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Regional Network on Poverty Eradication

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PROCEEDINGS

Prince of Songkla University Pattani Campus

Theme: Breaking the Cycle of Urban Poverty: Challenge and Strategy

























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Poverty Eradication in Pattani: Kor Lae Model

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Abstract

Pattani was the poorest province in Thailand in year 2015 with poverty rates of 34.91%

(The World Bank, 2020). Kor Lae village is located in Tambun Langa, Mayor District,

Pattani province, Thailand. It is listed as one of the poorest provinces which fall for urgent

acceleration for development in NRD2C, official database from Community

Development Department, Ministry of Interior, Thailand. NRD2C contains nationwide

socio-economic data at village level which data is surveyed and collected every two years. There are 91 households in Kor Lae village listed below poverty line, which after data

collection from research team, 80 households are eligible for urgent support. The village

is geographically located on the plateau and inaccessible of the water from main river.

Major population is the elderly and agriculture are the main occupation of the villagers.

Prince of Songkla University, Pattani Campus is undertaking the development of a

support system for area based on comprehensive and precise poverty alleviation project

which emphasize on Pattani Province. Participatory Action Research (PAR) was carried

throughout the project with the integration of qualitative and quantitative approach. All population of 80 households are included in the sampling size. Problem Tree Analysis

and SWOT Analysis were used to analyze qualitative data. Descriptive statistics was used to analyze quantitative data. The earthworm fertilizer pilot project is successfully

implemented in Kor Lae village. Villagers benefited from cost reduction on fertilizer expenses. Furthermore, extra income from selling vermicomposting production.

Vermicomposting Production has become a learning center for internal and external

villagers.

Keywords: Pattani, poverty, poverty eradication, vermicomposting

1. Introduction

Poverty rate in Thailand has increased in year 2016 and 2018 from 7.21 percent to 9.85

percent and the number of Thai people living in poverty increased from 4.85 million to more than

6.7 million (The World Bank, 2020). Office of the National Economic and Social Development

Council reported country poverty threshold, which conceptualized as a minimum standard

required by an individual to fulfill basic consumptions needs and unit in baht per person per

month. Top 10 poorest provinces of Thailand are Pattani, Mae Hong Son, Tak, Buriram, Yala,

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Nan, Chai Nat, Narathiwat, Kalasin, and Kanchanaburi respectively. The increase in poverty rate in year 2018 was extensive to 61 out of 77 provinces. In year 2017, the South of Thailand became the region with the highest poverty rate. In year 2015, Pattani was the poorest province in Thailand with poverty rates of 34.91%. With the insurgents in Thailand's Deep South provinces, public infrastructure are deficient. Access to public services, public health and compulsory education are limited to some groups. Basic Minimum Need (BMN) data collected annually by the Community Development Department is a household information that presents life quality of household members in different aspects at a specific period. In year 2017, there are 3,331 households (2.69%) in Pattani has average income per year of individual household members below than Basic Minimum Need (BMN) threshold which is 38,000 Baht per year of individual household members.

Prince of Songkla University, Pattani campus conducted an area-based collaborative research on reducing poverty and improving equity in Thailand: a case study of Pattani province which aims to review a process of poverty alleviation and to comprehensive a survey data of bottom 40% households from a census-based Basic Minimum Need (BMN) and Village Basic Information (NRD2C) official database from Community Development Department, Ministry of Interior, Thailand. This is including working together with Pattani government offices on data collection of five poverty dimensions which are healthcare, education, income, living standard and access to public services. 11,703 households in Pattani were carried out for a research. Result found that poor people in Pattani have good indicator on human capital, physical capital, and natural capital. The research project has divided into geographically 3 zoning area which are city, plateau, and seashore. Zone 1 is city area located at Kueya village, Pakaharang subdistrict, Muaeng district. Zone 2 is plateau located at Kor Lae village, La-nga subdistrict, Mayor district. Zone 3 is seashore located at Moo 5, Klang Village, Panare district. 3 Pilot projects in each zoning area with different approach were executed under an area-based collaborative research on reducing poverty and improving equity in Thailand: a case study of Pattani province. First pilot

project is to set up Sufficiency Economy Learning Center in Zone 1 to strengthen capacity on physical capital and human capital. Second pilot project is earthworm fertilizer where derived from community-based research forum (CBRF) in Zone 2. Lastly, third pilot project is to cooperate with government agency and organize 6 occupational trainings and workshops which are quails breeding, vegetable farming, donna trichogaster pectoralis fish breeding, local pastry, and dress making.

Kor Lae village is located in Tambun La-Nga, Mayor district, Pattani province. "Kor Lae" is derived from local Melayu language means canal. In the past villagers benefitted a lot from great canal in the village. Hence, they named the village with the same word of canal which is "Kor Lae". There are 2 access points to the village; national highway no. 42 (Songkhla – Narathiwat) and national highway no. 4061 (Yala – Palas). Kor Lae has 2 seasons; summer (February - July) and raining (August – January). Most areas are rice field and farmland. Main occupation for the villager is farming for instance sweet potato, cucumber, and cow-pea. Some groups of villagers are doing dressmaking, specialized on Kopiah (Muslim headwear) and Muslim male dress. All villagers (100%) are Muslims and most of them are elderly. Most work-force age population is working outside of the village to seek other occupation opportunity rather than farming. Kor Lae is listed as one of the poorest province in Thailand which fall for urgent acceleration for development in NRD2C official database from Community Development Department, Ministry of Interior (TPMAP, 2019).

2. Literature review

Kor Lae Demography Information

Network of Civil Society Organization for quality of life improvement (2018) reported that Kor Lae is agricultural based village. Mainly is rubber tapping for the total number of 50 households, farming for the total number of 20 households, worker in Malaysia for the total number of 20 households, freelance worker for the total number of 15 households, government officer for the total number of 10 households, tailor for the total number of 10 households and

construction worker for the total number of 5 households. Agriculture areas available for rubber tapping is 80 rai or 128,000 square meters, rice field 10 rai or 16,000 square meters, dry crop farm 52 rai or 83,200 square meters (sweet potato 50 rai or 80,000 square meters and sugar cane 2 rai or 3,200 square meters). Social formation in Kor Lae can be categorized into 3 main groups; 1) Occupational group 2) Saroh Mati Funeral fund 3) Women's group. Occupational group, 30 members, was formed in 2005 with the purpose to extend production capacity of worker in the village. Saroh Mati Funeral fund, 60 members, was formed in 2018 with the purpose to provide assistance with funeral costs. Each member need to contribute with the amount of 200 Baht per funeral event. Women's group, 25 members, was formed in 2009 with the purpose to help women in the village with occupational and other perspective.

Household debt in Kor Lae are mainly from Bank for Agriculture and Agricultural Cooperatives for the total number of 80 households with average debts per household of 20,000-50,000 Baht. Followed by Islamic Bank of Thailand for the total number of 15 households with average debts per household of 10,000-50,000 Baht (Network of Civil Society Organization for quality of life improvement, 2018). Villager in Kor Lae possess Social welfare in the form of State government welfare card, Child support grant, Elderly living allowances, Social Security and Disabled living allowances for 300, 55, 50, 30, and 18 persons respectively.

Participatory Action Research (PAR)

Participatory Action Research is an approach which integrate Participatory Research and Action Research. This method involve all related parties to be working together including researcher, targeted community, villagers, government sector and private sector. Main purpose of this method is to solve specific problems of a certain community by the people in the community which is called "participant". They will participate in every process of the research which increase efficiency in problem solving and successful rate in implementing (Crane, P. & O'Regan, M., 2010). Key activity of this method is data collecting. When researcher and participants are well collaborated, data collecting and interpreting will be more precise. Hence, Participatory Action

Research is a system to improve understanding and improving a particular situation that found gap between theory and implementation. Stringer (2007) mentioned that the best learning process is to take an actual action and the best action to be done is through Action Research. Thus, research and implementation are not to be separated.

Participatory Action Research promotes participation and equality. Everyone is equal, free from any threatening and has fully right to express any thoughts. Philosophy of Participatory Action Research is well corresponded with postmodern tradition which encourage mutual understanding and treat participants as a part of researcher, not objectivity. (Kelly (2005) and Attwood (1997) recommended that philosophy of Participatory Action Research is consist of concept of right to demand and choose what best for oneself which will lead to sustainable development. Participatory Action Research might come in a public space form which participant and researcher are working together to present a public policy related to social and economic. Participatory Action Research can be considered as cycle of reflection and implementation (Marshall & Rossman, 2006; Selener, 1997). Kamjadpai (2010) suggested in his research that Participatory Action Research can be divided into 6 stages; 1) preparation and choose a specific community 2) problem identification 3) team set-up and participant classification 4) project assessment and evaluation planning 5) implementation and 6) project publication with participant.

Lean Canvas Business Model

Lean Canvas is an improved version of Business Model Canvas (BMC) intended for a startup business entrepreneur. It is a tool assist a business entrepreneur to craft the business idea and transform into pilot model. This tools is widely used among entrepreneurs. It provision the entrepreneur to see overall picture of entire business process and understand actual needs of the customers well (Maurya, 2012). Lean Startup is a methodology for business development and new product development. Main purpose of Lean Startup is to shorten Product Development Cycles (PDC) and cut off any unnecessary procedures. It involves Business Hypothesis Testing Experiment and Validated Learning. Key activity is to understand customer's pain point and

recognize actual demand of targeted customer. The better understanding demand of customer, the faster the product development.

There are 9 elements in Lean Canvas Business Model; 1) Customer Segments 2) Problem 3) Solution 4) Unique Value Proposition (UVP) 5) Channels 6) Revenue Stream 7) Cost Structure 8) Key Metrics and 9) Unfair Advantage as shown in Figure 1. Customer Segments is to define customer according to demographically, behavioral, psychology, and geographically. The better customer segmentation, the faster product implementation and the sharper marketing strategy. Customer might be the same person with buyer, however, in some cases there are different. Hence, an entrepreneur shall be able to identify who is the targeted customer. Problem is to list significant problem that is faced by the targeted customer. This is to highlight the pain point of the customer. Solution is the ideal of how problem faced by the targeted customer can be resolved. Unique Value Proposition (UVP) is the process to identify product features and benefits that could matched with customer demand and solve those mentioned problems. Channels mean marketing channel and product delivery channel. It is including communication channel with the targeted customer. Revenue Stream is where an entrepreneur need to identify how the business can generate the income for instance Business to Business (B2B) or Business to Customer (B2C). Cost Structure is to list all costs occurred during the business implementation. An entrepreneur shall be able to identify the list of fixed costs, variable costs, administrative costs, marketing costs, and manufacturing costs. Key metric is the indicator of the business operation. An entrepreneur shall set the KPI as goal to achieve. Unfair Advantage is a business strategy which lead to survival in the business competitions among rivals.

Problem	Solution	Unique V	alue	Unfair	Customer
		Proposit	tion	Advantage	Segments
	Key metrics			Channels	-
Co	ost Structure			Revenue Str	eams

Fig 1: Lean Canvas Business Model

3. Methodology

This pilot project used mixed method within a Participatory Action Research approach to address demands of villagers in Poverty Eradication. The project integrated qualitative methods which is interview and community-based research forum (CBRF), with quantitative method including questionnaire on the survey to understand occupational training needs to enhance employment rate and increasing household income and Social capital management and community development Questionnaire. Problem Tree Analysis was used to analyze root cause of current problem faced in Kor Lae village. SWOT Analysis was used to explain context of the village. Population of this study is 80 households in Kor Lae village. Researcher distributed questionnaires to every single 80 households in the village.

4. Results

Data is collected and interpreted quantitatively and qualitatively. Questionnaires on Social capital management and community development are categorized into five dimensions which are human capital, physical capital, financial capital, natural capital, and social capital as

illustrated in Table 1. Social capital management in Kor Lae village is having highest Physical Capital (3.05), followed by Natural Capital (2.89), Financial Capital (2.66), Human Capital (1.79) and Social Capital (1.65).

Table 1 Social capital management and community development of Kor Lae Village

Human Capital	1.79
Highest education level	1.42
Studying	1.26
Employed	1.16
Non-agricultural income	1
Health	3.86
Social welfare	1.75
Physical Capital	3.05
Accommodation	3.93
Accommodation condition	3.36
Hygienic condition	3.35
Water supply / electronic supply	2.88
Public road	3.96
Government announcement communication channel	3.81
Usage of Technology Digital in accessing social welfare	1.19
Financial Capital	2.66
Average household income	2.28
Household expenses	1.15
Saving	3.48
Debts	3.38
Assets	1.34
Natural Capital	2.89
Agricultural land	1.75
Water supply for Agricultural	1.05
Benefit from Natural Resources for Living	1.09
Benefit from Natural Resources for Generating Income	1.05
Accommodation is located in Natural Disaster area	4
Agricultural Land is located in Natural Disaster area	4

Social Capital	1.65
Social Interaction and Group Formation	2.73
Community Aid in emergency cases	1
Community Regulations and community practice	2.69
Conflict Management in community	1.8
Knowledge person in community development	1.03
Benefit from Knowledge person is problem solving	2
Participated in community management	3.63

Occupational training needs

Result of Occupational training needs to enhance employment rate and increasing household income is shown in Figure 2. Villagers are interested in occupational training to composting production for 46%, followed by Agricultural for 42%, and lastly Technicians for 12%. Village representative described that Kor Lae is mainly agricultural production, however, agricultural product is not satisfying. Farmers spend large amount on composting and fertilizer to enhance their agricultural products. Therefore, if village is able to produce their own composting, expenses on agricultural can be reduced. Furthermore, if composting is excess, villager can sell this high-value products to another villages.

OCCUPATIONAL TRAINING NEEDS OF KOR LAE VILLAGE

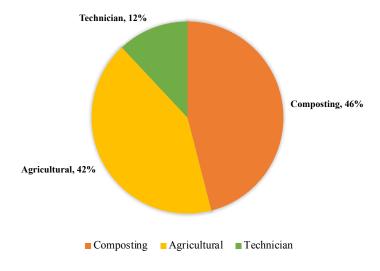


Fig 2: Occupational training needs of Kor Lae Village

SWOT Analysis of Kor Lae Village

From community-based research forum (CBRF), observation and interview, qualitative data analysis of Kor Lae village can be explained by using SWOT Analysis as shown in Table 2.

Table 2 SWOT Analysis of Kor Lae Village

	SWOT Analysis of Kor Lae Village
Strength (S)	1. Aware and recognize community problem
	2. Leadership skills of a Village headman
	3. Villagers are fully cooperative and collaborative
	4. 7 out of 70 households that is identified as poorest household in
	Basic Minimum Need (BMN) and NRD2C official database are
	participated in this project. Accounted for 7 percent
	5. Villagers are ready to learn
Weakness (W)	1 poorest household from Thai People Map and Analytics Platform
	(TPMAP) which is developed by the Office of National Economic
	and Social Development Board (NESDB) and National Electronics
	and Computer Technology Center (NECTEC), National Science and
	Technology Development Agency (NSTDA), Ministry of Science
	and Technologies is not listed
Opportunity (O)	1. A new product in village
	2. Joining an agricultural cooperative
	3. One Tambun One Product (OTOP) support from government
	4. Agricultural market in Pattani
	5. Centre for Community Enterprise registration
	6. Integrated farming
Threat (T)	Female is not interested in joining vermicomposting production.

Kor Lae Vermicomposting Lean Canvas Business Model

Lean Canvas Business Model is analyzed through brainstorming in a workshop setting environment to ensure the business validity and the success of this community project. Details of Lean Canvas Business Model is explained in Table 3 and illustrated in Figure 3.

Table 3 Kor Lae Vermicomposting Lean Canvas Business Model

	Kor Las Vermicomposting Lasn Canyas Business Model
1 Custs	Kor Lae Vermicomposting Lean Canvas Business Model
1. Customer	B2B: Business to Business
Segments	1. Botanist shop in Pattani Province
	2. Agricultural equipment shop in Pattani Province
	B2C: Business to Customer
	1. Tree lovers
	2. Farmer
	Segmentation:
	- Age above 10 years old
	- Any genders
	- Live in Pattani or near by
	Interested in organic fertilizer and natural fertilizer
3. Unique Value	1. No waiting time for order shipping process
Proposition	2. Save costs on shipping fees
	3. Guarantee a quality product
	4. Vermicomposting product is tested quality proved
4. Solution	1. Vermicomposting product is available is local market / shop
	2. Quality proved test and certified
5. Channels	Offline
	1. Vermicomposting production house
	2. Kor Lae village headman office
	3. Village weekly market
	4. Local grocery shops
	5. Agricultural market at PSU Pattani (every Tuesday)
	Online
	1. Facebook Page
	Network Partner 1. Mayor Agriculture District
	Mayor Community Developer
	3. Pattani Land Development Station
	4. Vermicomposting group
6. Revenue	Per 3 months production period
Streams	- Vermicomposting 1,200 packs x 20 THB = 24,000 THB
	- Vermicompost Liquid 300 bottles x 20 THB = 6,000 THB

Kor Lae Vermicomposting Lean Canvas Business Model

7. Cost Structure

1. Fixed Cost: 89,550 THB (Setting Cost)

Item	Amount	Price Per	Total Amount
		Unit	(THB)
1. Production House	1	55,000	55,000
2. Equipment			
- Basin	100	59	5,900
- Drill	1	1,450	1,450
- Water supply system	1	1,500	1,500
- Mixing Bowl	3	700	2,100
- Hoe	6	250	1,500
- Shovel	2	200	400
- Watering Can	4	100	400
- Net	40 m.	50	200
- Cement Pipe	4	500	2,400
- Threshing basket	5	200	1,000
3. Earthworm breeder	15 kg.	500	7,500
4. Acrylic sign board	1	1,200	1,200
		Total	89,550

2. Variable Cost: 8,100 THB (per 1,200 kg. production)

Item	Amount	Price Per	Total Amount
		Unit	(THB)
1. Cow manure	30	50	1,500
2. Printed packaging bag	3	1,200	3,600
3. Sack	30	5	1,500
4. Vermicomposting	1	1,500	1,500
quality test kit			
		Total	8,100

3. Operational Cost: 1,050 THB (per 1,200 kg. production)

Item	Amount	Price Per	Total Amount
		Unit	(THB)
1. Electricity	100	3	300

	2. Water	200	3	600
	3. Local management	50	3	150
	fees			
			Total	1,050
8. Key Metrics	200 bags per 1 production 1,200 bags per 3 months	period (15 d	ays)	
9. Unfair	Quality consistency with v	ermicompos	ting quality test	kit
Advantage	100% cow manure, guarantee quality			

- 760	Three	1000 - 100 -	Total and the	
Problem 1. Need a quality organic fertilizer for organic farming 2. Unable to find vermicomposting in local		No waiting time for order shipping process Save costs on shipping fees	Quality consistency with vermicomposting quality test kit 100% cow manure, guarantee quality	Customer Segments B2B: Business to Business 1.Botanist shop in Pattani Province 2.Agricultural equipment shop in Pattani Province B2C: Business to Customer 1.Tree lovers 2.Farmer Segmentation: Age above 10 years old Any genders Live in Pattani or near by Interested in organic fertilizer
area 3. Long waiting period to receive vermicomposting ordered from another provinces 4. Quality of a vermicomposting product 5. Packaging of a vermicomposting product is not interesting 6. Vermicomposting is costly 7. High cost in shipping fees to Kor Lae Key Metrics * 200 bags per 1 production period (15 days) * 1,200 bags per 3 months	Guarantee a quality product Vermicomposting	Offline 1. Vermicomposting		
	product is tested quality proved	product is tested production house		
Cost Structure		Revenue St		
Fixed Cost: 89,550 THB (3 Variable Cost: 8,100 THB Operational Cost: 1,050	-	•Vermicompo	s production period esting 1,200 packs x 20 THB = . est Liquid 300 bottles x 20 THB	

Fig 3 : Kor Lae Vermicomposting Lean Canvas Business Model

5. Discussions and Contributions

Researchers and villagers were working together in Participatory Action Research manner to integrate academic knowledge with existed local wisdom in the village. Kor Lae villagers involved in every brainstorming and workshop sessions. Nevertheless, villagers are main driven in every decisions made in this pilot project of zone 2 in an area-based collaborative

research on reducing poverty and improving equity in Thailand: a case study of Pattani province by Prince of Songkla University Pattani campus. Entire model can be illustrated in Figure 4 Kor Lae Poverty Eradication Model. The project started after questionnaire on social capital management data collected and interpreted. Five dimensions of social capital management in human capital, physical capital, financial capital, natural capital, and social capital are calculated and analyzed. Researchers proceed with problem identification to understand the need of villagers.

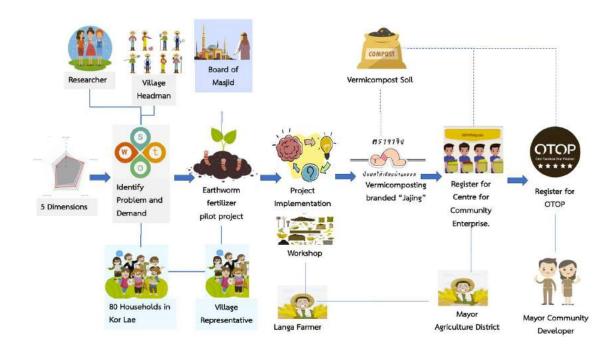


Fig 4: Kor Lae Poverty Eradication Model

First community-based research forum (CBRF) was conducted with full supported from village headman. Researchers introduced themselves along with clarified on the purpose of working with Kor Lae village. In this forum, SWOT of Kor Lae village is proceed to understand local context as shown in Figure 5. Villagers can communicate in Thai language well which made easier for researchers who are not from local area.



Fig 5: First Community-based research forum (CBRF) at Kor Lae village headman office

Second community-based research forum (CBRF) is conducted with a survey to understand occupational training needs to enhance employment. Conclusion from the forum is to proceed with organic fertilizer. Main purpose is to enhance their agricultural products and to reduce costs on purchased fertilizer. Researchers then discussed on which kind of fertilizer are most suitable for villagers. Result from first community-based research forum (CBRF) on SWOT analysis of the village shown that Kor Lae is an agriculture based village, however, agriculture products in the villager are not satisfying. Villagers spent a lot to purchase fertilizer from external. Furthermore, there were no vermicomposting production in local area. Lean Canvas business model was analyzed to ensure the success and sustainable of this project.

Third community-based research forum (CBRF) is done to propose a vermicomposting project to villagers. Presentation was made to enhance understanding of vermicomposting process. Action plan for vermicomposting production was presented by researchers. Discussion was made with several questions for clarification. Finally, villagers accepted the proposed pilot plan and registered their names in the project. A workshop and field trip at vermicomposting production house located in another district was arranged with the assistance of researcher.

Participants gained lots of knowledge and experienced hands-on vermicomposting production.

They feel more confident that the project is achievable.

Vermicomposting production house is located in the Masjid area. Village headman allocated some space for this production house with good intention to be the learning center for all villagers. While Kor Lae vermicomposting production house is under construction by the some representatives, researcher at the university discussed and designed for an attractive vermicomposting packaging bag together with marketing plan as shown in Figure 6. The logo is designed and available for villager to reuse in the future. Facebook Page is created by researcher and villager representative is appointed as admin to manage the page and vermicomposting orders.



Fig 6: Kor Lae vermicomposting production house and vermicomposting products

Official opening ceremony of vermicomposting production house was done with honorable guests from government agency who are Mayor Deputy District Chief, Mayor agriculture district, Mayor community developer and vice president of Prince of Songkla University Pattani campus. All villagers attended this function to witness the success project achieved by village representative. After production is steady, the representative group register this vermicomposting production for center for community enterprise and One Tambon One

Product (OTOP) with the assistance of researchers in order to receive support from government agency in the future.

6. Conclusion

Kor Lae Model in Pattani Poverty Eradication Project was successfully implemented in Kor Lae village, Tambun Langa, Mayor district, Pattani province. This model is resulting from pilot project of area-based collaborative research on reducing poverty and improving equity in Thailand: a case study of Pattani province under zone 2 responsible. Kor Lae Model is explained by the integrated work of researchers and villagers in Participatory Action Research (PAR). Villagers voices are heard equivalently and decision was made by the result of highest chosen option. A group of village representative enrolled themselves to test out this pilot project before magnify the success story to all villagers in Kor Lae. Lean Canvas business model is used to ensure the feasibility and profitability of the project.

Main output from this model are 1) poor people were assisted with occupational training not less than 10% of target poorest household. 2) vermicomposting production house has become a learning center on vermicomposting production for internal and external village. 3) vermicomposting products are available and ready for business. 4) vermicomposting liquid is another product for sale. 5) vermicomposting soil can be used for agricultural farming as well as for sale. 6) Facebook Page / Packaging/ Logo and all related to marketing are produced and available to use in long term. 7) Knowledge board and information pamphlet are designed and available for exhibition and promote products.

Outcome of this project is the poverty eradication model that can be applied in another poverty area. However, it is recommended to SWOT and understand the context of target village. Processes in Kor Lae model might need to be changed according to the nature of particular village. Key Challenge in Kor Lae Model is working population in the village is very small. Elderly and children are major population which might not able to work excessively. Key success in Kor Lae

Model is participation from villagers and the final decision was able to fulfill villager's actual needs and requirement well.

Impact to villagers in Kor Lae according to Return on Investment (ROI) can be justified as decreasing household expenses in purchasing fertilizer. In every 3 months of production period, the vermicomposting production house is able to produce vermicomposting and earthworm for the total value of 30,000 THB. If vermicomposting production house is extended, vermicomposting production will be increased as well. Impact to villagers according to Social Return on Investment (SROI) can be described as village is sustainable to producing organic fertilizer for agricultural usage. Vermicomposting production house has become a learning center on vermicomposting for villagers internally and externally.

Recommendation for policy maker in order to successfully perform Poverty Eradication Project in other provinces are 1) researchers shall conduct several community-based research forum (CBRF). 2) network partnership in local area is very important for instance agriculture district and community developer. 3) if researchers are able to communicate same slang and same language with villagers will be more advantage. 4) seek for actual requirement of the villagers rather than propose pilot project according to academic research only. 5) a group representative or the frontier speaker to villagers louder than researchers.

Future plan for Kor Lae Model is to utilize coconut pulp which is available and left unused in the village in vermicomposting production instead of purchasing from external. Furthermore, female in the villager is not comfortable with earthworm in vermicomposting production. Additionally, coconut pulp can be sale and increase more income to household.

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References

- Arluktham, S., & Sanusan, S. (2014). Effects of a vermicomposts from earthworms on changes of soil physical properties and improve soil structure (research report). Mae Jo University.
- Crane, P. & O'Regan, M. (2010). On PAR: *Using participatory action research to improve*early intervention. Retrieved may 21, 2021, from

 https://www.researchgate.net/publication/279492043_On_PAR_Using_Participatory_
 Action_Research_to_Improve_Early_Intervention
- Kamjadpai, S. (2010). Participatory action research for developing a teachers development model to make them be able to manage learning with emphasis on thinking: A case in ban tha wat "kuru rat bamrung wit" school under the office of sakon nakhon educational service area 1, *Rajabhat Sakon Nakhon University Journal*, 2(3), 50 65.
- Maurya, A. (2012). Running lean: Iterate from plan A to a plan that works. Sebastopol, CA: O'Reilly.
- Maurya, A. (2018). *What is a Lean Canvas?*. Retrieved May 21, 2021, from https://leanstack.com/why-lean-canvas
- Network of Civil Society Organization for quality of life improvement. (2018). Information of Kor Lae village, Moo 1, Tambun Langa, Mayor District, Pattani province.
- The World Bank. (2020). *Taking The Pulse of Poverty and Inequality in Thailand*. Retrieved May 21, 2021, from https://www.worldbank.org/th/country/thailand/publication/taking-the-pulse-of-poverty-and-inequality-in-thailand
- TPMAP. (2019). *About TPMAP*. Retrieved May 21, 2021, from https://www.tpmap.in.th/about #source
- Wikipedia Organization.(2018). *Business Model Canvas*. Retrieved May 21, 2021, from https://en.wikipedia.org/wiki/Business_Model_Canvas

Social Capital and Implementation Effects: Participatory Action Research for Poverty Alleviation Through the Earthworm Fertilizer Pilot Project, Mayo District, Pattani Province

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Abstract

Undertaking poverty remains a significant challenge in today's society. It is listed as the first mission in the list of 17 goals in Sustainable Development Goals (SDGs), which are to be incorporated by all developed and developing countries. Thailand's poverty rate is rising in recent years. Many provinces in Thailand face poverty and inequality, including Pattani, Thailand's top poverty-stricken province. The main objective of this article was to study the social capital available in the community and the impact of the implementation under participatory action research (PAR) for poverty alleviation under the Earthworm Fertilizer Pilot Project in Kor Lae village, Mayo District, Pattani Province, Thailand. Results showed that important social capital leading to the successful implementation process, including; human resources in the community, trust, efficient group representative, and cooperation network. The major outcome that impacts the group level is that community members are self-sustainable in producing organic fertilizers for agricultural use, reducing household expenses, and income-earning from the sale of vermicomposting and other derivable products. Finally, the main outcome which impacts at the social level includes incorporating ready-to-produce equipment with the fertilizer production house, information and knowledge board, learning center on worm manure production that can be a model for other communities.

Keywords: operational impact, participatory action research, poverty alleviation, social capital

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Reducing Poverty and Improving Equity by Using Knowledge of Sufficiency Economy Philosophy in Pakaharang, Pattani, Thailand

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Abstract

The sufficiency economy concept is a key to improving poverty and reducing the economic susceptibility of the poor. The aim of this study is to reduce the poverty and improve equity by using the model of sufficiency economy philosophy in Pakaharang, Pattani, Thailand. This study is a part of the project on "Area-Based Collaborative Research on Reducing Poverty and Improving Equity in Thailand: A Case Study of Pattani Province Project". A total of 215 poor households were surveyed based on data from the Thai People Map and Analytics. Then, the eleven poorest families in this village were selected for further analysis in order to understand the knowledge of the sufficiency economy philosophy. Subsequently, we gave the suitable knowledge in sufficiency economy philosophy for each family for four months by focusing on the concept of "poor families have a place to live, food to eat, money to save and invest". The result shows that these poverty families have dramatically developed better living qualities such as income, food, social acceptance, happiness, knowledge, education, ideas, money management and investment.

Keywords: improving equity, Pattani, philosophy, reducing poverty, Sufficiency Economy