The Power of Data Systems for Driving Problem Solving
on Spatial Poverty in Sisaket Province

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Abstract

This research aims to develop and enhance a comprehensive system for verifying household poverty data across Sisaket province. The study emphasizes the participation and acceptance of the data by stakeholders at both the community and local levels, employing Participatory Action Research (PAR) method. The target areas include two districts: 1. Mueang Sisaket District and 2. Huai Tap Tan District. The target groups are 24 local administration organizations (LAOs), the Community Development Department (CDD) in Mueang Sisaket District and Huai Thap Than District, the Sisaket Provincial Social Development and Human Security Office. The analysis was conducted through a process of interpretation for content analysis, synthesis, and antithesis. The developed system, named the Sisaket Equity System (SES), serves as a Central Data System for Sisaket Province, supported by the Provincial Poverty Elimination and Development Committee (PPEDC). The system focuses on managing data and changing situations, reporting issues in six dimensions: 1. health, 2. living conditions, 3. education, 4. incomes, 5. access to government services, and 6. other aspects. It also reports on vulnerable household groups, improves data verification, and the application of the data for practical use. A memorandum of understanding was signed for data verification, data collection, and the use of the Sisaket province database system with the Sisaket Provincial Community Development Office. The direct beneficiaries include the Community Development Department, the Provincial Social Development and Human Security Office, and the PPADC that use the data for comprehensive and accurate planning and problem-solving.

Keywords: data system, solutions for solving spatial poverty problems, data system management

Introduction

Solving poverty problems is a complex challenge which requires great efforts since the problems usually have several related dimensions whether on incomes, education, health and infrastructures. For this reason, solving poverty problems has to use integrated approach covering various aspects such as promoting economic growth to generate works and incomes, education investment and skill development in order to escape from poverty, building health system and thorough social protection, promotion of gender equality and infrastructure investment along with giving significance to environment sustainability as well as having good

governance. Besides, based on the information and management of new challenges, cooperation among stakeholders is also necessary (S Dhinesh, Babu, 2022; United Nations Economic and Social Commission for Western Asia, 2023; M., Sharath, Chandra., et al, 2020).

Solving poverty problems is a complex challenge requiring great sources and efforts since problem issues are related to several dimensions, whether they be education, health, and infrastructures. Therefore, solving poverty problems has to use integrated approach covering several aspects such as promotion of economic growth to generate works and incomes, investment on education and development of skills in order to escape from poverty circle, building health system and thorough social protection, promotion of gender equality and investment on infrastructure along with giving significance on environment sustainability as well as having good governance. Apart from this, cooperation among stakeholders based on the information and management of new challenges is also necessary (S.Dhinesh, Babu, 2022; United Nations Economic and Social Commission for Western Asia, 2023; M., Sharath, Chandra, et al, 2020)

In 2019 the TPMAP Information System reported that Sisaket province ranked number 10 as the poor province. The province, therefore, stipulated an integrated agenda to solve the problem of socially disadvantage people and help the poor covering five dimensions, namely: 1) economic security, 2) education and necessary skills, 3) health status, 4) quality of livelihood, and 5) access to assistance services and social participation, using the TPMAP household data-base. The province has integrated cooperation from every network partner by holding the meetings of Administration Center for Poverty Elimination and Development of Every Generation at the provincial level together with creating an MOU among 12 ministries and one organization and announcing the provincial agenda with two forms of driving mechanisms, namely, the Administration Center for Sustainable Poverty Elimination and Development of Every Generation at the provincial and district levels in 22 centers with 206 operation teams and 119 mentor teams. The task force committee on sustainable poverty elimination and development of all generations on each dimension consists of 93 organizations chaired by a vice provincial governor with main agencies directly responsible for the five dimensions to develop recording skills and TPMAP system, MSO logbook, survey, analyze and classify the target families using ASRE Principles: Attitude, Skill, Resource and Exit. Budget and projects among network agencies should be integrated with the aim for assistance at three levels: survival, sufficiency and sustainability following the model "Si City People, Having Deep Love, Sharing and Having Equal Happiness at Sisaket", enabling a sustainable self-sufficiency through occupational promotion following the Economy Sufficiency Philosophy in order to elevate the quality of life, and share plant seeds. Every family is a food warehouse store, and every village is a food sharing center, supporting the family for food security through the activities "This house has love, growing vegetables, having products, people loving one another, having unity, couple with Khok Nong Naa. Sisaket province also driving the provincial agenda to decrease the gap, increase quality of peoples' life by integrating with the network agencies both within and outside the province using Sisaket Rajabhat University as an academic monitoring agency (Sisaket Provincial Office for Public Relations, 2023).

Sisaket Rajabhat University has continuously received support fund for doing research since 2023 from the management agencies of development fund at the area level (MDA) to conduct a research to solve the poverty problem using the poverty platform strategy consisting of 1) accurate information system, 2) delivery assistance, 3) developing innovation for solving poverty problems, and 4) making policy/plan (Kitti Satjawattana, 2021). This has been participated by all sectors in Sisaket province in investigating genuine causes of the poverty,

searching for locations of the poor people, collecting the data of the poor on five aspects (human capital, physical capital, finance capital, natural resources capital, and social capital), and systemizing the poverty data of Sisaket province (Practical Poverty Platform-PPPconnext). Currently, the results of the data analysis based on 21,372 families with 106,684 family members have been stored and reported on the following website: (http://www.ppaos.com/ppaos33/frontend/web/index.php?r =site/stat01&y=2566&p=, since 18 March 2024. Additionally, a study of working mechanism in the area on driving poverty problem solving, the delivery of assistance system for four groups of the poor (suffering group, difficulty group, livable group, and happy group) has also been reported to the related agencies for problem solving together.

In 2019, the results of the study has significance towards solving poverty in three aspects, namely: 1) solving poverty problems must have a clear and reliable information database, 2) solving poverty problems must have the process of bringing the information for establishing community's participation which is a concreate mechanism for solving the problems under the community fund covering five dimensions, and 3) solving poverty problems has connected and integrated with problem solving plan from the sub-district, district and province levels (Sahutsa Ponnil and others, 2023). In 2021, a research re-examined 100% poor families based on the list in TPMAP, in 18 sub-districts/municipalities in Mueang Sisaket Municipality using the process of co-re-examination with the community leaders. It was found that 692 families were missed out from the list of collected 2,760 families with 11,242 members (Sahutsa Ponnil and others, 2022), the information of which showed that it did not cover the whole assistance provided.
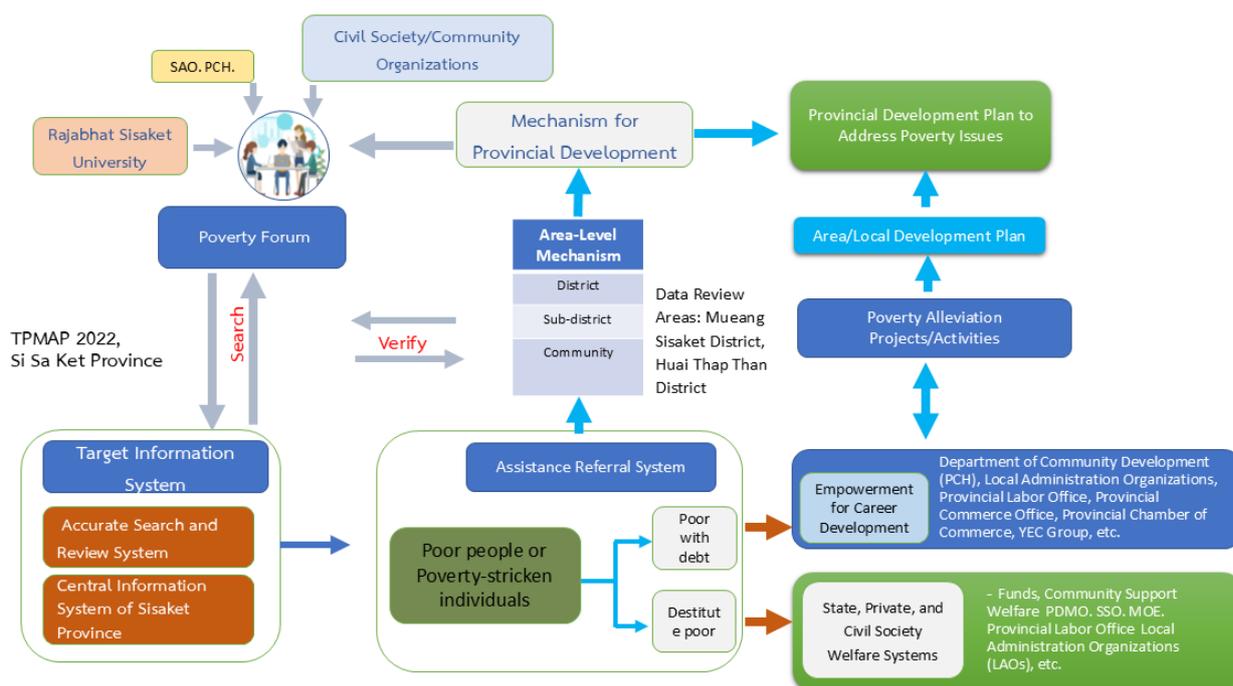
Presently, the agency having the mission on solving poverty problem in Sisaket province has had different information database, namely: ThaiOM, TPMAP, MSO logbook and Jorporthor (basic essential needs). It was found that the information in the system was not identical and that the information utilization for running the activities, planning for problem solving with separation and discontinuity as well as duplication in setting the budget. As to enhance the efficient system and mechanism in transferring assistance to the related agencies in Sisaket province to have the information ready for administrators in decision making, being able to correctly and accurately connect the database to external agencies, the Central Data Center should be developed and managed by a participatory basis, and be in line with Sisaket province context.

Objective

To develop and alleviate the system of reaching and re-examining the household data of the poor all over Sisaket province by means of participation and data acceptance by the network agencies both at the community and area levels.

Frame Work of the Study

This study employed a participatory action research with two target districts, namely 1) Mueang Sisaket district, and 2) Huai Thap Than district. The target groups that joined the activity were 24 local administration organizations (LAO), Community Development Office (CDO), Mueang Sisaket district, Huai Tha Than district, Sisaket Office for Social Development and Human Security, (SDHS), and the Committee of the Provincial Administration Center on Sustainable Poverty Elimination and Development of Every Generation Using the Sufficiency Economy Philosophy.

Figure 1: Research Framework
Source: Adapted from Kitti Sajjawatanakul

Literature Review

1. Roles of Network Agencies Related to Solving Poverty Problems

The roles of the network agencies relevant to solving poverty problems and those related to the study to drive innovations to solve poverty problems consisted of 11 agencies, namely: 1) the Provincial Office, having the role of transforming the national strategy into the provincial strategy in the area, and develop an administrative database system; 2) Community Development Office, having the role of making and developing a standard system for community development, the system and mechanism in enhancing learning process, knowledge management, occupation, saving, and management of community fund, supporting and developing community data system, promoting utilization and community information services; 3) Provincial Social Development and Human Security Office having the role as a

national mechanism that supports and coordinate, connect with every network sector for people security of life as well as welfare services and protection; 4) Local Administration Organizations having the role as supporters of peoples' participation in local development, natural resources management; 5) Provincial Office for Commerce having the role of laying the guideline and suggestions in organizing trade regulations, marketing, promoting and developing and solving problems on trade economy, product marketing and services; 6) Provincial Office for Agriculture having the role in providing the information on agriculture, disseminating knowledge on agriculture and providing a mobile agricultural clinic, registering agriculturalists/issuing agriculturalist certificates; 7) Institute for Skill Development having the role of developing working skills and potentials for labor groups; 8) Provincial Agriculture Council having the role of developing and enhancing strength to agriculturalists and agricultural organizations in the province, coordinating the policy among agriculturalist organizations, agriculturalists, research institutes, education institutes and government agencies; and 9) Provincial Chamber of Commerce having the role of collecting statistics, disseminating trade news, conducting researches on trade and economy, and promoting tourism industry; 10) Civil Society Organization, community organizations, institute for community development having the role for driving urban communities to solve poverty problems; Sisaket Rajabhat University, a higher education institute in Sisaket having the mission in locality development in line with solving spatial poverty problems, being the provincial knowledge and wisdom source. Previously, the university has continuously cooperated with both government and private sectors, and has accepted trust being a committee in driving poverty problem solving in Sisaket province for 10 terms.

2. Concepts for Sustainable Livelihood in Sisaket Province

Sisaket province has four concept for sustainable livelihood (DFID, 2000).

1) Concept on livelihood assets consists of 7 aspects of the poor families, namely: human capital, natural capital, money capital, physical capital, social capital, cultural and wisdom and welfare capital (Sahutsa Ponnil and others, 2022).

2) Concept on transforming structures and processes which affect choosing ways of living consisting of two minor parts: structures and processes of the structure, namely (1) government sector referring to functioning agency, that is local administration organization, Ministry of Interior, Provincial Social Development and Human Security Office, Community Development Department, Provincial Public Health Office, Institute for Skill Development, District Committee for Life Quality Development, etc. (2) Private Sector, business agencies having readiness in investment with the community in producing and selling the product at the process level, being the driving section of the structure: (1) process of making harmonious development plans at the community, sub-district, district, and provincial levels; (2) process of making Big Database for solving poverty problems correctly and accurately.

3) Concept on vulnerability context and uncertainty referring to natural disaster (flood, drought) Covid 19 pandemic which brought about unemployment, shortage of incomes, and increase in the number of the poor.

4) Concept on livelihood strategies, survival strategies for the poor in Sisaket has two ways: 1) bringing the capital on resources, culture and wisdom to create occupation and incomes, 2) using the social capital to help and support one another in the community such as *Phapah* merit making, incoming funds for the poor in the village.

3. Collaborative Governance

Collaboration is a process the administrator or authority in an organization connects with the others in the organization or other organizations to work together, share knowledge, information, skills and motivation in order to achieve the goal together. Collaboration is very important in the organization because it brings about efficient work, builds innovation, solves complex problems and sustainably develops the organization (Katzenbach, J.R., & Smith, D.K. (1993); Lencioni, P. (2002); Hackman, J.R. (2011).; Dyer, W.G., Dyer, J.H., & Dyer, W.G. (2013), including connecting with others in decision making (Shrum, W., Genuth, J., & Chompalov, I. (2007). Creating spatial collaboration could be done in two manners: (1) establish formal collaboration through a governing order in case the province is a policy driver by making an invitation letter to agencies of equal level requesting for cooperation to be cooperation networks, and 2) establish informal collaboration through the network made from seminars, coffee council meetings, and meeting of practitioners, which constitute personal relations and informal coordination among agencies. Studies show that the mechanisms in driving collaboration for solving complex poverty problems require both formal and informal collaboration for the policy to be operated and to achieve the goal of the policy (Phimlikid Kaewhanam et al., 2021).

4. Development of Database System

To manage an organization with highest efficiency by using least resources, with utmost benefits, having right information, rapidity, being up-to-date, significance for both government and private administrators in decision making to solve problems in time, the data information will be used for operation plans, being the navigation compass that leads the organization to achieve its aims. To have such data, it requires a systematic, reliable process of data analysis by means of whole-organization participation (Sahutsa Ponnil, 2021) and design of database for data collection, browsing, up-dating, and data collection in an appropriate structure (Elmasri, R., & Navathe , S.B. (2015); Coronel, C., Morris, S., & Rob, P. (2015).

The step of system development, system development life cycle:SDLC of the data system has been divided into five steps, namely: 1) system planning, 2) system analysis, 3) system designing, 4) system development, and 5) maintenance (Opart Iam-siriwong, 2012).

Research Methodology

1.Target Group

The target group consisted of 24 local administration organizations (LAO), Community Development Office (CDO), Mueang Sisaket District Office, Huai Thap Than District Office, Sisaket Provincial Office for Social Development and Human Security (SDHS), and Committee of the Provincial Administration Center on Sustainable Poverty Elimination and Development of Every Generation Using the Sufficiency Economy Philosophy.

2.Research Instruments

This study employed a participatory action research by means of the following activities.

- Hold a meeting in order to explain the process of re-examining of the household data of the poor at the provincial and district levels, back ground and significance of the searching and re-examining of the data for poverty solving, creating the shared target to bring the data into the system for solving poverty problem at the provincial level and forwarding for assistance.

- Set up a stage or platform for re-examining, data of the 100% poor using a participatory process with the stakeholders in 24 subdistricts.

- Select the personnel for data collection, data managers and data recorders in 24 sub-districts.

- Analyze the data system on household poverty at the area level.

- Analyze the situations, problems, needs, implementation of the data information in each level and ideas of related people at the provincial level.

- Hold the meeting to develop management models of the database at the sub-district level.

- Hold the meeting to try out the database system and evaluate the implementation of the system of the related people at the provincial level.

- Train the administrators on implementation of the system at the sub-district level.

- Hold the meeting to present the database system of the relevant people at the provincial level, and explain how to connect the data for the benefits of the provincial offices.

3.Data Analysis

The issues were concluded by means of interpretation for content analysis with three steps: 1) investigate related literature and theories, and guidelines (Thesis), 2) specify steps of the operation, analyze, co-synthesize, and 3) summarize the step of operation, examine the steps from the theories, and explain antithesis.

Research Findings

The Mechanism of Cooperation Network in Driving the System of Data Development to Solve Poverty Problems and Forwarding for Assistance

The mechanism of cooperation network in driving the poverty problem solving in Sisaket province has set up the Administration Center for Sustainable Poverty Elimination and Development of Every Generation following the Economy Sufficiency Philosophy and such a center at the district level, including the spatial operation team in the area to deal with poverty problems and develop every generation based on the designated standard and philosophy with emphasis on appropriate adjustment to geographical condition and resources in each area. The operation is divided into five dimensions of poverty, namely: economic security, 2) education and necessary skills, 3) health, 4) life quality, and 5) access to services, assistance and participation in the society.

The process of development has three main steps, namely, survival, sufficiency and sustainability. However, the important problem is following up the overall result of operation of each sector, particularly the result of assisting poor families or the spatial vulnerable groups taken care by the network agencies that usually perform only their own missions. When the assistance was completed, the data would be reported to the provincial level at the Administration Center for Sustainable Poverty Elimination and Development of Every Generation.

However, there were problems on following up the information from other sectors and integration of assistance together resulting in discontinuity of poor family assistance. Additionally, the main agencies in the area such as local administration organizations lacked of the feedback, particularly the time of assistance and details of the assistance.

Sisaket Rajabhat University has established cooperation networks, signed MOU with the Provincial Office for Community Development for developing the data collection system which has developed the collecting personnel at the sub-district level (Community Development Network) including how to collect, record, and analyze the data, certify the data and forward the information for assistance to the disadvantaged people on five dimensions, including following-up and re-examining the information for improving the report and forwarding the information to the meeting at the spatial level and the district level respectively.

Figure 2: Cooperation network operations to develop a data collection system

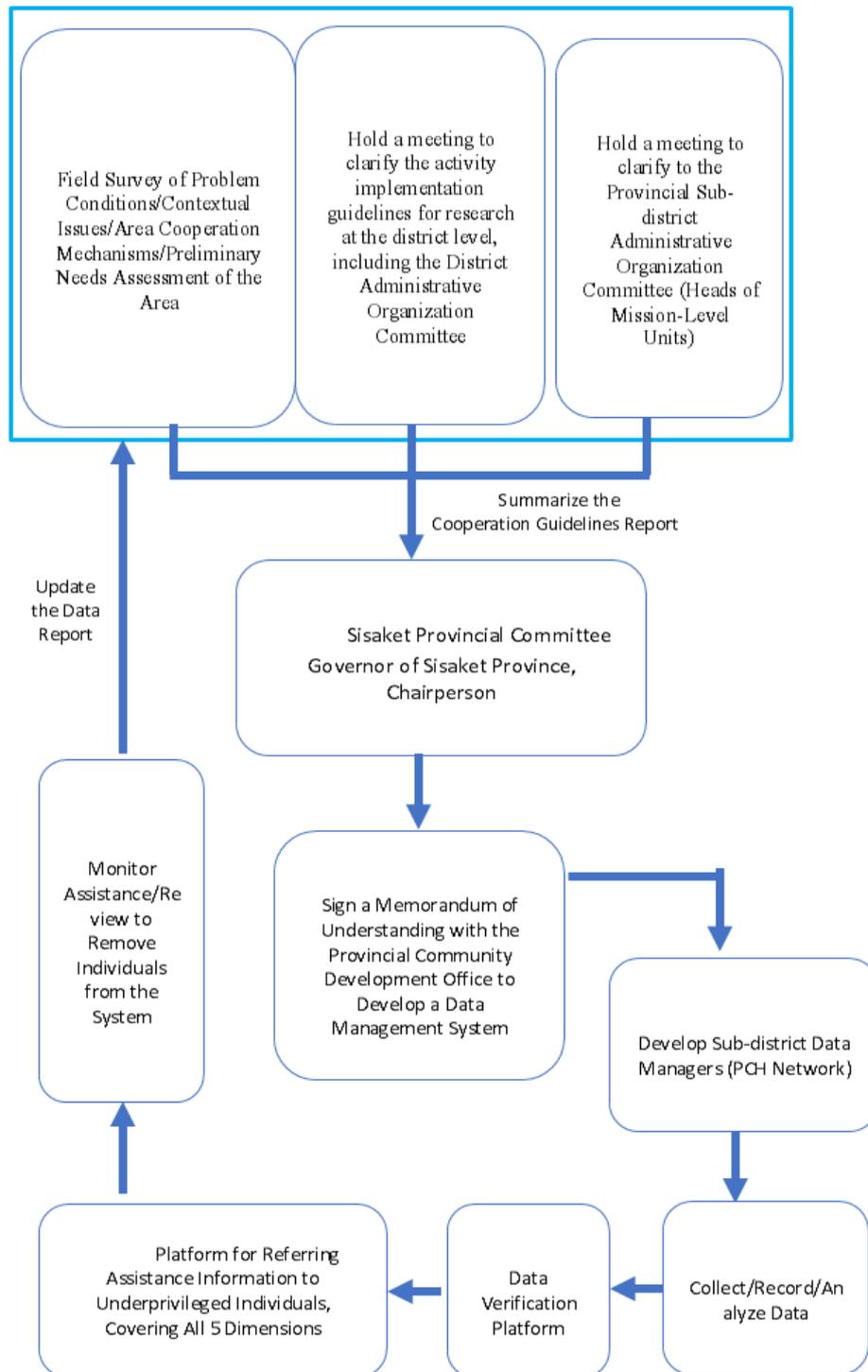**Important Mechanism in Cooperation with the Network in Driving the Data System:**

1. Following Up Overall Results: It is necessary for enhancing the system in following up the operation on giving assistance to the poor families continuously and efficiently such as following up the assistance which would be improved to suit the people's needs in each area.

2. Data Collection: Data collection and recording are important for data analysis and a suitable and efficient operation plan.

3. Building Cooperation among Agencies: To have a data and resources integration in assisting among relevant agencies such as local administration organizations and Sisaket Provincial Community Office.

4. Innovation Technology Development: Using technology for data collection and information communication can decrease complexity and increase operation efficiency.

5. Establishing Enhancing Cooperation Mechanism: Establishing the system for enhancing cooperation among agencies and social groups can enhance sustainability in solving poverty problems and efficiently develop people of every generation.

Figure 3: Mechanism for Building Cooperation in Sisaket Province
and Referral of Assistance in Sisaket Province

Mechanism of Establishing Cooperation and Forwarding Assistance in Sisaket Province Searching and Re-examining the Data on Poor Families all over Sisaket through Participation and Acceptance of the Data and Network in the Community and Spatial Levels

The starting point of successes in solving poverty problems came from the right and accurate data originated from the acceptance of each other in the area, the process of searching and re-examining of the 100% poor people derived with accurate data and the efficiency of forwarding for assistance consisting of four steps, namely: 1) investigate the context/prepare spatial readiness, 2) data collection, 3) data analysis, and 4) forwarding the data for assistance.

1) Investigate the context/prepare spatial readiness

On readiness of preparation and building understanding at the administration level for poverty problem solving in Sisaket, this study has administered the meeting at two levels to build understanding as well as ask for cooperation from the relevant people.

(1) The committee meeting was held at the provincial and district levels with the governor, chiefs of the related provincial government agencies to explain the research plan and request for suggestions and cooperation when visiting the area to collect data, with emphasis on building understanding on the work and the aim of the study. The meeting is important in establishing support from the highest administrators of the province as for the operation would be done smoothly and efficiently.

(2) Th committee meeting was held at the spatial agency level at each sub-district administration organization with participation of sub-district leaders in Mueang district, sub-district committee on life quality development in Mueang district, chiefs of government agencies in Sisaket, representatives of the Provincial Administration Organization (PAO) and representatives of the local administration organizations (LAO). The meeting aimed at explaining the operation plan of the research in details and requesting for cooperation when visiting the area. Participation of the local administrators is important in driving the policy and plans to the related agencies in truly solving poverty problem.

The meeting at the two levels is the to establish a firm basis in building cooperation and support from every related sector with the aim to have efficient operation and be able to have concrete poverty problem solving in Sisaket province.

Figure 4: The meeting at the two levels is the to establish
a firm basis in building cooperation and support

Creating understanding and readiness of preparation in the area for re-examining the data of the poor in Sisaket was done through the meeting explaining the objectives, data collection, and utilization of the data of which the participants were village headmen, sub-district chiefs, representatives of local administration organizations (LAO), and community

leaders. This meeting employed the concept of sustainable livelihood framework as the framework for analysis of the problems and poverty situations in the area. This concept helps define the poor people and specify clearly the causes of poverty. At the meeting, the participants joined in examining the list of poor families from the database TPMAP (Thai People Map and Analytics Platform) by adding up or decreasing the lists of the target groups. Improvement of the data must be approved by the meeting to assure that the current data are correct.

Additionally, questionnaires were also distributed, method of data collection, and process of choosing the data collector, who received trust from the area so that he would be able to get access to elaborate information efficiently and reliably, were also discussed.

The purposes of all the operations were to build understanding and participation from the related people in the area in order to use the data and have accurate data analysis, being able to be used for operation plan in solving the poverty problems in Sisaket effectively.

Figure 5: The meeting explaining the objectives, data collection, and utilization of the data of which the participants were village headmen, sub-district chiefs, representatives of local administration organizations (LAO)

2) Data Collection

The data collection for the study employed a survey form from the central part developed for use in every province, the items of which consist of seven parts: Part 1 being the family data (humancapital, namely, skill, knowledge, labor ability and quality, leader potential, and good health) with 17questions; Part 2 being physical data and public utilities (physical capital, namely, facilities, infrastructure and tools or production machines) with 16 questions; Part 3 being economy foundation (finance capital,namely, money savings applicable for circulation) with 6 questions; Part 4 being natural resources and disasters (natural resource capital, namely, soil, water, air, forest, biodiversity) with fourquestions; Part 5 being social support system (social capital, namely, network groups, civil society, membership as well as household and social relations) with 10 questions; Part 6 being opinions towards problems and impacts from Covid -19 with 3 questions; and Part 7 being opinions towards suggestions with 3 questions. The data collectors have been chosen are residents in the area who have reliability and the local poor people have trust to give information, such as village headmen, public health village volunteers, volunteers for social development and human security. Prior to the data collection, the research team organized a training program to build understanding of the instrument and method of data collection to have the complete and correct data. After storing and checking the data, the data recorders consisting of 25 people in the research team would

bring the data to the PPPconnext processing system (the management unit on the capital for spatial development (MSP), 2023) to summarize the data analysis on a quantity basis.

Figure 6: Data collection with sample groups in the target area

3) Data Analysis

The results of data analysis of the poor families from the PPPconnect system, showed five average capitals on five sides, namely: human capital, physical capital, finance capital, resources capital, and social capital. Classification of the poor was put into four groups, report of the name list Group 1 forwarded for assistance of the poor rapidly or forward to Group 2 or Group 3 for promoting and occupation development by bringing the classified list of the poor for the meeting with the sub-district administration organization, village headmen, sub-district chiefs, and people with significant roles in sub-district area, listening to additional information and suggestions from the network agencies in the area , and analyze the marketing possibility.
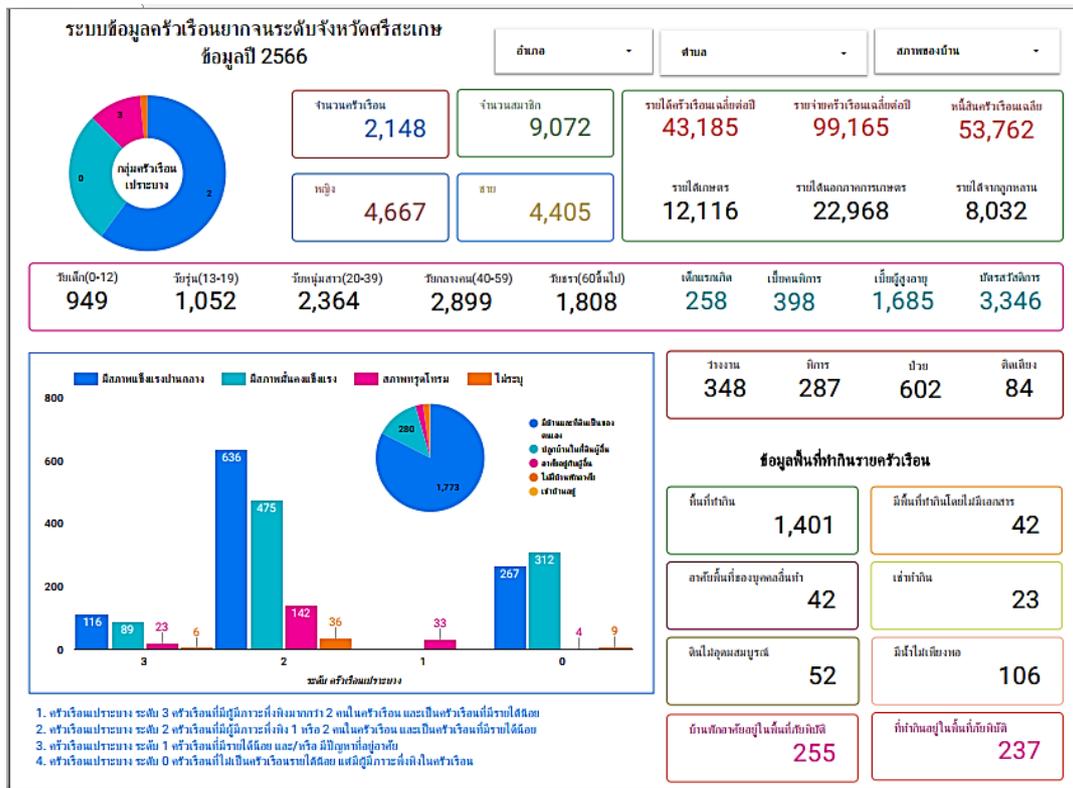

Figure 7: Data analysis results of data analysis of the poor families in Sisaket

4) Forwarding for Assistance

The results of data analysis were classified four groups of poverty: Group 1 living with sufferings, 2) living with difficulties, 3) living alright, and 4) living well. Forwarding for assistance refers to bringing the data in Group 1 to the welfare supporting unit urgently. For Group 2 and 3, the data would be sent for the research project for innovation development to solve poverty and to the related agencies for development of skills, occupation using technology and suitable innovation to elevate income. For Group 4 being the group capable of living without receiving assistance but having ability in investment and receive Group 2 and 3 to join activities/business. The research project would support them with body of knowledge and innovation, decrease the operation cost or expand the amount of production.

อำเภอ...	ตำบล	ชื่อ-นามสกุลหัวหน้า...	ประเภทครัวเรือน	ประเภทปี...	ประเภทปี...	ชื่อกิจกรรม	ผลสัมฤทธิ์กิจกรรม
เมือง ศรีสะเกษ	นาศา		ต้องการให้สงเคราะห์ /ช่วยเหลือเพียงอย่างเดียว (สูงอายุ/พิการ)	ด้านรายได้	ด้านรายได้	1. การแนะนำหน่วยงานที่เกี่ยวข้อง	1. กิจกรรมสามารถแก้ไขปัญหา ได้แล้ว
เมือง ศรีสะเกษ	ซ่า		ต้องการให้สงเคราะห์ /ช่วยเหลือเพียงอย่างเดียว (สูงอายุ/พิการ)	ด้านรายได้	ด้านรายได้	1. เลี้ยงชีวิต	1. กิจกรรมสามารถแก้ไขปัญหา ได้แล้ว
เมือง ศรีสะเกษ	จาน		ต้องการให้สงเคราะห์ /ช่วยเหลือเพียงอย่างเดียว (สูงอายุ/พิการ)	ด้านรายได้	ด้านรายได้	1. การส่งเสริมการสงเคราะห์	1. กิจกรรมสามารถแก้ไขปัญหา ได้แล้ว
เมือง ศรีสะเกษ	หมาก เขียบ		ต้องการให้สงเคราะห์ /ช่วยเหลือเพียงอย่างเดียว (สูงอายุ/พิการ)	ด้านรายได้	ด้านรายได้	1. การดูแลรักษา	1. กิจกรรมสามารถแก้ไขปัญหา ได้แล้ว
เมือง ศรีสะเกษ	น้ำคำ		มีความพร้อมสามารถพัฒนาได้	ด้านรายได้	ด้านรายได้	1. แนะนำความรู้เกี่ยวกับการดูแลรักษาโรค	1. กิจกรรมสามารถแก้ไขปัญหา ได้แล้ว
เมือง ศรีสะเกษ	หนองครก		ไม่ขอรับความช่วยเหลือ	ด้านการศึกษา	ด้านการศึกษา	1. ส่งเสริมการเรียนต่อ	1. กิจกรรมสามารถแก้ไขปัญหา ได้แล้ว
เมือง ศรีสะเกษ	น้ำคำ		มีความพร้อมสามารถพัฒนาได้	ด้านความเป็นอยู่	ด้านความเป็นอยู่	1. แนะนำหน่วยงานที่เกี่ยวข้อง	1. กิจกรรมสามารถแก้ไขปัญหา ได้แล้ว
เมือง ศรีสะเกษ	เทศบาล เมือง ศรีสะเกษ		มีความพร้อมสามารถพัฒนาได้	ด้านรายได้	ด้านรายได้	1. การส่งเสริมการปลูกผัก	1. กิจกรรมสามารถแก้ไขปัญหา ได้แล้ว
เมือง	จาน		ต้องการให้สงเคราะห์ /ช่วยเหลือเพียงอย่างเดียว	ด้านรายได้	ด้านรายได้	1. สนับสนุนการปลูกผัก	1. กิจกรรมสามารถแก้ไขปัญหา

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Figure 8: Reporting the Results of Assistance to Targeted Poor People

Development and Alleviation of the Data System for Spatial Family Poverty to Be the Central Data System for the Provincial Data System of Family Poverty (Provincial Thai People Map). Sisaket Equity System (SES) has been developed from the shared approval of the Committee of the Provincial Administration Center on Sustainable Poverty Elimination and Development of Every Generation following the Sufficiency Economic Philosophy as the central data system of Sisaket province which aims at data management/the changing situation, utilizing the information by the agencies directly benefits, namely: Community Development, Social Development and Human Security, and Committee on Provincial Development and Alleviation of Family Poverty Problem, and District Development and Alleviation of Family Poverty Problem for using the data for work planning and complete and accurate poverty problem solving. In this connection, key performance has been set up in accordance with those set up by the province for its self-evaluation (MPI) of Jor Por Thor in TPMAP and THaiQM which the system can collect the data at the sub-district, district and provincial levels.

To develop and alleviate the system of forwarding for assistance for the target poor group to have access to the government/ community or private welfare in a concrete manner, Sisaket province has cooperation mechanism of data integration for solving spatial poverty problem in Sisaket in four steps, namely:

Step 1 Integration and connecting the data of TPMAP, THaiQM MSO Logbook, PPPconnect (connecting the data to outside of PPAOS), re-examine the data to correspond to each other, the participants are from important related provincial agencies, local administration organizations, Sisaket Rajabhat University/ private sector/civil society.

Step 2 Data analysis and report by the research team, Sisaket Rajabhat University . The report of the data has been classified by problem situations into six dimensions, namely: 1) health dimension, 2) living dimension, 3) education dimension, 4) income dimension, 5) dimension on access to government services, and 6) other dimensions. The report on brittle families where people are in the situation that should have assistance and taken care by the families such as little children, the elderly, the disable and the bedridden patients or being the family with little incomes (the family with income less than 100,000 baht). The brittle families are classified into four level (Office of the National Economic and Social Development)

- Level 3 Family with more than two dependencies and with little incomes.
- Level 2 Family with one or two dependencies and with little incomes.
- Level 1 Family with little incomes and or with residence problem.
- Level 0 Family not being a family with little incomes but with dependencies.

Step 3 Forwarding the Data providing assistance immediately and providing assistance by an agency under the work plan/project/activity of the relevant agency.

Step 4 Bringing the data after providing assistance, bringing the data to the Feedback Loops SES in order to follow up the assistance in the next working circle.
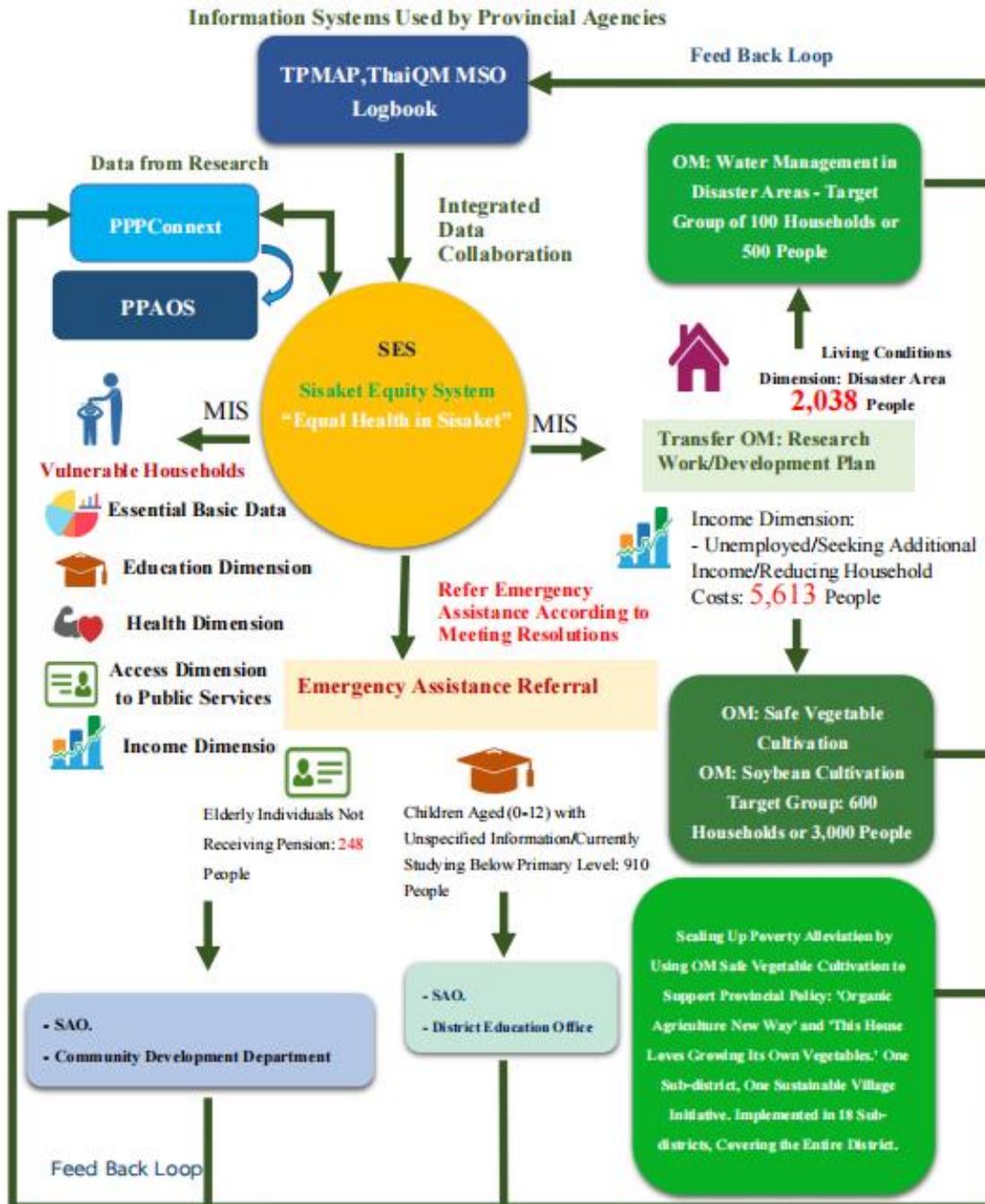
Figure 9: Workflow of the Poor Household Data System in Sisaket Province

Data Integration for Solving Spatial Poverty in Sisaket Province

In holding the meeting to integrate the data for solving spatial poverty problem in Sisaket province, the researchers cooperated with the relevant agencies in analyzing and developing the central data system on poor families of the province by presenting the result of data analysis and connecting with the mechanism of solving poverty problem using Sisaket Equity System which is a data integrating system jointly used with various agencies.

The meeting – workshop for using the developed data system has listened to the suggestions and needs of the users from community leaders, officials of local administration organizations and the committee of the Provincial Administration Center on Sustainable Poverty Elimination and Development of Every Generation Following the Sufficiency Economic Philosophy (district and provincial levels) which analyzed and improved the system to suit the spatial users most.

The result of data analysis has been brought to the meeting of the provincial committee chaired by the governor has leaded to connecting the data and the provincial development plan in the year 2026. The information resulting from the meeting would be used for laying a development plan of each relevant government agency such as Office of Sisaket Province, Sisaket Horticulture Research Center, Sisaket Tourism and Sports Office, Sisaket Community Development Office, Natural Resource and Environment Office, Social Development and Human Security Office, Sisaket Agriculture Office, and the Office of Agriculture and Agricultural Cooperatives

The data integration is aimed at building connectivity and cooperation among government agencies in sufficiently dealing and solving spatial poverty problems, data management and laying development plan consistent with poverty problem solving thoroughly and sustainably.

Figure 10: Workshop for the Use of the Data System Presented at the Sisaket Provincial Committee Meeting

Discussion

The mechanism of network cooperation in re-examining the data, driving development of the data system to solve poverty problems and forwarding for assistance in this study showed that the mechanism of the cooperation among agencies is very important in management of the family poverty data and forwarding for assistance. Efficient collaboration could be established through working ecology with strong participation and relations among agencies. A continuation of collaboration enhances friendship and decreases the steps of formal contact and coordination resulting in working more efficiently.

According to Katzenbach, J.R., & Smith, D.K. (1993), Lencioni, P. (2002), Hackman, J.R. (2011), Dyer, W.G., Dyer, J.H., & Dyer, W.G. (2013), the concept of governing by thinking together and working together emphasizes the significance of connecting and collaboration, working together, within an organization or among organizations in order to share knowledge, information, skills and motivation to achieve the shared goal together. Building good cooperation is, therefore, able to lead to working efficiently, establishing innovation, solving complex problems, and developing sustainable organizations.

Establishing spatial cooperation both formally and informally has played important roles in driving the policy on poverty problem solving. Establishing formal cooperation could be done through governing order and invitation letters from the organizations at the same level, while the informal one arising through networking from the meeting and informal conversation.

Furthermore, a study by Phimlikid Kaewhanarm et al (2021) found that working with the Community Development Office that has the network in every district and sub-district is more efficient than working without an agreement to work together. The coordination and re-examining of the data were correct and fast resulting in decreasing work and budget. Additionally, because of the reliability of the network of the people working at the Community Development Office, data collection of the poor all over the districts and the province proceeded efficiently.

Therefore, working on a complex and wide spatial basis is necessary to use a systematic and reliable working mechanism. Establishing cooperation and education network, and an analysis of working mechanism in the area in details is important in making the working process successful and achieve the goal of having sustainable solutions solving the poverty problems.

The Power of Data in Driving Spatial Poverty Problem Solving

The concept of transition of the structure and process of government agencies based on DFID (2000) indicates that the structure and process of government organizations play vital roles in specifying life style and people's choices, particularly the poor group. Therefore, availability of accurate and up-to-date data would help the organizations be able to lay plans and policy in line with real situation efficiently.

In Sisaket context, integration the data from the same source helped spatial poverty problem solving proceeded completely and thoroughly. Having high quality data enabled us to specify the problem and deal with it on the point which is line with the concept of organization management and the analysis process and designing the system as Sahutsa Ponnil (2023) states that having correct data and up-to-date is important for administrators' decision making in eliminating various problems.

Reliable and quality data collection and data storing must have a clear cut process and participation from all sectors in the organization. Significance given to the data collection from various and reliable sources would help increase efficiency in planning and solving poverty problems. Besides, using accurate data also helps decrease risks in making a wrong decision and increase ability in response to rapidly changing situations.

For this reason, the development of quality data system and participation of all sectors in the process of data collection are highly important so as to be able to solve poverty problems efficiently and sustainably in the long run.

Suggestions

As to enhance the efficiency of the system of data collection to be correct, accurate and up-to-date, the suggestions are as follows.

1.Sisaket province should have a plan to improve the central system with an annual budget and have a management committee for the provincial Central Data System, and every agency takes part in running the center so as to create acceptance of the data and make use of them widely.

2. Sub-district administration organizations which are spatial key agencies should give significance to this matter by setting manpower as officials to manage the information at the sub-district level because the information data at this level are most important and will be forwarded to other agencies following the administrative structure.

Acknowledgement

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