A PARTICIPATION FOR STRENGTHENING COMMUNITY MODEL FOR SUSTAINABLE DEVELOPMENT

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ABSTRACT

The objectives of this article were (1) to analyze community contexts, (2) to analyze participation in strengthening communities for sustainable development, and (3) to present a model of participation in community development to strengthen communities for sustainable development. The study found that the community was affected by all aspects including socio-economic development, technology development, environmental problems, and natural disasters from climate change. Especially, stepping into the 4th Industrial Revolution with artificial intelligence (AI) caused the disruption in all aspects. Community participation consisted of 4 aspects; decision making, operation, receiving benefits and evaluation. For a model of community participation, all parties must be people-centered. People development to develop communities applied the principle of participation in holistic collaborative learning. Recognizing the benefits of information technology and AI was applied as an important tool in processing and synthesizing the information. The development was based on the philosophy of Sufficiency Economy.

Keywords: Participation Model, Strengthened Community, Sustainable Development

INTRODUCTION

The sustainable development concept has evolved and adapted to the global context. In the era of the Millennium Development Goals (MDGs) of the United Nations, the operation was implemented and ended in 2015. After that, the era of 2015-2030 was defined as the Age of Sustainable Development (SDGs) by balancing the dimensions of economy, society and environment with 17 key targets and 169 goals [1, 2]. However, the thinking method was adjusted to be more effective in balancing. The factors of 5P's consisted of people, prosperity, planet, peace and partnership[3].

The adjustment of the UN's goals is due to the changes and development in various aspects of the world including economy and society. The study in scientific and technological advancement has been developed abruptly resulting in the disruptive innovations. Especially, the artificial intelligence technology has resulted in the changes in all aspects and has infiltrated an important role in the way of life, human society, business system, and organizations that need to be developed and modified both for national and international organizations [4] Office of the National Economic and Social Development Board, 2018. The impacts of climate change and natural disasters are gradually volatile and severe. There are droughts and several times of typhoon in Asia and Southeast Asia [5]. This negatively affects the amount of agricultural products, pets, property, economic conditions, sources of household income, and the community environment.

Therefore, under such circumstances, the change of urbanization infiltrates the rural community forcing the community to increase its competitiveness to keep up with the changes. The researchers recognize the importance of participation model education as one of the key factors in strengthening the communities for sustainable development. The objectives were to analyze the community context, analyze the participation in strengthening the communities, and present the model of participation in strengthening the communities for sustainable development.

CONCEPTS AND THEORIES

Concepts and theories of community and community involvement

[6]stated that the community has an important element. Membership is a sense of belonging and sharing of personal feelings. Influence is the feeling of differentiating a group and groups are important to members. Reinforcement is integration and filling in what is needed for members. The emotional connection is having similar experiences, having beliefs, and striving for common goals. Meanwhile, [7] argued that in the community there are relationships and overlaps on four issues; connections, differences, scope and development.

The community involvement is one of the concepts that are important to the community strength for sustainable development. The opportunities are provided for the community members to come altogether, learn, and share their knowledge and abilities to improve their quality of life. It is an activity beneficial to the public. The consistency is necessary according to the needs and culture of most people.

[8]stated that community involvement is the process of participating in decision-making that affects the lives of individuals and groups in communities living in the development, building of social networks, and increase of problem-solving abilities. [9]identified four aspects of community participation; participation in decision-making, participation in the operation, assessment on the performance, and the participation in benefiting. [10]identifies three levels of participation. The high level is in the decision acceptance, i.e. collective decision-making, compromise, and negotiation for assistance. At the moderate level, it means having influence on decision making, i.e. solving problems altogether, facilitating, listening before making decision. The low level is gaining knowledge about the subject that requires decision-making which is just public perception.

[11]provides the definition of participation to cover in 3 dimensions.

First dimension

The participation is divided into four aspects in consistence with Yadav (1980) and Ananda (2009); (1) participation in decision-making at the initial, ongoing, and action stages, (2) participation in the implementation, (3) participation in obtaining material, social and personal benefits, and (4) assessment.

Second dimension

It focuses on who participate divided into villagers and local leaders (informal leaders, association leaders, local organizations), government officials and foreign personnel.

Third dimension

It focuses on how participation occurs which must be explained in details on these issues. Most of the participation initiatives come from the orders of government agencies or citizens. Participation is voluntary or coerced. Moreover, [11]also pay attention to the consideration of contexts in which spontaneous or intended participation takes place, ie, attention to the characteristics of projects that contribute to community development and environmental conditions which are conditions or factors that can determine community participation.

Concept of strengthened community and sustainable development

The strengthened community means the community that has the ability to manage problems and has talented leaders to learn altogether continuously based on culture, beliefs, original values, religion and community economy that depend on one another. Each community has used its potential to deal with problems under cooperation and support from outside organizations. The sustainable development is based on three areas; economic growth, people-centered development, alleviation of poverty and inequality, and environmental management in the country and around the world. In order to preserve ecosystems and resources [12], 17 Sustainable Development Goals (SSGs) in 5 groups, namely people, are concerned with the people quality of life. The wealth is on sustainable economic prosperity covering the world group on natural resources and environment. The peace group requires the strong institute and justice. The partnership group is on the partnerships for the Sustainable Development Goals [13, 14]. Under each goal, it contains goals and metrics that will help us better understand the content of each goal including (1) No poverty, (2) Zero hunger, (3) Good health and well-being, (4) Quality education, (5) Gender equality, (6) Clean water and sanitation, (7) Affordable and clean energy, (8) Decent work and economic growth, (9) Industry, innovation, and infrastructure, (10) Reduced inequalities, (11) Sustainable cities and communities, (12) Responsible consumption and production, (13) Climate action, (14) Life below water, (15) Life on land, (16)) Peace, justice, and strong institutions, and (17) Partnerships for the goals[15]. In summary, sustainable development consists of an important aspect, namely economic sustainability, social sustainability, and ecological sustainability.

Community contexts in economic and social aspects

The world through the industrial revolution, economic revolution, and digital revolution of information technology, computers, and telephones has changed people's lives to be more convenient and connected with information. The 4th time is the big revolution that is fast causing disruption resulting in the wide impact. It is based on faster computer processing from artificial intelligence. In this regard, the country's development guidelines set the 20-year national strategy (2018-2037) leading to the implementation of the vision. Thailand can become the stable, prosperous, sustainable, and developed country. The main points can be summarized as follows. "Stable" means being safe from dangers and changes both inside and outside the country. The stability can be in all dimensions. "Prosperous" means there is continuous economic expansion, upgrading to high-income countries. "Sustainable" means development that creates prosperity in income and the quality of life of people

continuously with social responsibility focusing on sustainable public benefits according to the Sufficiency Economy Philosophy [16].

The philosophy of Sufficiency Economy (2014-2017) has been adopted as the basis for driving [17] the development according to that strategic plan. The Sufficiency Economy is the philosophy pointing to the way of existence and practice of people at all levels from the family, community, to the state level. Both the country's development and administration should be carried out in the middle way, especially economic development, in order to keep pace with globalization. Sufficiency means moderation and reasonableness including having an immune system. This requires knowledge, prudence and careful planning and execution at every step. Strengthening the mental foundation of people in the nation is for people to have the sense of virtue, honesty, and proper knowledge. They can live their lives with patience, perseverance, mindfulness, wisdom and prudence in order to balance and be ready to cope with rapid and widespread changes in material, social, environmental, and cultural aspects from the outside world (Sub-Committee on Promotion of Driving Development according to the philosophy of sufficiency economy in agriculture and rural sector, 2015).

Environmental aspects

The changes and developments in various fields especially in technology have affected the natural resources and environment of the world. At the same time, nature has responded by causing natural disaster that affects human life. For example, the wildfires in the United States occur many times. In western California, in September 2020, the wildfire destroyed approximately 6.3 million hectares [18]. The wildfires in Australia destroyed the ecosystem and killed nearly 500 million animal lives [19]There were also big flood in many countries. In Jiangxi Province, many areas of China faced the worst flood in 30 years affecting more than 38 million people [20]. In Thailand, there was flood in many districts of Nakhon Ratchasima [21]. For the problem of forest fires in Thailand, there is a potential for forest fires to increase to 7,550 times destroying an area of approximately 174,813.4 million rai in 2020 [22]. We have to conduct our own natural resource and environmental management.

Technological development

Nowadays, technology is developing rapidly to play a role in many fields of science. Connecting to the internet has resulted in the expansion of knowledge bases that feed data into AI and machine learning, deep learning as a tool for manipulating big data. They can also learn and analyze data which is applied in various fields such as research, industry, logistics, medical and biological fields [23]. The PwC study analyzed and forecast the potential of AI with a total economic impact by 2030 for 15.7 trillion USD [24] in each region benefiting from AI. For example, in China, the total impact is 26.1 percent of GDP or about 7.0 trillion USD [24].

Analysis Framework

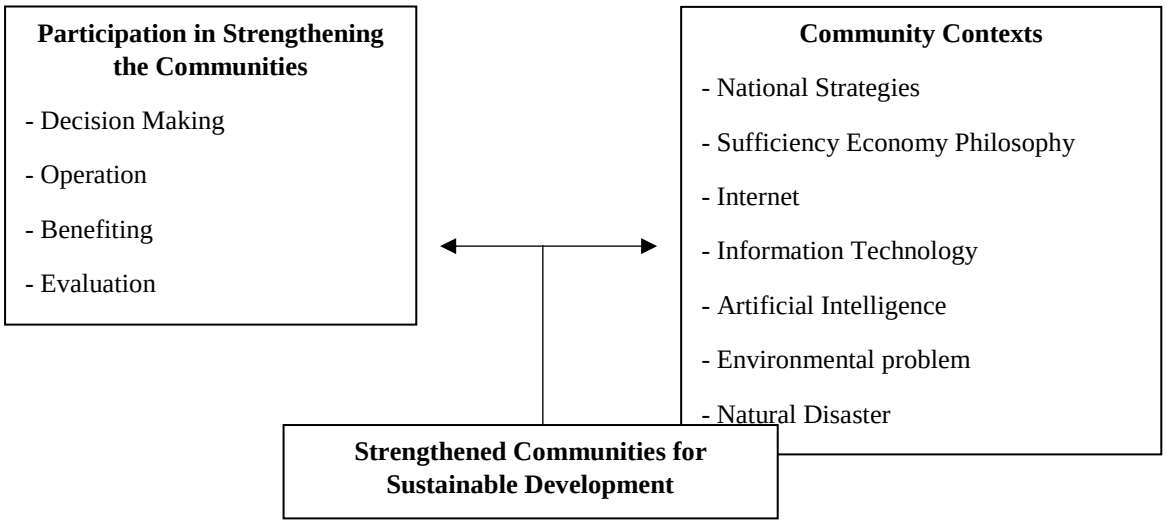

***Figure 1*:** Analysis Framework

ANALYSIS AND CONCLUSION

Thailand has driven the country's reforms in various fields to be able to cope with new opportunities and threats that change rapidly in the 21st century leading to an "innovation-driven economy". The main idea is changing from manufacturing "commodities" to "innovation", transforming the country's drive from industry to technology. The creativity and innovation shifted from focusing on product manufacturing to focusing more on the service sector. The traditional agriculture has changed to modern agriculture. More emphasis is on management and technology [25] [26]. The information technology is important. Artificial Intelligence technology is the key driving force towards the Industry 4.0 Revolution. Artificial Intelligence has negative impacts such as replacing workers at all levels leading to unemployment and no income [27, 28]. Therefore, the approach to be made in parallel with the development of technology is the adjustment of the country's development plan to provide opportunities for all sectors to participate. The concept of sustainable development is combined with the basic principles of the Sufficiency Economy Philosophy. The national strategy is adjusted to use for developing and strengthening the communities. The new ideas can be generated to learn to deal with problems. The emphasis is put on human capital, use of human development, "people-centered" development, development of people into sustainable lifelong learning society. This can be socially connected from a group of people to a community. The focus is on cooperation and participation in problem solving. To realize the values, culture, and wisdom, "people" must be the leaders of technology to bring artificial intelligence in driving the society. The changes are created in all sectors of society such as health and quality of life. Lifelong education and training create new business innovation and competitiveness to accelerate scientific discovery and innovation as well as expanding opportunities, social, and safety policies [29]. This agrees with [30] who studied and found that artificial intelligence and connectivity have powerful potential for creating positive social change to promote sustainability towards an effective wellbeing paradigm and transformation. "Smart City" that can be redefined is to transport and supply mobility with the impact on urban development. It focuses on user-centric approaches that "understand" and "response" human users. When the focus is on developing people, it subsequently strengthens the community. To build a strong community, the system-wide approach must be established to work with different sectors, emphasizing the work of naturally occurring communities along with the needs

of public services. It can lead to voluntary partnership work. The important agencies that lead to community participation are sub-district councils, local business organizations, faith organizations, community centers, and the residents' association which is a community-based agency [31]This is in accordance with [32] finding that the limitation of participation includes the state, centralized management decision, attitude towards people, strong trust and commitment. Knowledge and skills in working with people, incentives and policies, laws, and administrative support can be used to promote greater community involvement by allowing other agencies to participate apart from the government agencies. The operations can be done in decentralizing the decision-making power, adjusting the attitudes, building mutual trust between the state and the community, educating people in the community and enhancing the skills of government officials, motivating, engaging, and setting policies. The laws can encourage people in the community to participate in management by presenting a model of participation in building strong communities for sustainable development as shown in the picture.

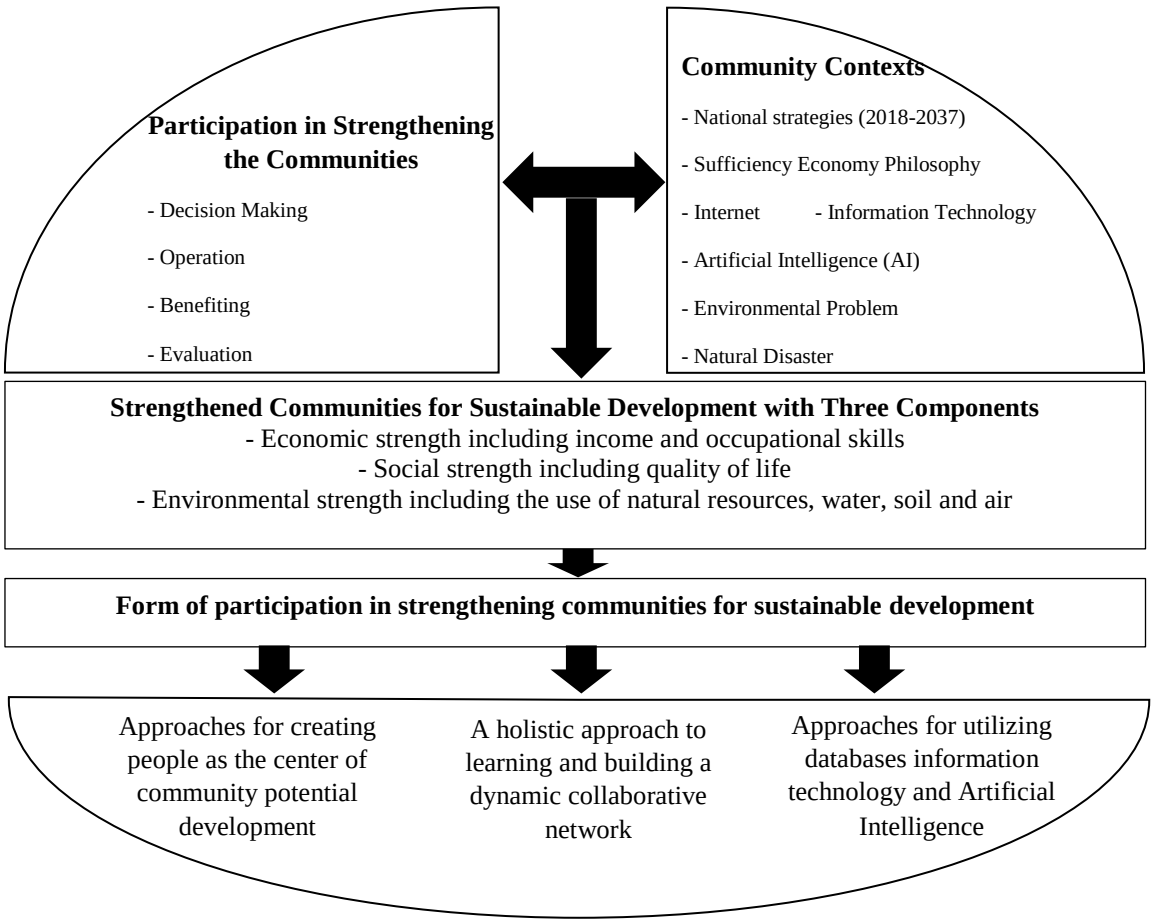

Figure 2: Form of participation in building strong communities for sustainable development

The model of participation in building strong communities for sustainable development has the 3 main approaches including:

1) Approaches for creating people as the center of community potential development

2) A holistic approach to learning and building a dynamic collaborative network

3) Approaches for utilizing databases information technology and Artificial Intelligence

All three approaches are under the model of participation in building strong communities for sustainable development. It can be further explained in the form of collaborative and holistic learning. There must be a network of links to share knowledge both internal factors and external obstacles that affect the community. Artificial intelligence must be an important tool for data processing, synthesis, learning and decision making in a networked manner. It consists of diverse groups and people joining altogether to achieve common economic, political, social, cultural and environmental objectives. The development approach is based on a middle path and carelessness by taking into account moderation, reasonableness, building a good immunity as well as using knowledge and virtue as a basis for living and preventing them from crises. This is to be able to survive stably under globalization and various changes. Sustainable development of the community requires a diverse body of knowledge to learn together, timely, and participate in knowledge sharing to apply knowledge to create a community model for strength and sustainability.

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