farmers in the country since 1955. According to Thailand's Agricultural Census 2013, the majority of the agricultural land was

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used to grow rice (51.3%), followed by field crops (22.3%), rubber trees (14.6%), plants and trees (8.5), vegetables (0.8), and fodder crops for animal feed (2.5%). The total agricultural land in 2013 was estimated at 72.8 million rais, which was 5.4 million rais higher than in 1993 that to show Thailand's population structure is closely involved with agriculture in terms of cultural tradition. Thailand is predominantly an agricultural country. Agriculture constantly plays a crucial role in Thailand's economy. However, the number of agricultural land holders in 2013 decreased from 4.2 million to 3.8 million (Hansasiripot, 2017). The task of achieving self-reliance and self-sustainability in agriculture depends not only on infrastructure and governance reforms but on decreasing our Agri-imports bill and finally increasing farmers' income.

Because at the end of the 19th century, the middle man began to play the role of buying rice from farmers to sell mills. Sometimes the good price rice mills will buy from the farmers themselves. But when sending to Bangkok to sell abroad You have to go through a middleman anyway. Farang scholars say that the problem of Thai agriculture is a system that is tied to a middleman. And the middleman is not just buying the produce. but also lending winch to buy land to rent for farming Coordinating import, export, etc. Farmers have no knowledge of price and market mechanisms and lack of cash flow. therefore have to rely on middlemen The more farmers rely on the sky, rely on the rain. The mortgage has nothing to tie the yield into debt to the middleman. The produce that is sold is sold in the harvest season. which when the price is low The middle man smiled again. but the peasants are bitter Circulating in a vicious circle, in 1938 an adviser to the Ministry of Finance estimated that 50% of the export price of rice was attributable to middlemen, mills and export brokers. But the one who gets the most share is the middleman. still todayas before but can't blame the middleman. He set up a high-interest loan because the risk of leaving money to the farmers was high. especially farmers who have no mortgage assets. having only one body and the power of farming in someone else's place So the middleman is seen as the culprit despite following the market system. (State-sponsored) and bear the risk on behalf of the farmers. especially the cost Another issue is to educate farmers on business. This is very necessary Because Thailand is one of the world's top rice exporters, the middle man and the tooth mill make profits together. But the peasants didn't know anything at all. Until it can be said that the state allows exports to guide rice policy. not the well-being of the peasants Starting a rice retailer yourself is a good initiative. but lack of collective power to create bargaining power As for the city people who will help, they don't know if it's popular or not, and the big structure hasn't been fixed. Afraid to meet from influential people in the market The government therefore had to rely heavily on the farmers. but must change the way of thinking How to help the villagers (Disthan, 2020), and that a majority of farmers, who have the desire and ability to produce more food, utilize multiple avenues to reach consumers, have implemented some form of sustainable production methods into their business and offer a diverse variety of products in order to remain competitive. Despite such beneficial attributes but supply and consumption of local food is limited. In turn, the structural barriers related to land use and agricultural policies are shown to be affecting the economic prosperity of the farm community operating at the farmers' markets. Other the economic, social and environmental benefits of supporting local food have been shown through other research to be the driving force behind the increase in consumer demand. This study uncovers the perspectives held by direct-sale farmers (Tras, 2021).

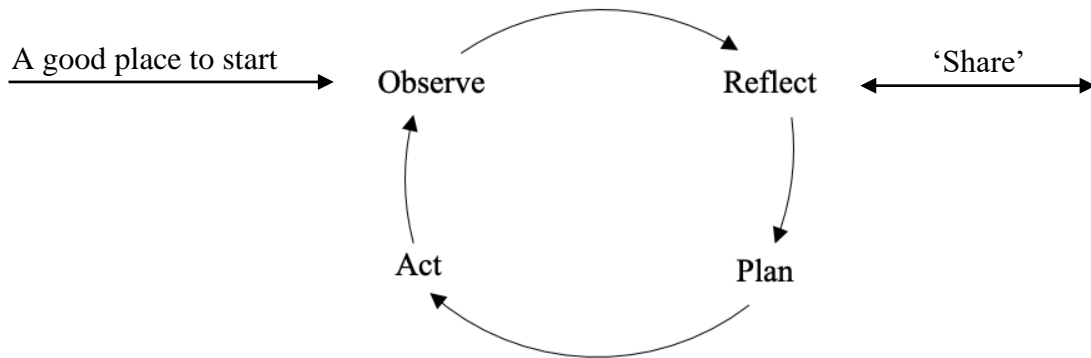
Sufficiency economies in Thailand, we wanted to see if we could create an entirely new business model for farmers where they were could access markets that they were in charge of themselves — to remove the middle-men. To do this, beginning with the core element of creating a new model: a new kind

of education. In order to become a member of the social enterprise to make products from farmers' crops. "This way, researchers and famers get involved," we make connections, get to know each other, get to know the farmers. It's hands-on — we get our hands dirty, help on the farms, and learn about farming techniques, the challenges facing farmers, and environmental issues — even if we aren't farmers themselves." but we serve a deeper purpose, as well. "to start as a way to ask how we can learn to make life less complicated," "We want to know how we can live more easily. How can we live happily? How can we enjoy our life more?"

From the reasons and necessities mentioned above, the research team was interested in studying participatory action research for the sustainable utilization of rice. Research is used to develop the sustainable rice through a community participation process, to make the sustainable utilization of rice, and to share the goals and benefits from group.

LITERATURE REVIEW

The cycle of participatory action research consists of five elements: a systematic process of observation, reflection, planning, action, and share. This cycle of inquiry is repeated until the conclusion of the Action Research. The model of Action Research preferred in the Reconnect program is Participatory Action Research (referred to as PAR throughout this manual), though some of the program resources and reports referred to in this manual shorten this to 'Action Research' (see Figure 1 below).



Imagine a rolling ball – multiple cycles over time

Figure 1 : Cycle of Participatory Action Research (Crane & O'Regan, 2010)

The scope and content were community development under the concept of sustainable development which consists of people in the community have a better quality of life, economic stability, no environmental impact and meaningful participation from the community. The community is going to manage community problems on their own. However, the principles of participation are included sharing information, sharing ideas, sharing decisions, participating in action, share responsibility and participate in monitoring and evaluation (Thammajinda at al., 2017).

RESEARCH METHODOLOGY

The research methodology is telling about selected research design, population, sample, data collection technique, and also about the typological tool used for descriptive analysis (Ampansirirat & Wongchaiya, 2017). In the current study, a quantitative research approach was used which is also called the hermeneutics approach rather than a quantitative approach. A study is conducted for analyzing the Participatory Action Research for the sustainable utilization of rice. Unit of analysis or in other words the population of this study were organic farmers of Banchian, Chai Nat, Thailand.

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The populations of this research were 60 famers in Banchain, Chai Nat, Thailand. The respondents were 12 members of the sustainable utilization of rice group and community leaders. Including the village headman and assistant village headman who were mainly involved in the establishment of the sustainable utilization of rice group, consisting of 10 people selected by purposive sampling. This research is a participatory action research. The tools used for data collection consisted of a structured interview form. (Semi-Structured Interview), a depth interview was used. (Participated Observation) field note taking, providing knowledge through study design thinking brainstorming techniques and listening to lectures; Focus Group Discussion find information on problems; community; group meeting to mobilize brain and exchanging knowledge together to find solutions to problems, communities. (Thammajinda at al., 2017)

RESEARCH RESULTS

This research presents the results of the study in 3 parts: **Part 1** Sustainable community development process by community participation in 7 steps (**Figure 2**)

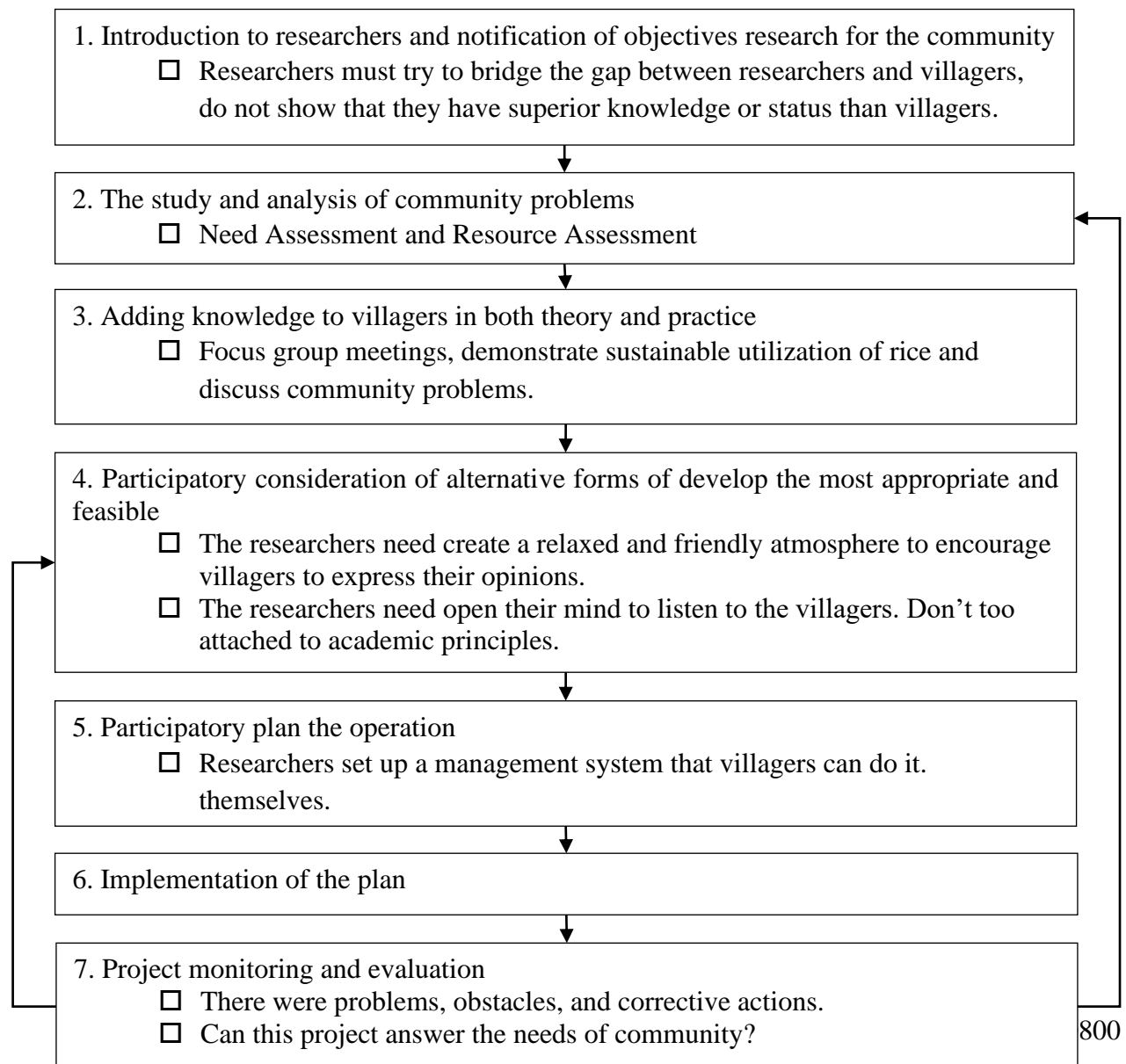


Figure 2 Participatory Action Research for the sustainable utilization of rice

From Figure 3, **First, Introduction to researchers and notification of objectives research for the community:** It started with meeting the community leaders and asking them to organize a meeting with the villagers. To introduce researchers and research objectives to create understanding that researchers will cooperate with villagers in thinking and developing to solve community problems, not focusing on training or the introduction of the budget to support, which was found to be an important step and get cooperation is very good in conducting research with the community. Next, the study and analysis of community problems at this stage was done using techniques: Focus group meetings with community leaders such as the village headman, the village headman's assistant chairman of sustainable utilization of rice group to discuss community problems. The joint solution came to the conclusion that the villagers wanted to reduce farming using chemicals by they would like to switch to farming more organic due to health concerns and selling products at a low price because they are sold through middlemen. Then, adding knowledge to villagers in both theory and practice about the production and distribution of chemical-free rice, the research team allocated time for interested villagers. group together group meeting by those who came to see the event with the nature of chemical-free rice management which has both the form of a group production and distribute Some houses are manufacturers and sell to department stores. Some houses sell restaurants in nearby areas. In addition, listen to a lecture on how to sell products online before the end of the group meeting. Brainstorm ideas for possible solutions shared among the villagers. with the research team and assigned the group leader to study and consider the possible approaches. After that, Participatory consideration of alternative forms of develop the most appropriate and feasible, the research team had a group meeting with the villagers who received to Participation plan work by bringing academic documents at this stage, the research team found that sometimes there may be gaps between academics and villagers because most villagers are unable to study. From the documentation and understand yourself. To close this gap, researchers therefore have to act as mentors and assistants, filling in the gaps, that is, having to study and find a way to present. The academic information is in a format that the villagers can easily understand. The method that is effective in this research is to draw a diagram to show plans for sustainable utilization of rice, to pose for villagers to visualize understand and be able to participate. One you've finished that, Participatory plan the operation, researchers must encourage group leaders to hold meetings with Members to plan operations together, causing members to accept and cooperate well. This way makes the operation of the group progress. Once you've done that, implementation of the plan: The experiment in rice cultivation and distribution showed that the yield was good. And try to sell agricultural products onsite in the community and online outside the community. As a result, the group members' products have been well received and sold out. Because now a day many people is more attention to the consumption, pay of non-toxic products and products from manufacturers. Finally, Project monitoring and evaluation: From the trial to sell in the community, the villagers started confidence that organic rice is in demand in the market, so it is confident that if there is a product, it will be able to sell for sure. The group members are confident that they will follow the production plan. Continuously planning to expand the market, it can be seen that the solution to the group

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of sustainable benefits from this rice can fix problems It meets the needs of the community. They are the reduction of chemical farming and the ordering products be delivered directly to the farmers.

Results of the study, part 2 Establishment group of sustainable utilization of rice model

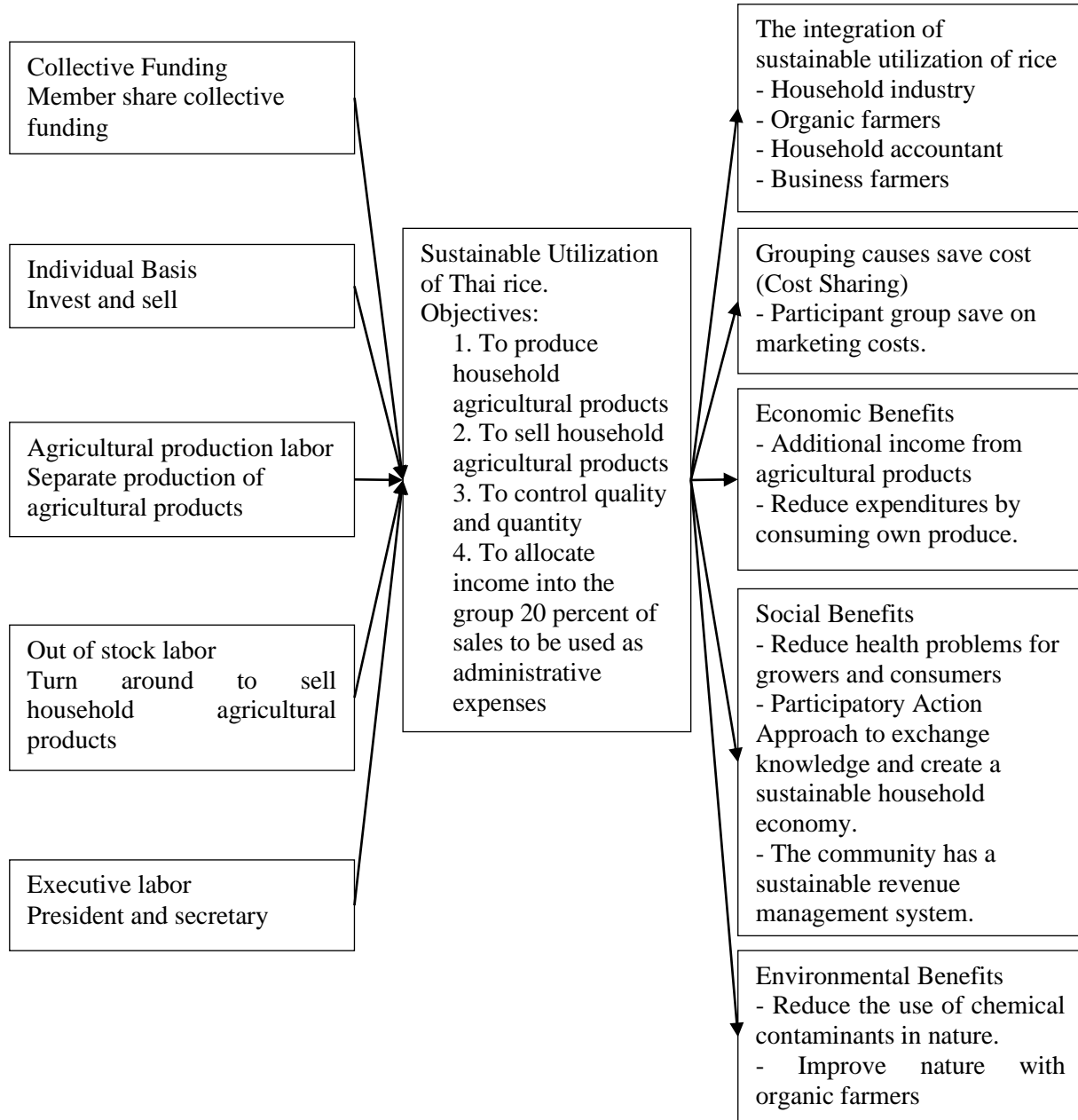


Figure 3 Establishment group of sustainable utilization of rice model

From Figure 3, it can be seen that the group establishment process arises from the participation process of villagers from the beginning. after seeing many examples form of production and distribution at differ according to the context of each community. Therefore, the group meeting happened to come to the conclusion that Which model is suitable for the Ban chain community, considering several options

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such as the cooperative model and the community enterprise model, etc., which are some formal, and must be prepared systematic account The meeting considered and evaluated. human resource potential in terms of ability, time and funds, it was found that the villagers in the community were not ready. and has limitations in terms of both time and funds. Therefore, proposed guidelines Joining groups in more specific ways is grouped together by the objective is to produce and sell rice and household agricultural products in the name of sustainable utilization of rice and has a goal generate additional income and reduce expenses for members as the villagers have limited funds. Therefore, unable to bring large sums of money Invest in production all together Therefore, there are 2 types of investments together: 1. Collective Funding (10 members, 500 baht per share, total initial capital 5,000 baht) to be used to drive the project. can start to be used as working capital, packaging and distribution 2. Individual investment (Individual Funding) is the capital that each person must use. in the purchase of seeds and organic fertilizers to grow and take care of the household products production sector that they are responsible for participatory plan and design of management system. The group will have a plan for planting together in advance. by specifying the type of rice Amount of rice and time to be harvested in order to prevent the output from exceeding the market demand and to have a variety of agricultural products to distribute to consumers and have sufficient quantity of produce to the market to meet demand distribution system in the initial stage, it will be sold through the community market. and set the price Sold at the same price as the market retail price. It will be allocated income into the group 20 percent of sales to be used as administrative expenses and accounting records every time that members bring their produce to sell can be seen as new innovation no capital required It's a way that villagers come up with a rural lifestyle that might not be seen in urban settings.

Results of the study, part 3 goals and benefits from the merger

The integration of sustainable utilization of rice is to strengthen marketing. Creation of non-toxic agricultural products that is accepted by consumers in the community and outside the community. In the next phase, the group plans to request a check. to certify products from the provincial public health to create confidence and acceptance of sustainable utilization of rice broadly. Grouping causes save cost (Cost Sharing). They will help It can save many costs, such as including in the future there will be marketing costs, public relations costs. and distribution expenses, etc. Economic Benefits: Members will have additional income from growing organic rice with the goal in the early stages. There was an additional income of about 4,000 baht per month per household. For emphasizing a self-reliant distribution system by selling equal to the general retail price in the market, not through middlemen, enabling members to sell at the same price fairer. By-products after the harvest and rice seed collection are rice straw and rice stubble which are biodegradable materials. Tilling of the rice stubble results in improved physical, chemical and biological properties of the soil. It contains macronutrients and micronutrients that are beneficial to the soil, making the rice plants flourish and produce good yields; reducing the need to use chemical fertilizers due to the higher organic substances in the soil. In addition, it can be used for other purposes, such as being pressed into bales for distribution, used for raising cattle, making compost, mulch, and paper pulp. It can be applied to furniture or home appliances as a substitute for wood, such as tables, chairs, lamps, decorations, souvenirs. It shows that we can recycle not so useless material like rice straw in a very imaginative way. Social Benefits: Changing the way to focus more on organic farming will have a positive effect, namely reducing health problems for both growers and

consumers. Grouping also helps to exchange knowledge among members, which will lead to continuous development. has arranged a system for meetings between members by setting a date to take care of the rice together at least once a week to have time to meet. Discussing and exchanging problems and bringing them to be solved. Environmental Benefits: Organic farming practices lead to reductions in chemical use reduce contamination to nature, reduce soil degradation problems, improve quality soil.

DISCUSSION AND CONCLUSION

This participatory research leads to the development of sustainable utilization of rice that meet the needs and abilities of the community. There has never been a group in the matter production and distribution of household agricultural products. before the participation process of villagers in establishing the sustainable utilization of rice group. according to the concept of Community based learning is the involvement of the community in project design and implementation (implementation). Development process community must integrate local wisdom into the decision-making process for choosing the appropriate alternatives (Patitungkho, 2017). Consistent with the principle of participation (Participation). The steps for participation are: 1. Contribute information 2. Join think together and decide 3. Participate in the implementation 4. Take responsibility for the bank, jointly monitor and evaluate the results. Participation in every step. It will be a real participation Thammajinda at al. (2017). And according to Ratchathawan at al. (2018), the steps for participation are: 1. Participation in decision-making, 2. Participation in the operation, 3. Participation in receiving benefits, and 4. Participation in the evaluation. The participation steps can fix the problem and real community development. The participatory process in community development should include an important step in addition to the original participatory principle, that is, adding knowledge in the villagers in both theory and practice (Step 3 in Figure 2.) because the body of knowledge or the wisdom that the villagers have not enough for development. Villagers should be filled the successful career. According to Ketanon Neawheangtham (2017), the successful career groups of the products of the folk wisdom were found that the operation was similar in terms of the strong management, the members in the groups had the knowledge, the ability and the career skills which applied the technology properly, and had the vision of managing the career groups which occurred from members in the groups, the good strategies and searched for new strategies for developing the products of the career groups which consisted of the folk wisdom which had the base of the creative work from the local culture, the manufacture procedure and the proper products development, the strategies of managing the marketing, and the principles of the business development sustainably by transferring, conserving, and cumulating the folk wisdom. The results showed that the community development process by participation (Figure 2) derived from this research was consistent with the main principles of action research participative It consists of 3 principles as follows: 1. Social investigation, in which the results of this research are Step 2, the study and analysis of community problems by considering needs and resources. Existing in the local area 2. Education, which corresponds to Step 3 in Figure 2, is to fill the body of knowledge villagers both in theory and practice Although the villagers have local wisdom but still lacking in academic knowledge and management Researchers need to evaluate and add the body of knowledge that the villagers still lack For this research project By providing knowledge to the villagers, consisting of direct education, such as listening to lectures on academic knowledge and knowledge non-direct education, i.e. taking a study tour with successful communities to create the exchange of knowledge which describes the process of educating people in the community. There are both formal and informal. 3. Implementation or action, which is an open space for learning and problem

solving together. Consistent with the findings of Figure 1 in Steps 4, 5 and 6, is the joint consideration of appropriate alternatives, joint planning of action. and implementation of the plan.

The five key factors contributing to the success: To try to bridge the gap between researchers and villagers, do not show that they have superior knowledge or status than villagers, as Panezai (2016) explains meeting leader (Facilitator) with villagers attending the meeting. They are equal status and horizontally relation which are the structure of equality learning and mutual support together. They don't have an actual gap or it is a constructed gap which are "research gap" or "knowledge gap", demonstration sincerity in coming. to help the villagers that they have real intentions to come and help villagers solve community problems It's not just collecting data to get the position, research paper, and then leave, it's a very important step. To create understanding among the villagers It has gained cooperation and has led to the success of the project. In the research community, the community now calls this process. Build-up rapport researchers meet with various people in the community to introduce themselves so that everyone can understand their objectives. goals and needs of villagers to participate in research benefits which will make the villagers trust is born (Kadem, 2020), Creation a friendly atmosphere in the meeting, relaxed, not too informal. Especially the meeting should be conducted in a format and the atmosphere is informal and flexible. Meetings are often the space in which the members of a group get tasks done: sharing information, reaching decisions and getting on with jobs. But a good meeting doesn't only get work done. Another important function of meetings is maintaining the group by involving, supporting and empowering the participants. This can help build a sense of community and connection to fellow group members, resulting in a strong group with high levels of enthusiasm for achieving your shared aims. (Seeds for Change In-depth guide, 2021), to encourage villagers to think and know how to plan, for example, when the produce will be sold, whether the group will hire silk workers or will arrange shifts in rotation, and how should they charge the cost? which is the role of meeting leader (Facilitator) is to use two-way communication. Emphasis is placed on listening rather than speaking and speaking to shape the issue. Focus group discussion provide information. which has been through the discussion among members of the discussion group to ensure accuracy, accuracy, and credibility. And the variety of information is considered an effective method for triangulation of the participants themselves (triangulation). (Urwongse, 2019), and changing the way of life of the community has to be done gradually, possibly starting with the Pilot Project, i.e., small moves before it becomes effective. and then gradually develop to expand should not think big full from the beginning in the beginning must have an action (Action) first to see results from the results of the first set. If members had confidence, then gradually expanded to a larger area. Finally, they may be able to replace their former occupation, which is to stop growing rice get rice. Let's make sustainable utilization of rice: growing rice get everything instead.

REFERENCES

1. Ampansirirat, A., and Wongchaiya, P. (2017). "The Participatory Action Research: Key Features and Application in Community." *Journal of Humanities and Social Sciences Mahasarakham University* 36(6),192-202.
2. Crane, P. and O'Regan, M. 2010. *On PAR Using Participatory Action Research to Improve Early Intervention*. Department of Families, Housing, Community Services and Indigenous Affairs, Australian Government.
3. Disthan, K. 2020. Why Thai farmers are the poor across the century? *Post Today*, May 5, 2020

4. Hansasiripot, B. 2017. "Quality of Life of the Farmers Enrolling in Thailand's Rice Pledging Scheme." *NIDA Development Journal* 57(4), 15 – 30.
5. Ketanon Neawheangtham, R. (2017). "The Guideline of the Local Wisdom Product Development for Promote Creative Economy in Nakhon pathom Province." *Journal, Silpakorn University* 10(1), 994-1013
6. Patitungkho, S. 2017. A Survey of Rice Landraces Diversity for Conservation and Sustainable Utilization of Rice in Surin Province. Research project, Faculty of Humanities and Social Sciences, Burirum Rajabhat University.
7. Kadem, Y. (2020). "An Activity Implementation Model for Community-Based Learning." *Journal of Yala Rajabhat University* 15(3), 344-352.
8. Panezai, S. (2016). What is a "research gap" or "knowledge gap" in research and literature? Is gap explored or constructed ? How can gap in research be identified? (online). <https://www.researchgate.net/post/What-is-a-research-gap-or-knowledge-gap-in-research-and-literature-Is-gap-explored-or-constructed-How-can-gap-in-research-be-identified>, May 2, 2021.
9. Ratchathawan, R., Kaewkrajok, T., Jongkatekit, W., Phromkaew, P., Sumdangsan, D., and Thonglert, D. (2018). "The Community Participation Process in Well-being Development." *Journal of Southern Technology* 11(1) ,231-238.
10. Seeds for Change In-depth guide. (2021). Facilitating meetings : A guide to making your meetings effective, inclusive and enjoyable (online). www.seedsforchange.org.uk, May 2, 2021
11. Thammajinda, R., Chingchayanurak, C., Jitaree, W., Trakarnsirinont, W., and Navaratana na Ayudhya, T.(2017)." The Development of a Sustainable Community Enterprise Model: A Case Study of the Puk Plod San Ban Don Satan Group in Pua District, Nan Province." *Journal of Community Development Research (Humanities and Social Sciences)* 10(4), 98-107
12. Tras, N. 2021. "Economic sustainability through diversification and self-reliance: The role of farmers on the north shore of Oahu." *Journal of Sustainability and Green Business* 2021(1),1-18
13. Urwongse, K. (2019). "Focus Group Discussion: Effective Qualitative Data Collection Technique." *STOU Education Journal* 12(1), 17-30.