THE COMPETENCY MODEL FOR SURVEYOR COMPETENCY OF LARGE-SCALE IRRIGATION PROJECTS IN THE LAO PEOPLE'S DEMOCRATIC REPUBLIC (LAO PDR)

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Abstract

In the Lao People's Democratic Republic (Lao PDR), human resource development is critical. In the Lao PDR, competence drives the growth of human capital, particularly in the construction of surveys for massive irrigation projects. Large-scale irrigation projects begin with surveyors contributing to design and construction monitoring. This research aims to create a core competency model for surveyors working on large-scale irrigation projects in Laos. The goal of content analysis is to synthesize qualitative research findings into a coherent whole. According to the findings, surveyors of large irrigation projects in the Lao People's Democratic Republic have three complementary performance characteristics. These are knowledge characteristics, skill attributes, and personal traits. The outcomes of this research will aid in the development of human capital and improve irrigation surveying capabilities by utilizing human resources in the Lao People's Democratic Republic's exploration of large-scale irrigation projects (Lao PDR). The findings of this study can be used to improve the professional potential of irrigation surveyors in the Lao People's Democratic Republic by planning operations in various domains and applying the body of knowledge in the classroom. Governments and related government agencies can also use the research results in the Lao People's Democratic Republic to plan, educate, and develop surveyors' capacity to perform successfully and efficiently. Further, survey participants' organizations or agencies may use the data to improve explorers' skills and expertise. It may allow the firm to find new potential in its

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personnel, allowing them to learn new skills and allowing the corporation to start new businesses that will benefit the company.

Keyword: Surveyor, Competency, Large-scale Irrigation Projects, Lao People's Democratic Republic

Introduction

The Lao People's Democratic Republic (Lao PDR) is a developed nation that is expanding at the highest and fastest rate among ASEAN nations, due to the acceleration of the investment and construction sectors. While economic growth is at its peak, there is an insufficient labor supply. Lao PDR has adopted the Economic and Social Development Plan 2011-2012, allowing talented foreign employees to work in Lao PDR so that their knowledge can aid in the country's development and investment in next fiscal year's initiatives (Bureau of ASEAN, Department of International Trade Negotiations, 2016). The Laos Ministry of Planning and Investment has stated that increased investment forces Laos to hire more foreign workers because Lao PDR is unable to provide sufficient labor for the expanding mining and hydroelectric sectors. However, Lao PDR educational institutions are able to produce enough graduates to meet labor market demands. Due to the small number of higher education institutions, the majority of professionally skilled people are imported from Thailand (Browne et al., 2016). In accordance with global trends, natural resources are anticipated to contribute to the economic recovery (Chandramohan, Perera & Dewagoda, 2020). However, the Lao People's Democratic Republic still has a serious shortage of professional and lower-level labor, probably due to the country's minimum wage. So, one way to raise wages in the member states is through the ASEAN Community (Chamikara, Perera, and Rodrigo, 2020).

Itaku & Ramadani (2020) and Kamkankaew (2021) assert that skills and craftsmanship are crucial to economic development and economic progress where the surveyor is a professional and skill-based worker. Therefore, workers in this industry must possess skills in the following six areas: Data Collection, Development, Process Field, Communication and Control Survey (Daouk, Sahakian & van de Vijver, 2021). Several areas of expertise are required for irrigation projects, which have already been researched. In addition, they undertake public hearings and public engagement processes in the project

construction process, collaborating with or supporting the actions of other pertinent authorities or assigned projects (Nkado & Meyer, 2001). The surveyors of large irrigation projects must be prepared to assist in maximizing the potential of the operators, regardless of whether they have basic knowledge of irrigation surveys, such as surveying, mapping, designing large-scale irrigation projects, surveying for large-scale irrigation building construction, and surveying for improvement and maintenance (Eckel, Iacovone, Javorcik & Neary, 2016). Therefore, to satisfy the water needs of the populace and for the nation's welfare, (Horváthová, pková, & Mokrá, 2019), The human resource development of the survey service business of large irrigation projects will generate learning opportunities for workers. They create value for themselves and the organization to be acknowledged, allowing the survey service sector to have individuals with sufficient standards to support the transition and growth of the nation and to be globally competitive (McCartney, Murphy, & Mccarthy, 2021). There is no program that produces surveyor graduates. In addition, there are still insufficient training opportunities. Moreover, irrigation surveyors lack the information, competence, and abilities necessary to be an irrigation surveyor, as they lack field experience in a variety of situations (Nguyen, Haar & Smollan, 2021). To be on par with surveyors in ASEAN countries, we need to improve or build up the skills of our irrigation surveyors so that they are efficient and skilled enough to help the economy grow. The lack of skilled labor in the Lao People's Democratic Republic has become the country's most pressing issue. Historically, the government's major focus was soliciting foreign direct investment (FDI) for the purpose of boosting its development. First, the abilities and competence of Lao workers do not match market demand, and second, there are no restrictions governing the transfer of knowledge from international enterprises. Second, a growing number of young Lao employees are leaving the nation. In 2018, over 120,000 Laotians traveled abroad for employment, with Thailand being the most popular destination. Therefore, the bulk of enterprises with foreign investment import more labor than they employ domestically. The majority of foreign investments in the Lao People's Democratic Republic come from China, followed by Vietnam and Thailand, creating a labor imbalance issue. A labor shortage problem, on the other hand, needs the importation of foreign workers; yet, the number of domestic workers has exacerbated unemployment. So, it is up to the Lao People's Democratic Republic to improve workers' skills so that the unemployment rate goes down.

This study provides a competency model for surveyors working on a huge irrigation project in the Lao People's Democratic Republic (Lao PDR). It investigates the context of the current state of the surveyor's competence in large-scale irrigation projects, investigates the surveyors' required competences, and produces the surveyor competency model for large-scale irrigation projects. The research data will be used to enhance the ability of irrigation surveyors to have specific knowledge and skills, as well as their competence, through the development of basic survey work knowledge for use in irrigation surveys, such as surveys and mapping for irrigation project planning, surveys for irrigation building construction, and surveys for improvement and maintenance. It is also the country's progress in the agriculture sector. In order to satisfy the water needs of the people and steer them toward the nation's best interests.

Research Objective

This study intends to create a model of surveyor competency for a big irrigation project in the Lao People's Democratic Republic (Lao PDR).

Literature

Eckel, Iacovone, Javorcik & Neary (2016) Lee & Kim (2018) Çitaku & Ramadani (2020) McCartney, Murphy, and Mccarthy (2021) defined competency as the group of knowledge, competencies, skills, and attitudes necessary to work effectively and efficiently, attributes of individuals that influence behavior and performance, with skills and knowledge constituting a portion of these attributes. The abilities, attitudes, mentality, values, and behaviors of people who excel in a particular occupation (Mishra & Jha, 2017). Competence is the capacity to conduct activities in accordance with specified standards (Nkado & Meyer, 2001). Performance is the set of traits that help people do their jobs better or make them more productive (Redmond, 2013). According to this concept, competency is the determining factor for the success of a job as an input. Competence refers to the information, abilities, skills, attitudes, behaviors, and characteristics that an individual must possess in order to be able to use them in the performance of their duties (Smolinski & Xiong, 2020). Responsibilities in the work role and as required by the organization to accomplish the job's and agency's objectives. From a survey of the literature on competence's definition (Redmond, 2013), it can be stated that competence is knowledge (Mishra & Jha, 2017). Individual abilities, which are realized

or not, are based on employment possibilities or self-discovery to uncover latent capabilities that can propel the organization toward its objectives (Podmetina, Soderquist, Petraite & Teplov, 2018).

Research Methodology

This qualitative study seeks to design a surveyor competency model for a large irrigation project in the Lao People's Democratic Republic. This research was required to comply with constructivism as a research paradigm. The key informant has become an expert by focusing on a purpose. As a sampling of this research to discover ten experts who can address the researcher's research questions; the first, academics who have published scholarly results or conducted research on large-scale irrigation projects in the Lao People's Democratic Republic help compensate for the first group of specialists. The second group of experts is made up of executives of government agencies who are in charge of developing strategies, plans, projects, and other activities related to large-scale irrigation projects in Thailand. The Lao People's Democratic Republic is a country in Southeast Asia. The third category of professionals in the Lao People's Democratic Republic benefits from the surveyor competency model for large-scale irrigation projects. Two parties of the Lao People's Democratic Republic have been well trained and experienced in working on large-scale irrigation projects (Lao PDR). The opinions of experts on the format's suitability are indicated by their experience and opinions. Using Data from expert sources is sorted into categories and then selected for analysis in content analysis, resulting in data that has been linked, organized, analyzed, and examined. For research instrument, the five specialists in human resource management and qualitative research examined the structured interview as a research instrument. This research uses double-checking the accuracy of the data have gathered to assure its legitimacy and dependability. The triangulation principle is used to ensure that inductive and conclusive findings based on research and data analysis are correct. This triangulation has to do with certifying surveyor competency models for large irrigation projects in the Lao People's Democratic Republic and figuring out if they can be used.

Results and Conclusion

The development of a model of surveyor competency for large-scale irrigation projects in the Lao People's Democratic Republic (Laos PDR) can be achieved through the analysis of data on the development of a model of surveyor competency for large-scale irrigation projects in the Lao People's Democratic Republic (Laos PDR) (Lao PDR). It is significant in the Lao People's Democratic Republic (Lao PDR) to synthesize and design the issue of model development of surveyor competency in large-scale irrigation projects and the study of documents, concepts, and associated research. Therefore, the Lao People's Democratic Republic (Lao PDR) describes in detail the surveyor performance model that should be used for large irrigation projects.

Large-scale Irrigation Projects in the Lao People's Democratic Republic and the Importance of Surveyor Competencies (Lao PDR)

Numerous nations' economic progress has been impacted by globalization's fluctuating conditions. The Lao People's Democratic Republic (Lao PDR) has produced the eighth Five-Year Economic and Social Development Plan since it is one of the countries that recognizes changing realities (2016-2020). First, they are making sure the country's economy grows steadily and in a balanced way. Second, they are improving the abilities of both the public and private sectors by developing human resources. Finally, they are protecting the country's natural resources.

Additionally, the environment must be conserved and appropriately utilized for sustainability. In particular, they are expanding the nation's economy to attain steady, balanced, and robust growth by bolstering its primary industries through the expansion of economic activities like agriculture and forestry. In the Lao People's Democratic Republic (Lao PDR), large-scale irrigation projects are needed to provide water for planting. Developing water sources for agriculture in the irrigated area, which can use some of the water from the irrigation system, can also be used for agriculture.

Therefore, irrigation project surveyors are the first individuals to provide information regarding project implementation and cost-effectiveness evaluation in irrigation project construction. Therefore, surveying is a necessary activity. To fulfill their objectives, surveyors for large-scale irrigation projects must possess the necessary traits and qualifications. Consequently, the competency of irrigation project surveyors is crucial and one of the determining elements for the successful implementation of

irrigation project surveys by relevant organizations. Those who work as surveyors and conduct surveys are accountable for boosting the productivity of survey data. Because an explorer's competence is an indication of greater performance, and superiority is expressed via knowledge. The competence and self-worth of large-scale irrigation project explorers in the context of the organizational environment results in large-scale irrigation project surveyors who are devoted to achieving the intended goals of the organization.

The Model of Surveyor Competencies for Large-scale Irrigation Projects in the Lao People's Democratic Republic (Lao PDR) was created for surveyors of large-scale irrigation projects as a reference for self-improvement and professional surveyor development. It also gives surveyors of large irrigation projects in the Lao People's Democratic Republic (Lao PDR) information about how well they are doing so they can keep doing their jobs well.

Large-scale Irrigation Projects in the Lao People's Democratic Republic: Components of Surveyor Competence (Lao PDR)

The components of the competency of the surveyors of large irrigation projects in the Lao People's Democratic Republic (Lao PDR) are comprised of three elements: knowledge characteristics; skill attributes; and personal attributes.

Knowledge: Explorers of large irrigation projects in Lao PDR acquire and gather knowledge through education in educational institutions, training, seminars, and self-study. Including data gleaned from discussions, exchanges of viewpoints, and sharing of experiences with experts on surveying big irrigation projects.

Skill: Skills are the ability to do or complete large irrigation project surveying operations. They are learned, developed, and trained to become proficient, and then used in project surveying operations in the Lao People's Democratic Republic.

Attributes: Attributes are the thoughts, feelings, attitudes, and personalities of the people who found or made the big irrigation projects in Lao PDR.

Knowledge Competency Characteristics

The knowledge competency features of surveyors of large-scale irrigation projects in Lao PDR are comprised of two aspects: knowledge of large-scale irrigation projects survey and knowledge of systems and methods for investigating large-scale irrigation projects. The following is a description of the dimensions:

Surveyors of large-scale irrigation projects in the Lao People's Democratic Republic are required to hold either a vocational certificate in surveying or a bachelor's degree in surveying engineering, irrigation surveying, or a related discipline. If the surveyor does not have surveying experience, he or she must have other qualifications linked to irrigation project surveys or qualifications recognized by the government of the Lao People's Democratic Republic to conduct confirmed surveys on irrigation projects. The working surveyors are familiar with large-scale irrigation project surveys and can explain the rules, regulations, and methods for surveying large-scale irrigation projects.

Surveyors of large-scale irrigation projects in the Lao People's Democratic Republic must be familiar with the protocols and procedures for surveying such projects. That is, explorers of huge irrigation projects in Lao PDR on the system side must have knowledge and understanding of the composition, regulations, and criteria for performing surveys of big irrigation projects. In addition to being able to describe the scope and convey the characteristics of the elements, rules, and criteria for conducting surveys of large-scale irrigation projects, including surveying irrigation boundaries, surveying and repairing irrigation areas, surveying for land surveying for irrigation, and surveying irrigation boundaries, the candidate must also be able to survey irrigation boundaries, survey and repair irrigation areas, and survey for land surveying for irrigation. Surveys of soil mechanics, geology, and the development of large-scale irrigation projects, etc. Regarding operational procedures, surveyors of large-scale irrigation projects in the Lao People's Democratic Republic must comprehend the scope of operations for surveys of large-scale irrigation projects, the steps required, and the several types of process diagrams accessible. It can also explain how to deal with papers or forms related to survey work on large irrigation projects, as well as methods and procedures that surveyors working on large irrigation projects in Lao PDR must know.

Skill Competency Characteristics

The skills and competency characteristics of surveyors of large irrigation projects in Lao PDR consisted of five aspects: measurement and data collection; the development of the survey; the data review; the survey process; the communication skills; and the survey control, which manifest as behavior in the proper operation according to the roles, responsibilities, and duties of the irrigation project survey.

Measurement and Data Collection Skills

The measuring and data collection skills of surveyors of large-scale irrigation projects in the Lao People's Democratic Republic consist of four sub qualifications: data collection by measurement; search and acquisition; availability and maintenance. Using quality assurance standards, maintain satellite navigation and surveying equipment. The following is a description of the dimensions:

The capability of the surveyor to select a data collection approach for large-scale irrigation project surveys The surveyors measured and validated the redundancy of data from surveys of big irrigation projects adequately. Irrigation project surveys allow surveyors to confirm correct and regulatory measures. Using existing procedures, surveyors may accurately evaluate how to quantify data from surveys of various irrigation projects. The surveyors were able to accurately and precisely evaluate the efficacy of the data from the implemented irrigation project surveys. Also, surveyors can choose how to collect data and solve problems from irrigation project surveys.

Ability to search for and analyze the requirements for information connected to surveying irrigation projects, such as geography, area databases, and survey background information.

It is where explorers may use their understanding of GNSS observation concepts for the operation and maintenance of satellite navigation systems. Survey instruments can specify observation procedures, calculations, and assessments of GNSS observations' validity. The surveyor can determine and calculate the GNSS coordinates based on the coordinate trend encountered by the GNSS. The surveyor must be able to detect and explain the utilization of anomalous sources of GNSS observations using various GNSS techniques. Surveyors can send GNSS data to other ground system organizations and work together to use the data to their advantage in their surveys.

The surveyor's capacity to discuss the survey's quality assurance system in detail. Surveyors must be able to use the quality assurance system for surveys and keep getting better at following quality standards.

Survey development skills

Survey development skills for major irrigation project surveyors. These comprise four sub-qualifications: work ordering abilities; topographic surveying skills; quantitative and sizing skills for large-scale irrigation projects; and occupational health and safety compliance skills. The following is a description of the dimensions:

The surveyor must be able to precisely define the technique of sequencing the irrigation project surveys in Lao PDR, and the surveys must be properly prioritized. Surveyors are capable of reading, interpreting, and comprehending blueprints and planning the building of irrigation projects. Government agencies may be reached by surveyors. Additionally, construction workers and other consultants rely on an efficient method of job sequencing. With a well-thought-out plan, the surveyor can work with the other parts of the re-measurement to get accurate and enough data.

Using ground tools and GNSS, surveyors are able to complete a topographic survey with a diversity of topography according to the survey objectives in Lao PDR. The explorer is able to explain the origin of the survey findings and accurately record the data. Surveyors might collaborate with necessary parties in order to remeasure topographical data in order to acquire accurate and sufficient information.

Because the surveyor can collect accurate topographic data to meet organizational needs, the number and size of irrigation projects in the Lao People's Democratic Republic (Lao PDR) can be accurately calculated and reported.

The surveyor's ability to explain occupational health and safety regulations when doing survey work means that the surveyor must always be able to follow the rules for health and safety at work that are set by the law.

Survey Process Data Validation Skills

The survey process data validation abilities of renowned irrigation project surveyors consist of five sub competencies: the ability to identify errors by viewing current data and the ability to use existing data to create new data to ensure accuracy. Required and acceptable talents include the ability to combine current data with new survey data, plan with precision and clarity, and construct and implement electronic survey models. The following describes the dimensions:

For the surveyor to be able to identify flaws in existing survey data, he must recognize errors in data he and others have provided. Utilizing quality assurance techniques, surveyors can detect and avoid errors. Surveyors can be held accountable for their own and others' faults and they can advocate improvements based on data inaccuracies made by others.

The capacity of the surveyor to explain how to utilize existing data to generate new data is precise and suitable. Surveyors can validate existing survey data for correctness and reliability. Surveyors can identify and limit the survey data they collect

accurately and responsibly. In their surveys, explorers are capable of precisely and adequately generating fresh data. Explorers can solve problems that come up when new data is collected for the survey to make sure it is accurate and useful.

With the surveyor's capacity to describe how to gather existing data and how to collect data for a new survey, the limitations of existing data can be accurately identified. The surveyor appropriately determined the limitations of the provided data. The surveyor was able to appropriately evaluate the limitations of the provided data. The explorers can work in concert to acquire the data for the new survey.

The surveyor can properly and clearly describe the planning process and accurately and clearly detail the plan's components using computers and programs. The surveyor can precisely and concisely create a well-planned, objective-appropriate plan as well as handle planning challenges.

With the surveyor's ability to use a computer to correctly and electronically represent the schematic components of the project, the surveyor may build precise digital models of real surfaces. The surveyor was able to properly and transparently attach characteristic data digitally. Explorers can accurately transfer data between several survey data formats. Explorers are able to solve problems that come up during the creation and use of electronic model plans for surveys.

Communication skills

The communication skills of surveyors of large-scale irrigation projects in the Lao People's Democratic Republic consisted of four sub-qualifications: general communication skills in surveying; the ability to speak at meetings; the ability to write survey reports; and the ability to give recommendations. The following is a description of the dimensions:

Surveyors are able to use electronic communication technologies for effective operations; to communicate well vocally and in writing; and to suggest difficulties to colleagues in a clear manner.

In discussions with individuals involved in the survey of large irrigation projects, the surveyor can present the survey and its problems in a straightforward, pertinent manner.

Regarding the survey of large irrigation projects in Lao PDR, surveyors are able to generate reports consistent with survey principles and reasons that are valuable for

surveys, colleagues, and stakeholders. Based on the scope of their job, surveyors can create a certificate relating to the survey of irrigation projects in Lao PDR.

Depending on their capacity to assume responsibility accurately and responsibly, the surveyor is able to engage with colleagues and stakeholders about surveys of large-scale irrigation projects in Lao PDR and give them thorough advice.

Exploration control skills

The following four sub qualifications comprise the survey control skills of big irrigation project surveyors in the Lao People's Democratic Republic: Knowledge of the Geographic Reference System, Survey Integration Control, and Measurement and Control Enhancement. in horizontal surveys and measuring and the enhancement of vertical survey control. The following is a description of the dimensions:

An explorer is able to develop a dereferencing technique to survey big irrigation projects in the PDR precisely and appropriately. Exploratron must undertake surveys of shortcuts and intersections by precisely estimating their geographic coordinates. Using the UTM (Universal Transverse Mercator) system precisely and appropriately, explorers must undertake surveys of short-cuts and intersections. Using the program, an explorer must convert the three-dimensional coordinates between the system and the data, which is the reference point, in order to estimate its position on the Earth's surface properly and appropriately. Explorers must coordinate surveys in order to create shortcuts and junctions by computing geographic coordinates using the grid coordinate system and translating three-dimensional coordinates between the system and the data. The explorer must calculate geographic coordinates using the grid coordinate system and convert three-dimensional coordinates between the system and the data in order to overcome challenges encountered during the discovery of shortcuts and intersections.

The surveyor was able to precisely describe the survey procedures and mapping infrastructure. Surveyors are capable of adhering to survey laws and utilizing the proper mapping infrastructure. Explorers can utilize past survey data and mapping infrastructure effectively. Explorers can regulate the survey integration by applying previous survey data and mapping infrastructure.

Surveyors are able to describe how to calculate measurements and change horizontal survey controls. Using GNSS and ground measurements, surveyors can construct a survey project control network to precisely and appropriately analyze and adjust

using adaptive approaches. Using multiple measuring techniques, surveyors can collect sufficient data and analyse it effectively and adequately. Using the computer software system, the surveyor can alter the mathematical survey network accurately and appropriately. Surveyors are able to study and evaluate survey hazards in order to adjust their accuracy and suitability. The surveyor can coordinate measurements and improvements to horizontal survey control. They can also solve problems that come up because of the schedule for measurements and improve horizontal survey control.

Surveyors are able to describe how to calculate measurements and change vertical survey controls. Surveyors are able to conduct precise level measurements. The explorer must recognize the effects of curvature and refraction on alignment and apply the understanding of leveling using trigonometry in an acceptable manner. The surveyor must be able to determine the equipment and methods used to modify the accuracy level of the source of the inaccuracy as well as employ the proper techniques to mitigate this effect. Surveyors can collaborate to perform vertical survey measurements and regulate changes. In addition, surveyors can solve problems that come up when they measure and change the control of the vertical survey.

Personal Character Performance Characteristics

The personal characteristics of the surveyors of large-scale irrigation projects in the Lao People's Democratic Republic consisted of eight aspects: self-development ability, patience, unity, career love, vision, work commitment, integrity, and responsibility. The following is a description of the dimensions:

During the implementation of irrigation project surveys, surveyors on large-scale irrigation projects in the Lao People's Democratic Republic exhibit the ability to predict the future and discern internal and external changes. Explorers must learn to link the destinations of their exploration trips with the dissemination of their survey activities to all expedition team members. Surveyors must have the ability to understand corporate policies. To design plans, surveyors must be able to coordinate activities with others. Develop methods and enhance survey operations in an effective manner. Surveyors have to be committed to using their surveying skills, techniques, and experience to help manage an irrigation project well.

Surveyors of large-scale irrigation projects in the Lao People's Democratic Republic demonstrate sacrifice via rigorous and constant labour. The surveyors arrive on time for work and attend all meetings required by the survey organization or team.

During holidays, explorers may report to work if their assigned tasks are essential. Explorers continually prepare their bodies, brains, and equipment for their missions. When seeking a personal advantage, the explorers can coordinate with various individuals without harassing their coworkers. To continue gaining knowledge and increasing operating skills, the explorer must be vigilant. Explorers have to show that they can do certain tasks to the best of their abilities.

The surveyors of significant irrigation projects in the Lao People's Democratic Republic must be truthful and not dishonest, misrepresent the truth, assume blame, take advantage of wrongdoings, or strive to gain an advantage. Participates as a surveyor in a massive irrigation project. As a surveyor of a big irrigation project, survey team, and organization, surveyors must display behavior that does not exert undue influence or utilize authority, responsibility, or any other method to create conflicts of interest for personal gain. Explorers must not take advantage of their coworkers and organizations, be indifferent to their work, or keep secrets. Information about how well one's coworkers are doing is not shared with people who are not interested in their operations or the company.

Large irrigation project surveyors in the Lao People's Democratic Republic have shown the determination, willingness, and dedication necessary to complete the assigned tasks and satisfy the survey team's and organization's objectives. The surveyor must be aware of the operational advantage's strengths and areas for development. Explorers are able to accept the practical blunders they and their teams make. Surveyors are able to confirm the accuracy of their duties and performance. Explorers can get better at what they do and are willing to help their survey teams reach the goals of the organization.

Guidelines for driving the surveyor competency model of large-scale irrigation projects in the Lao People's Democratic Republic (Lao PDR)

The driving force of large-scale irrigation project explorers

Large-scale irrigation project surveyors in the Lao People's Democratic Republic explore large-scale irrigation projects systematically (Lao PDR). With the operational circumstances required to construct a learning network capable of exchanging, sharing, and developing knowledge, competence, and skills for the implementation of survey irrigation projects that fulfill the objectives of the relevant organizations.

The driving force of the professional surveyor organisation

The professional group of surveyors in the Lao People's Democratic Republic (Lao PDR) can use the surveyor's competency in large-scale irrigation projects as a model for studying and developing surveyor career standards until it becomes a professional qualification system that facilitates personnel development. The employees of the professional surveyors meet the requirements and are suitable for the Lao People's Democratic Republic (Lao PDR).

The mobility of educational institutions

Laos People's Democratic Republic (Lao PDR) educational institutions offering survey courses Surveying engineering or other fields linked to surveying, such as organizations seeking to create professionals for irrigation project surveys, might use the defined competency model to develop surveying courses. Increase the number of people who want to be explorers in the Lao People's Democratic Republic (Lao PDR) by teaching and developing the skills and traits of surveyors.

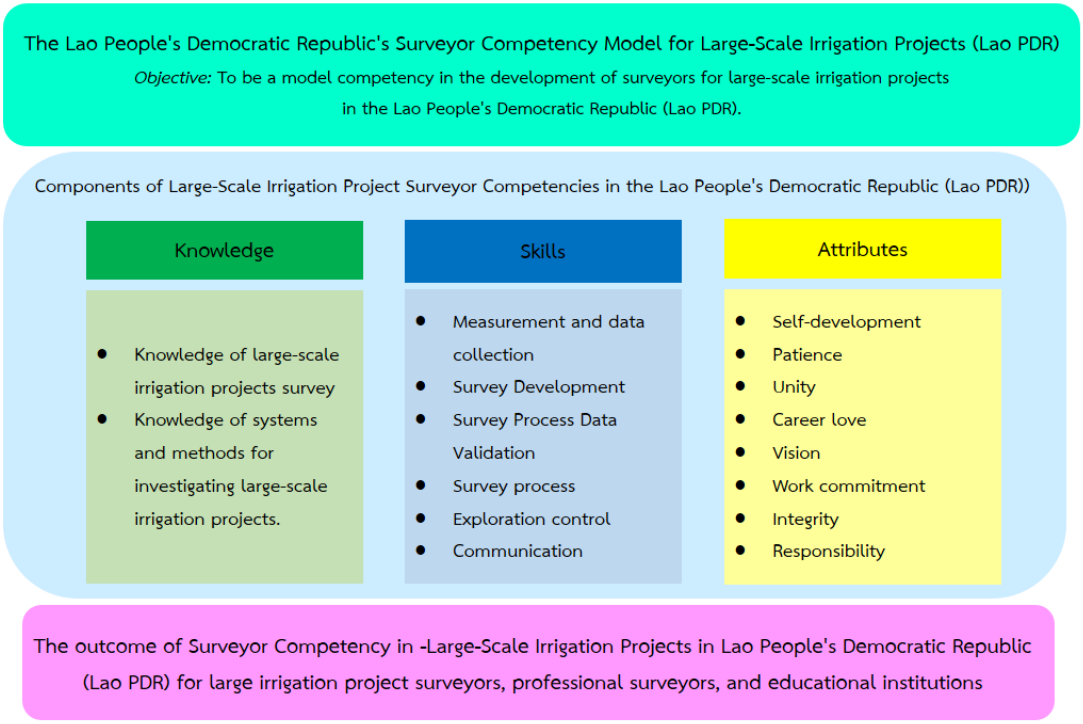

Figure 1 A model of surveyor competency for a big irrigation project in the Lao People's Democratic Republic (Lao PDR).

Implementation

Implementation for Academic

Academic circles will acquire new knowledge regarding the use of human resources for the development of skills and competences for irrigation surveys in the planning of operations in a variety of disciplines and will apply this knowledge for educational purposes. The results of this study will help irrigation surveyors in the Lao People's Democratic Republic do their jobs better.

Implementation for Policy

Governments and related agencies in the Lao People's Democratic Republic will be notified of the difficulties in irrigation surveys, which will provide information on opportunities, impediments, strengths, and weaknesses, allowing them to design policies that effectively address economic growth.

Implementation for Industry and business

Entrepreneurs who are likely to join the concession will be aware of the Lao People's Democratic Republic's irrigation survey standards. The data can be used as a guide for work and policy planning, as well as for collaborating on irrigation surveys in Lao PDR. The Lao People's Democratic Republic will continue to expand the industry.

Participating organizations or business agencies might use the gathered information to create new skills or expertise. This may allow the organization to find the new potential of its staff and enable personnel to expand their talents and generate prospects for the organization to launch new enterprises that will benefit them.

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