

Prototype Areas Development of Vanumrung Innovation on Ancient Community surrounding Phanomrung Mountain Buriram Province

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Abstract

The purposes of this research were 1) to study the development process of innovation and products from local wisdom in the ancient community around Phanom Rung Mountain, Buriram Province, 2) to design a set of Vanamrung innovation to create an ancient community around Phanom Rung Mountain, Buriram Province, and 3) develop a prototype area of Vanamrung innovation in the ancient community around Phanom Rung Mountain, Buriram Province. This research was action research following the PAOR process, consisting of planning (Plan), acting (Act), observing (Observe), and reflecting (Reflect). The research was divided into 4 steps: Step 1: Study the development process of innovation and products from local wisdom in the ancient community around Phanom Rung Mountain, Buriram Province, Step 2: Design a set of Vanamrung innovation to create an ancient community around Phanom Rung Mountain, Buriram province, Step 3: Observe, the results and follow up on the results from the implementation step of designing a set of Vanamrung innovation to create an ancient community around Phanom Rung Mountain, Buriram Province, and Step 4: Reflect the results of creating a prototype area of Vanamrung innovation in the ancient community around Phanom Rung Mountain, Buriram province. The research results were summarized as follows: 1. The study results of the innovation development process and products from local wisdom in the ancient community around Phanom Rung Mountain, Buriram Province, are divided into 7 steps, called “Sattavithi (Seven ways) of the Vanamrung Innovation Development Process”, consisting of Step 1: Problem survey, Step 2: need study, Step 3: Network coordination, Step 4: implementation, Step 5: Expanding the operation area, Step 6: Monitoring and Evaluation, and Step 7: Reflecting on the Results of the Implementation. 2. The Vanamrung innovation set to create the ancient community around Phanom Rung Mountain, Buriram province, which was designed, consists of 3 innovation sets: Innovation Set 1: Innovation to create social value with the Vanamrung Community Cow Bank System, Innovation Set 2: Innovation to create cultural value based on the Thai silk pattern, and Innovation Set 3: Innovation to create economic value with products from local banana varieties and organic jasmine rice from the volcanic area. 3. The results of the development of the Vanamrung innovation prototype area of the ancient community around Phanom Rung Mountain, Buriram Province. It has been developed into 2 systems: on the online platform and in the actual area in the community. The first set of innovations, the innovation to create social value with the Vanamrung Community Cow Bank System, has been developed into the Vanamrung innovation prototype area both on the online platform and in the area of Ta Pek Sub-district, Chaloem Phra Kiat District, Buriram Province. The second set of innovations, the innovation to create cultural value following the Thai fabric tradition of the Rung white cotton pattern, has been developed into the Vanamrung innovation prototype area, located in Ban Khok Muang Community, Prakhon Chai district, Buriram province. And the third set of innovations, the innovation to create economic value with products from local banana varieties and organic jasmine rice from the volcanic region, is

located in Ban (Village) Don Mai Fai Community, Tapek sub-district, Chaloem Phra Kiat district, Buriram province.

Keywords: Prototype Areas, Vanumrung Innovation, Ancient Community, Phanomrung Mountain

I. INTRODUCTION

Buriram province is a province of sports tourism, cultural diversity, and is also a city of Bayon and Ba-Puan art. However, social changes may lead to a lack of awareness of the value of traditional culture; beautiful arts of communities related to Buddhism and traditional beliefs. In particular, the community area surrounding Phanom Rung Mountain, which used to be an extinct volcano, still shows traces of buildings, traditions and practices of the people in the community, and various products that show the wisdom of the local people for a long time and are worth preserving to be sustainable and continue to be a part of this local identity. Therefore, it is the reason why the research team is interested in studying the development of the prototype area of Vanamrung innovation of the ancient community around Phanom Rung Mountain, Buriram Province to create a learning area for various Buddhist innovations that are important and missing, leading to the development of these innovation learning sources so that society can return to being interested in the basics of mental development from the past to the present with happiness, stability, and sustainability forever.

Social changes may lead to a lack of awareness of the value of the culture, traditions, and beautiful arts of communities related to Buddhism and traditional beliefs. Archaeological evidence of 46 ancient communities within a 10-kilometer radius around Phanom Rung Mountain, Buriram Province, which have settled in this area since the late prehistoric period, around 2,000-1,500 years ago, down to the early historical period of the Dvaravati era, around the 12th-14th Buddhist century, later around the 15th Buddhist century, when the influence of Khmer culture from the Angkor period spread, more people moved into this area. More importantly, the influence of Khmer culture that spread in, caused changes in many aspects of society and culture, such as settlement patterns and water resource management. In addition, there were constructions of religious buildings called castles in various communities and on Phanom Rung Mountain. At that time, the religious buildings on Phanom Rung Mountain, which were Hindu temples, Shaivism, were probably the religious centers of the surrounding communities. And it continued until the 18th Buddhist century. Later, when the Khmer empire began to decline, the role of Phanom Rung as the religious center of the community probably gradually declined in importance and was eventually abandoned.

From the data survey, it was found that evidence shows that some ancient communities, such as Ban (Village) Kratai Tai ancient community, Ban (Village) Khok Kalo ancient community, and Ban (Village) Khok Beng ancient community in Prakhon Chai district, may have a close relationship with the religious sites on Phanom Rung Mountain with such evidence as; stone pillars, which are assumed to be stone pillars and assumed to be stone pillars used to mark the boundary of the land given to the god of Phanom Rung Mountain, which are mentioned in several inscriptions found at Phanom Rung Castle. In addition, the discovery of evidence of Khmer pottery, which is found in all ancient communities surveyed this time, shows that there was contact and exchange between communities both in the same region and far away. In the survey of ancient communities around Phanom Rung Mountain, archaeological evidence of 46 ancient communities was found within a 10-kilometer radius around Phanom Rung Mountain, Buriram Province. (Preeyanuch Jumprom, 2019).

From the information shown, it can be seen that the condition of the community still lacks knowledge in the form of historical evidence; lacks the use of past wisdom, especially water management, as a basis for developing a way of life in the agricultural community that relies on water; lacks the development of data from archaeological sites in the community to link with the main historical data as a tourist attraction to become a cultural-civilization tourist attraction in the form of information and news in the information technology system systematically (Network, Technology) to be a tourism resource to link with other tourist attractions in Buriram Province (Phanom Rung Castle/Muang Tam Castle/Khao Angkhan Volcano/tourist attractions under the Sport City policy) are still limited and have not been managed; lacks product development to become a place to create jobs, income, and quality of life under the Smart City.

From this problem, it is intended to study under the framework of the study of the development of the prototype area of the Vanamrung innovation of the ancient intelligent community around Phanom Rung Mountain, Buriram province, by linking in detail to the study of the survey of innovation and products from local wisdom in the ancient community around Phanom Rung Mountain, Buriram province, to lead to the design of the Vanamrung innovation set for the creation of the ancient community around Phanom Rung Mountain, Buriram Province, including the creation of the prototype area of the Vanamrung innovation of the ancient community around Phanom Rung Mountain, Buriram Province, which will create a learning area for various Buddhist innovations, important and missing innovations, leading to the development of innovation learning sources according to the local identity of the ancient community around Phanom Rung Mountain, Buriram Province, so that society will have a learning society that keeps up with technology and social changes, including developing the mind from the past to the present with happiness, stability, and sustainability forever.

II. RESEARCH OBJECTIVES

The purposes of this research were 1) to study the development process of innovation and products from local wisdom in the ancient community around Phanom Rung Mountain, Buriram Province, 2) to design a set of Vanamrung innovation to create an ancient community around Phanom Rung Mountain, Buriram Province, and 3) to develop a prototype area of Vanamrung innovation in the ancient community around Phanom Rung Mountain, Buriram province.

III. CONCEPTUAL FRAMEWORK

The development of the Vanamrung innovation prototype area of the ancient smart community around Phanom Rung Mountain, Buriram Province is research that focuses on exploring innovations and products from local wisdom in the ancient community, designing a Vanamrung innovation set for creating an ancient community, and creating a Vanamrung innovation prototype area of the ancient community around Phanom Rung Mountain, Buriram Province. The main objectives are to introduce innovations, knowledge, technology, and management to create strength and improve the quality of life for the target groups, 3 communities, from 3 sub-districts around Phanom Rung mountain, Buriram province, and to create innovators who are leaders in designing innovations, presenting innovations on online media, creating added value from innovations, coordinating networks of ancient communities, and organizing learning processes in ancient communities, as follows:

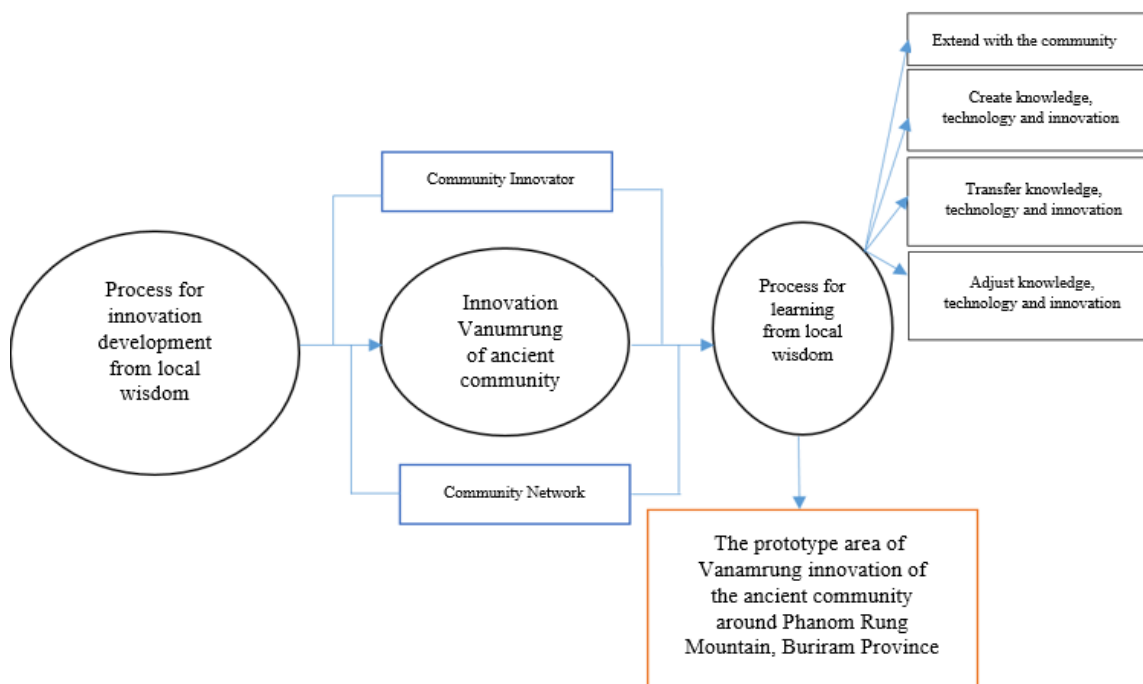


Figure 1 Conceptual Framework

IV. RESEARCH METHOD

This research is an action research based on the PAOR process, consisting of: Plan, Act, Observe, and Reflect. The research process is divided into 4 steps: Step 1 Study the development process of innovation and products from local wisdom in the ancient community around Phanom Rung, Buriram province; Step 2 Design the Vanamrung innovation kit to create the ancient community around Phanom Rung, Buriram province; Step 3 Observe the results and follow up on the results from the implementation step of designing the Vanamrung innovation kit to create the ancient community around Phanom Rung, Buriram Province; and Step 4 Reflect on the results of creating the Vanamrung innovation prototype area of the ancient community around Phanom Rung, Buriram province. The action research cycle can be presented as follows:

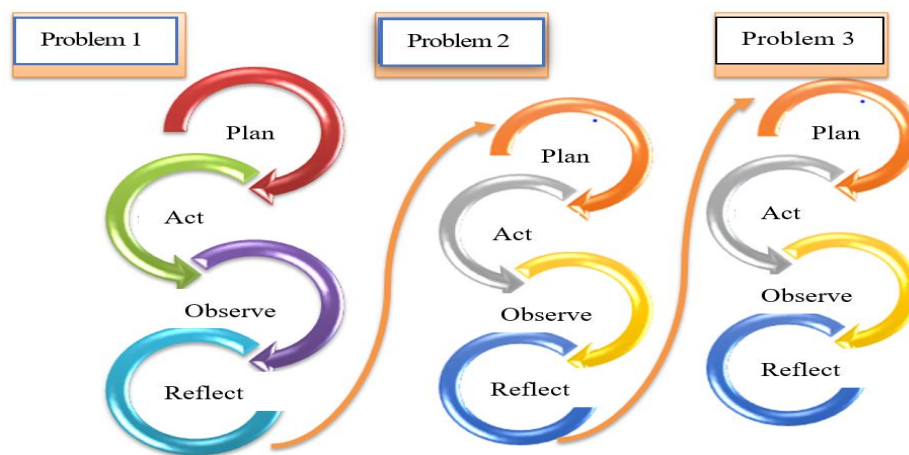


Figure 2 PAOR Action Research Cycle

V. RESULTS

1. The study results of the innovation development process and products from local wisdom in the ancient community around Phanom Rung Mountain, Buriram Province, are divided into 7 steps called “Sattawithi (Seven ways) of the Vanamrung Innovation Development Process” consisting of: Step 1; problem survey, Step 2; need study, Step 3; network coordination, Step 4; implementation, Step 5; expansion of the implementation area, Step 6; monitoring and evaluation, and Step 7; reflection on implementation results.

2. The Vanamrung innovation set to create an ancient community around Phanom Rung mountain, Buriram province, which is designed, consists of 3 innovation sets: Innovation Set 1; Innovation to create social value with the Vanamrung Community Cow Bank system, innovation Set 2; Innovation to create cultural value according to the Thai fabric tradition, loincloth (Pha Khao Ma in Thai) pattern, and innovation Set 3; innovation to create economic value with products from local banana varieties and organic jasmine rice from the volcanic region.

3. The development results of the Vanamrung innovation prototype area of the ancient community around Phanom Rung Mountain, Buriram province, have been developed into 2 systems: an online platform system and a real-world system in the community. In this regard, the first innovation set; innovation to create social value with the Vanamrung community cow bank system has been developed into the Vanamrung innovation prototype area both on the online platform and in the area of Ta Pek Subdistrict, Chaloem Phra Kiat district, Buriram province, the second innovation set; innovation to create cultural value according to the Thai silk pattern, has been developed into the Vanamrung innovation prototype area, located in Ban Khok Muang Community, Prakhon Chai district, Buriram province, and the third innovation set; innovation to create economic value with products from local banana varieties and organic jasmine rice from the volcanic area, located in Ban (Village) Don Mai Fai community, Ta Pek Subdistrict, Chaloem Phra Kiat district, Buriram province.

VI. DISCUSSIONS

1. From the study of the innovation development process and products from local wisdom in the ancient community around Phanom Rung Mountain, Buriram Province, it can be divided into 7 steps, called “Sattawithi of the Vanamrung Innovation Development Process”, consisting of: Step 1; Problem Survey, Step 2; Need Study, Step 3; Network Coordination, Step 4; Implementation, Step 5; Expanding the Operation Area, Step 6; Monitoring and Evaluation, and Step 7; Reflecting on the Implementation Results, which is the innovation development process that has been learned from the area study on the innovation development process and products from local wisdom in the community, which is consistent with the study of Priyanuch Jumphrom (2006) on the development of ancient communities around Phanom Rung Mountain, Buriram Province, which reflects the results of the study of community data that will be a joint mechanism for development and lead to the development of a specific area to create value and worth in the community. Including the work of Phichet Thangto and others (2024) in the study “Movement of King’s Philosophy Following Public Policy towards Kok Nong Na and Sufficiency Agricultural Learning for Community Self-Reliance”, which confirms the concept of sufficiency economy and the research area in Phanom Rung district, Buriram province, including other mechanisms as they appear in the research results with consistency in the practical mechanisms that occur.

2. From the results of designing the Vanamrung innovation set to create an ancient community around Phanom Rung Mountain, Buriram Province, which was designed, consists of 3 innovation sets: Innovation Set 1; Innovation to create social value with the Vanamrung community cow bank system, Innovation Set 2; Innovation to create cultural value according to the Thai fabric way of life, Pha Khao Ma pattern, and Innovation Set 3; Innovation to create economic value with products from local banana varieties and organic jasmine rice from the volcanic area, is a survey of products in the community and then bring it to further develop innovations or develop management systems, which are consistent with Phrakhruwirunsutakhun (Udomsak Uttamsakko), Lampong Klomkul, Phramaha Woot Suvuddhiko (Boonsaner), Phrakhrusophonsarophat (Apiwat Thitasāro) (2024), Development Of A Prototype Area On Sufficiency Agricultural Land Management Using King’s Philosophy towards Learning Process of Kok Nong Na R-Model: Multi-Case Study; Kunchuda Penchaiya (2021) A Guidelines to develop community and housing in Chiang Mai old town to comply with creative innovation district under smart city strategy plan: case study of Lam Chang communities; Chayoot Inprom (2022), Sufficiency and the New Theory applied to a One-Rai Plot of Land Generating an Income of 100,000 Baht; Chayut Inthaprom (2022) Sufficiency Economy and New Theory Agriculture Applied to Rice Farming 1 Rai Get 100,000, which brings knowledge to community drive to dive effectively in career development, income and quality of life.

3. From the development results of the Vanamrung innovation prototype area of the ancient community around Phanom Rung mountain, Buriram province, it has been developed into 2 systems: an online platform system and a real-world system in the community, where the first innovation set; innovation to create social value with the Vanamrung community cow bank system has been developed into a Vanamrung innovation prototype area both on the online platform and in the area in Tapek subdistrict, Chaloem Phra Kiat district, Buriram province, the second innovation set; innovation to create cultural value according to the Thai silk pattern, has been developed into a Vanamrung innovation prototype area located in Ban (Village) Khok Muang Community, Prakhon Chai district, Buriram province, and the third innovation set; innovation to create economic value with products from local banana varieties and organic jasmine rice from the volcanic area located in Ban (Village) Don Mai Fai Community, Tapek subdistrict, Chaloem Phra Kiat district, Buriram province. It can be seen that there will be both an online platform system and a real-world system in the community. This is consistent with Lampong Klomkul, Aroonrat Wilairattanakun, Thongdee Sritragam (2024) in the study “A Prototype Model Development of Learning Process on Sufficiency Agricultural Community: A Case Study of Agricultural Area Management in Phanom Rung Subdistrict Municipality Buriram Province”, which reflects the results of the study of the prototype of the educational area in Phanom Rung Subdistrict Municipality Buriram Province. And in the study of Porntip Wannawiro, Phra Patrachaiyakorn Khantiyutto (Udsuay), Lampong Klomkul, Phrakhrusophonsarophat (Apiwat Thitasāro) (2024) in the study on Development of Buddhist Learning Process Based on King’s Philosophy towards Sufficiency Agricultural Learning for Community Self-Reliance and in the work of Malisa sisakaew et al. Science of the King: New Theory of Agriculture in the form “Khok Nong Na Model”, all of the works reflect the connection between the community and the value of the community in developing themselves, developing products and promoting expertise in life, resulting in benefits for life in a holistic way called integration with the goal of developing quality of life.

VII. KNOWLEDGE FROM RESEARCH

The research on “Development of the prototype area of Vanamrung innovation of the ancient community around Phanom Rung Mountain, Buriram Province” has found findings on the process of innovation development and products from local wisdom in the ancient community around Phanom Rung Mountain, Buriram Province, divided into 7 steps called “Sattawithi (Seven ways) of the Vanamrung innovation development process” consisting of: Step 1 Problem survey, Step 2 Need study, Step 3 Network coordination, Step 4 Implementation, Step 5 Expanding the implementation area, Step 6 Monitoring and evaluation; and Step 7 Reflect on the results of the implementation, and design a set of Vanamrung innovations to create an ancient community around Phanom Rung Mountain, Buriram Province, consisting of 3 sets of innovations: Innovation Set 1, Innovation to create social value with the Vanamrung Community Cow Bank System, Innovation Set 2, Innovation to create cultural value based on the Thai silk tradition, white cotton fabric pattern, and Innovation Set 3, Innovation to create economic value with products from local banana varieties and organic jasmine rice from the volcanic area. In addition, the Vanamrung innovation prototype area of the ancient community around Phanom Rung Mountain, Buriram Province has been developed, divided into 2 systems: an online platform system and an actual area in the community. Wherein Innovation Set 1; Innovation to create social value with the Vanamrung Community Cow Bank System has been developed into a Vanamrung innovation prototype area both on the online platform and in the area in Tapek subdistrict, Chaloem Phra Kiat district, Buriram province, Innovation Set 2; Innovation to create cultural value based on the Thai silk tradition, white cotton fabric pattern has been developed into a Vanamrung innovation prototype area located in Ban (Village) Khok Muang community, Prakhon Chai district, Buriram province, and Innovation Set 3, Innovation to create economic value with products from local banana varieties and organic jasmine rice from volcanic areas, located in Ban (Village) Don Mai Fai community, Tapek subdistrict, Chaloem Phra Kiat district, Buriram province. From these findings, it can be summarized as a knowledge model from research as follows:

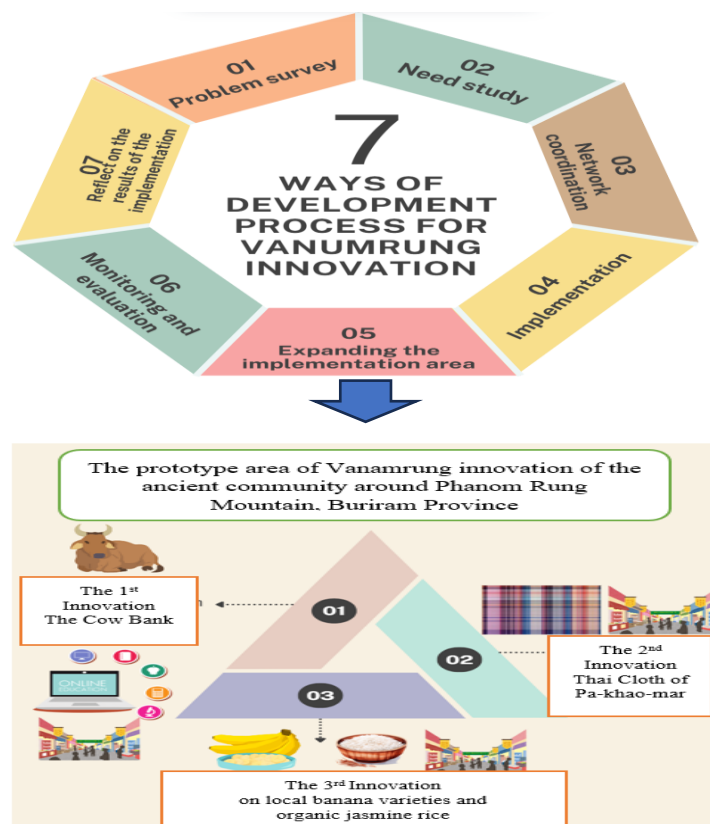


Figure 3 Knowledge from Research Source: Lampong Klomkul (2024)

VIII. RECOMMENDATIONS

1. Recommendations for Utilizations

1.1 From the research results, the development process of innovation and products from local wisdom in the ancient community is divided into 7 steps, which can be used as a mechanism to develop other innovations that appear in the local area, such as the innovation of Buddhist tourism routes, historical routes, innovation to preserve local traditions of Bai Sri Su Khwan in Thai.

1.2 From the research results, there are 3 sets of Vanamrung innovations to create ancient communities around Phanom Rung Mountain, Buriram Province, which have development mechanisms in the community by organizing and designing prototype areas of innovation both on online platforms and in real areas in the community, allowing those interested to access the area conveniently according to their readiness to access the innovation area.

1.3 People in the community enterprise group and network partners of the Khok Nong Na Learning Center, the Cow Bank Group, and people participating in activities resulting from the knowledge base, use this knowledge to develop tangible results and models for use in community development. In order to obtain tangible results, expand the results of operations to the community as a whole, covering studies to develop prototype areas of Vanamrung innovation in ancient communities around Phanom Rung Mountain, Buriram Province.

1.4 Let agencies drive practical implementation in the area, such as sub-district administrative organizations or municipal offices, apply the research results to drive the research area to be effective in practice in promoting community innovation in a broader sense by leading, leading (cooperating), promoting implementation and supporting budgets to create results in practice. 1.5 Provincial government agencies, such as the Provincial Administrative Organization, drive the research results by linking with government agencies, such as the District Agricultural Office, Community Development, and use the research results to drive campaigns for people to have jobs and income through implementation in the name of the community enterprise group, both in the Cow Bank group for the development of quality of life, jobs, and income, creating products from things available in the community, both fabrics and plants that can be grown and processed.

2. Recommendations for Further Research

2.1 This research is action research and a spatial study with lessons learned and an action network for future research. A participatory action research design should be used to obtain empirical findings and design activities in sequence.

2.2 The findings of this research can be used to design mixed-method research and develop into both quantitative and qualitative research to obtain both in-depth findings and broad findings covering the study to develop the prototype area of the Vanamrung innovation of the ancient community around Khao Phanom Rung, Buriram province.

CONCLUSION

The development of the prototype area of the innovation of Vanamrung of the ancient community around Phanom Rung mountain, Buriram Province has a process of developing innovations and products from local wisdom in the ancient community around Phanom Rung Mountain, Buriram Province, divided into 7 steps called “Sattawithi (Seven ways) of the Vanamrung Innovation Development Process” consisting of: Step 1 Problem Survey; Step 2 Study the needs; Step 3 network coordination; Step 4 implementation; Step 5 Expand the area of operation; Step 6 Monitoring and evaluation; and Step 7 reflecting on the results of the implementation, the Vanamrung innovation set to create the ancient community around Phanom Rung Mountain, Buriram province, which is designed, consists of 3: the innovation set consists of: innovation Set 1, Innovation to create Social Value with the Vanamrung Community Cow Bank System, Innovation Set 2, innovation to create cultural value based on the Thai fabric pattern, and Innovation Set 3, Innovation to create economic value with products from local banana varieties and organic jasmine rice from the volcanic area and the results of the development of the prototype area of the Vanamrung innovation of the ancient community around Phanom Rung Mountain, Buriram province, have

been developed into 2 systems: the online platform system and the actual area in the community; where the first set of innovations, the innovation to create social value with the Vanamrung Community Cow Bank system, has been developed into the prototype area of the Vanamrung innovation both on the online platform and in the area of Ta Pek subdistrict, Chaloem Phra Kiat district, Buriram province, the second set of innovations, the innovation to create cultural value according to the way of life of Thai fabric with a white cotton pattern, has been developed into the prototype area of the Vanamrung innovation, located in Ban Khok Muang community, Prakhon Chai District, Buriram province, and the third set of innovations, the innovation to create economic value with products from local banana varieties and organic jasmine rice from the volcanic region, located in Ban Don Mai Fai community, Tapek subdistrict, Chaloem Phra Kiat district, Buriram province.

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