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Editorial Views on the Research Promotion and Innovation

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Abstract

Research and Innovation were launched as the promotion for students, scholars, and teachers. This suggested researchers disseminating and exchanging the research works/practices and innovation of education, teaching, professional development, language, law, business, economy, psycho-pedagogy, public policy, political science, marketing, and technology. The practitioners were engaged with the critical analysis and discussion of research topics. This aims to motivate researchers or scholars share and innovate research results, which were centralized as the key concepts for policymakers, educators, and academic institutions reform the policies, guidelines or manual works. Research and innovation proffered the supporting initiatives that enhance educational quality, develop the skills, promote multidisciplinary practices, and contribute to the sustainable works.

Key words: *Research promotion, Innovation, disseminating, exchange, practitioners,*

1. Introduction

JARI is launched to promote research and innovation of education, language teaching, psycho-pedagogy, law, business, economy, public policy, political science, marketing, and technology. It is a platform to publish the research results, transforming the education system (teaching and learning results (Dirk et al., 2021; MoEYS, 2019; Parlak, 2017; Taşkıran, 2017). Research on education is a response to reform of training and schools, with the research skills (Balyer & Öz, 2018; Hang-Chuon, 2021). The key factor is to improve the research quality and innovate research environments. JARI suggests teachers, scholars, researchers, and practitioners to research and share their research results on education, language teaching, business, economy, law, psycho-pedagogy, professional development, public policy, politic science, marketing, and technology. JARI purposively promote students, teachers, and/or scholars share the innovative perspectives, such as theories, trends, and practices of learning and teaching.

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2. JARI Research Frameworks

JARI has a research framework for publications. Article publication is to process with editorial checking; reviewers' evaluation, authors' agreement, and editorial decision. Articles are published with JARI format, including introduction, literature review, methodology, findings and discussion, conclusion, and references. However, the articles are to screen for plagiarism avoidance. Articles are published by categorizing the issues, special issues, book publications. Publishing the articles, it required authors to follow the JARI guidelines, to revise the article based upon the reviewers' comments.

3. JARI Research Trends

JARI has the research trends for publishing the practical and innovative articles with the focus on the transformed education, language instruction, professional development, applying law, business administration, economic practice, psycho-pedagogy, public policy, politics, and technology. JARI publishes the original manuscript, article review and book review, both in English or in Khmer. In this effort, JARI encourages the authors to publish the articles, focusing on the practice of education, teaching methods, applied linguistics, language teaching, psycho-pedagogical practice, technological transformation, practice of management, applications of law, business-administrative practice (business, economics, finance, baking, accounting, taxation, audit, policy; politics; and marketing).

4. Research Perspectives and Innovation

Research transformation is necessary to reform the education policies (Bates, 2015). Reforming and innovating educational research contributes to lifelong learning (Sisman, 2016). Transformation of educational research can involve the society and individual research (Balyer & Öz, 2018). Reforming the research policy in education helps teachers or leaners develop knowledge and research skills. In this case, transforming the research capability helps the teachers and students better their teaching and learning quality, upgrading the ability to analyze and share information (Forrester, 2016; IDC, 2015; OECD, 2017). Research ability in teaching and learning is about a way of reforming and developing the educational systems, policies, and quality (Paulo, 2020). Within the educational-research framework, the research skill concerns the competence and skill of research in the teaching and learning process (Dirk et al., 2021). With 21st century-education, innovation of education research connects the teachers and learners to the world through research platforms (Hang-chuon 2021; NV, 2017; Paunescu et al., 2022). As the educational-research trends, higher education institutions (HEIs) should emerge the academic research as a means of bettering education practices to meet key missions for academic-research institutions (Alenezi, 2021; Paulo, 2020; Paunescu et al., 2022; Silva, 2017; Yurev et al., 2020).

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5. JARI Research Promotion

Academic-research institutions promotes students, teachers, and practitioners to better research skills. Research skills is a platform of the higher education studies, especially the doctorate programs. With research policies, graduates, PhD students, and/or lecturers are suggested to enhance research knowledge, competence, and skills in the academic research and writing. This is a mean of educational research framework to enrich the trends of the 21st century-research. By boosting the research skills, research ability is the need to better critical thinking of research learners or practitioners – requiring to know how to use the CAF in research (Chhorn, 2025). Research promotion is remained the need to the science research and trends in the world research (Davies & Elder, 2004). Of course, research promotion is central to the professional-research development (Brumfit, 2004). The disciplinary research-framework is used to pursuing PhD programs (Grabe & Kaplan, 1996).

Research promotion extends in a systematic way beyond research teaching and learning. This encompasses the assessment of research skills, policy, project settings, and corpus. Research-parallelism needs to understand how and why research is broadly generative with the research landscape. In this sense, variation of the research fields and areas are required to be practiced and centralized as assumption of research cognition and description (Robinson & Ellis, 2008). Research can involve the corpus, descriptive, and social research (Biber et al., 1999). Likely, the basics of the academic research relates the shift to analyzing data and discourse, and interpretation with the value settings (van Lier, 1997). The research perspectives is about the register analysis, genre analysis, and application of corpus research to a wide research contexts (McCarthy, 2008). In fact, research carries out a genuine role for the researchers, with the research real-world.

6. JARI Research Areas and Shares

With the research framework, JARI is a double-blind and peer review, with the online access. JARI officially publishes the practical and innovative research, focusing on education, instruction, language, economy, business, law, psycho-pedagogy, and technology. JARI sets the missions in giving the chance to educators, teachers, scholars, and practitioners publish the articles, share research experiences, support the research fields, and utilize research-based knowledge. JARI also extends research engagement and competence, ensures active research orientation, increases the research resources, and shows a strong commitment to engage in different-joint-research activities and projects.

JARI be responsible to viewing the criteria and principles of article publications, with quality, relevance, and impacts. Editors of JARI suggest researchers, scholars, or practitioners to check the plagiarism, bias, quality,

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and consistence of research articles. Authors are motivated to have competing interests with their articles and interpretation of results. In this case, authors should check conflict of interest research interest. By submitting the articles, authors should fully disclose the research areas. Authors are required to submit the manuscripts with the guided format in the journal system.

7. Conclusion

JARI promotes researchers, scholars, or practitioners shares the research results with the innovation and practice. JARI is publishes the articles with peer-review, scientific and original research. Transforming research involves developing the teaching and learning quality and ensuring the effectiveness of research innovation. Research promotion helps identify the challenges and teaching and learning practice. The JARI purposely shares and publishes the research results with creative contributions to the research competences and skills. The shares of researched findings would provide the mechanisms to reform curriculum, education programs, and instructional research. Greatly, JARI significantly benefits to the betterment of higher education quality, as such research knowledge and skills.

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Characteristics of Cambodian Land Concession

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Abstract
This study examined the economic and social land concession in Cambodia. The society not only progressed, but also provided work to the people. This study purposely explored the policy of economic land concessions provided by the royal government of Cambodia. This was about the solution that made the standard of comfortable living. At this point and which made people live a prosperous life and reduce poverty in line with the government's policies, in which it was an important compass in the development of the nation for progress. All sectors should facilitate the adaptation to market needs in the era of globalization. By developing the economic sector, it was needed for country to handle sustainable development. The government also created a new political party to be a driving force to accelerate economic growth through the press and related institutions. With investment purposes and the government, it also opened up the horizons for foreign investment. Economic land concession was an important key to do its national economic development. The impact of economic land concessions continued to show us significant trends of economic land concessions.

Key words: *Concession, land concession, policy, poverty, land concession trend*

1. Introduction
The policy of economic and social land concession is needed to reform and implement. Society has not only progress in developing the economics, but also needs to deal with challenges of people life and poverty. Since the government has established the provision of economic land concession policy, the people living near the area has job, make the standard of comfortable living. When there is development in any area, the people can have job and live with a prosperous life – having food, shelter, clothing, and employees. Economic land concession can make reduce the poverty in line with the government's policies. This is a compass in the development of nation progress (announcement, 2007). With economic and sustainable development, the royal government of Cambodia need the creation of new political party – being a driving force to accelerate economic growth. By developing the

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economic growth, it requires to have the opened-up policy with the horizons for foreign investment. Obviously, the royal government establishes a policy for providing economic land concessions. This study focuses on the social and economic land concessions (Annual Report,1991). Land concession is a main key to develop national economics. The government should find funds, investors, and partners for investment (Annual Report 1999). The land concession effectively influences social and economic land concessions and provides significant trends. Social and economic land concessions positively impact on the traditional livelihoods, interference, and work.

2. Conceptual Framework of Literature

Overview of Economic Land Concessions in Cambodia

With economic land concessions in Cambodia, the 2004 report listed 64 companies with concession contracts or letters of the request for approval of the economic land concession proposals in 13 provinces. According to information provided by the Ministry of Agriculture, Forestry and Fisheries (2007), the Royal Government of Cambodia granted 97 economic land concessions in 16 provinces and municipalities in Cambodia. Of these, nine concessions were approved in principle by the Council of Ministers, covering an area of 64,208 hectares, but the concession contracts had not yet been signed. During this period, Ministry of Agriculture, Forestry and Fisheries confirmed that 30 companies' contracts had been cancelled, covering an area of 265,230 hectares (Chhay, 2006). Only fve companies were listed: they had signed concession contracts with the Ministry, and the others had only letters of approval in principle for concession proposals (Land law, 2001)

As of December 31, 2006, there were 59 valid concessions remaining (Inter-ministerial Declaration of MAFF and ME, 2014), covering an area of 943,069 hectares in 15 provinces. This area accounts for approximately 5.2% of the total land area in Cambodia and 14.5% of total cultivable land in Cambodia (Chan, 2007; Report, 2004). A list of economic land concessions, including names and locations, is provided (DCRPA, 1989). Stung Treng has economic concessions, with 179,899 hectares, by 10 concession companies (GDDC, 1988). Two companies granted land concessions of 318,028 hectares, located in Kampong Chhnang and Pursat (Civil law, 2011). Pheaphimex company alone covers these two provinces, covering 315,025 hectares (Civil code, 2007). The districts where most of the land has been given to the concession company are Sambor district in Kratie province: Stung Treng and Sesan districts in Stung Treng province, and Phnom Sruoch district in Kampong Speu province (Law on commune, 2011). Figures and information provided by the Ministry of Agriculture, Forestry and Fisheries do not include economic land concessions of more than 1,000 hectares granted by provincial authorities (Ministry of agriculture, 1996).

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Province name	Number of companies	Concession amount	Land area (hectares)
Stung Treng	10	10	179,899
Kampong Speu	8	9	90.256
Kratie	7	7	64,373
Ratanakiri	5	5	53,747
Kampong Cham	5	5	12,070
Kampong Thom	4	4	35,561
Koh Kong	3	3	79,300
Kampot	3	3	36,200
Siem Reap	3	3	19.235
Mondulkiri	2	2	17,600
Oddar Meanchey	2	2	16,000
Sihanoukville	2	2	12,800
Pursat	2	2	141,963
Kampong Chhnang	1	1	176.065
Battambang	1	1	8,000
Total	58	59	943.069

The Ministry of Agriculture, Forestry and Fisheries stated that it was not in a position to provide information on these concessions. It was unable to obtain further information on the number and location of these concessions from government sources (MLMUP, 2001). According to information received from other sources, economic land concessions of more than 1,000 hectares were granted in Kampong Thom, Kratie, Mondulkiri, Oddar Meanchey and Ratanakkiri provinces. Further proposals were under consideration (MLMUP, 2010). At the end of 2006, there was reliable information, such as proposals for economic land concessions. Ten concessions, each no larger than 1,000 hectares, have been proposed to provincial authorities in Mondulkiri province, and another 22 concession proposals in Kratie province are under consideration (Announcement, 2007; Law on commune, 2001).

Economic Land Concession Technical Secretariat

Eight members of the Technical Secretariat for Economic Land Concessions were appointed by the Prime Minister on 30 June 2006 (MLMUP (1994). On the 1st of August 2006, the Ministry of Agriculture, Forestry and Fisheries established a support group consisting of officials from various ministries to assist the Technical Secretariat in carrying out its duties. To date, the activities of the Technical Secretariat have focused on establishing its functions and mandate, preparing new application forms and contracts for economic land concessions and providing guidance to companies with environmental and social impact assessments (Law on the Establishment, 1999).

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In August 2006, Technical Secretariat sent a notice to contracting authorities, requesting information and documents related to concessions granted prior to Sub-Decree on Economic Land Concessions. (MLMUP, 1988). In January 2007, the Ministry of Agriculture, Forestry and Fisheries stated that the Technical Secretariat was collecting data on economic land concessions from the ministry and authorities (RGPSLC, 2003). The province and that the Economic Land Concession Register would be created upon receipt of this information. There has been no further information on the status of the Economic Land Concession Register since then (Chhay, 2006). With the review of existing economic land concessions, in December 2005, Ministry of Agriculture, Forestry and Fisheries announced that 10 active companies had been re-examined. Apart from the cancellation of concessions that the Ministry mentioned in early 2007, it is not yet clear whether a general review of existing concessions has begun (RGC, 2008, 2011). The largest existing concessions, including Pheaphimex in Pursat and Kampong Chhnang and Green Sea, with 100,852 hectares in Stung Treng province, have not yet been re-examined (Civil law 2011).

Access to information and other documents

Good governance, which is at the core of government's rectangular strategy for growth, jobs, equity, and efficiency, is to ensure full transparency and accountability, such as “The government, including the sale or lease of public property.” It is important to know who benefits from the economic land concessions and from the concessioning of Cambodia’s land and natural resources (Royal decree, 2006). The 2004 report called for the disclosure of information related to economic land concessions, including contracts, maps, shareholders, and revenues received from concessions (Sub decree, 1999). A number of common monitoring indicators agreed upon by the government and development partners at consultative group meetings in December 2004 and March 2006 call for the prompt public disclosure of concession contracts and contract implementation, and for the establishment of a mechanism for the timely dissemination of information on economic land concessions. (Royal decree 2006).

In mid-2006, Ministry of Agriculture, Forestry and Fisheries created a land concession website. The Ministry of Economy has a website that includes information on all concessions granted and basic company information (http://www.maff.gov.kh/elc/index.html). In March 2007, the website was updated to reflect information on concessions up to 31 December 2006 (Sub decree, 1985). Information is provided on all concessions larger than 1,000 hectares, including details about the company. The website lists the names of company directors, but does not list the names of all concession companies’ shareholders. Detailed information is required about the ownership of the

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concession and the concession companies, including information about all company directors and shareholders (Sub decree, 2005).

No information was provided about concessions larger than 1,000 hectares (Sub decree, 2005). Information must be made available to the public immediately, including details about the concessionaire and its location, size, purpose. and the status of those concessions. Information on economic land concession proposals that are under consideration or have been approved in principle should also be made public, as many concessionaires begin their activities before signing contracts (Sub decree, 2002). On the other hand, information on the implementation of the sub-decree on economic land concessions is necessary, including public consultations and environmental and social impact assessments and reports on these consultations and assessments (Sub decree, 2016).

3. Critical Arguments

Compliance with Legal Requirements and Legal Procedures

The Ministry of Agriculture, Forestry and Fisheries said that it has difficulty complying with the conditions (Sub decree, 2005). The requirements of the sub-decree on the economic land concessions are because the ministry faces pressure from investors seeking land concessions. Officials explained that if the ministry has to wait until it is able to comply with the requirements of the sub-decree before granting the concessions, investors would no longer be interested in investing in Cambodia (Chan, 2007). However, the country's laws are binding, and intention to promote private sector investment cannot be an excuse for not complying with the requirements of the law (Sub decree, 2006). Many concessions have not operated for 12 months from the date of contract signing or have been inactive for more than 12 months without being sanctioned (Sub decree, 2016). Green Sea, which has a land concession of 100,852 hectares in Stung Treng province are not yet operational, despite the start of construction in late 2006 (Announcement, 2003). Other inactive land concession companies include 315,025-hectare concession of Phephimech in Kampong Chhnang and Pursat provinces, which has also not paid its deposit, according to the Ministry of Agriculture, Forestry and Fisheries. Based on information provided by the ministry, many concessionaires have not paid the required concession fees, have not demarcated or measured the concession boundaries, or have lost contact with the ministry. All of these are grounds for cancelling the economic land concession (Sub decree, 2007).

Many concessionaires began operations in areas they applied for concessions before signing the contract, which is contrary to Article 53 of the Land Law. For example, in Koh Kong province, Cabinet approved in principle to award two concessions to Koh Kong Sugar Industry and Koh Kong Plantation in March 2006. In May 2006, the company established a site and began clearing

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land in Sre Ambel district, including rice fields and local plantations (Prakas 2014). The concession contract was made later, on August 02, 2006. For example, Another is Wuzhishan Company concession in Mondulkiri province, where the company began working on indigenous lands in mid-2004, before signing the concession contract on December 30, 2005 (RGSLP, 2009). The land law states that land concessions cannot affect land, footpaths or roads, or waterways, streams, and water reserves that people use in their daily lives. However, many concessions have closed off footpaths. and roads used by residents to access forest areas and forest products. For example, in Kratie province, Global Agricultural Development company was reported to have set up barriers to block roads used by residents in order to collect tolls from road users. In Pursat, Ratanavisal company closed a canal used by residents to irrigate their rice fields after complaints from the community. A year later, the canal was reopened (RGPSLC, 2003.).

Private State Land and Land use Plans

The main conditions for granting the economic land concessions are the registration of land as private state land and the approval of a land use plan, in which land use proposals must be consistent. Systematic identification, classification, and registration of private and public land in state Cambodia has not yet done so, and in most cases, land use plans have not yet been approved by provincial-municipal land management committees. However, economic land concessions continue to be granted. In many cases, the land granted to the company was land that local people had been cultivating for many years, since before 2001, and these communities had met requirements for claiming ownership rights under the land law. In some cases, the local communities had also participated in initiatives for sustainable land and natural resource management through participatory land use proposals or plans to create community-based communities. These initiatives were halted or abandoned after the land was granted to the company. On February 26, 2007, the government issued a long-awaited circular on measures to prevent illegal land occupation to implement Article 18 of the Land Law. However, the circular does not cover economic land concessions, stating that the withdrawal or reduction of the size of economic land concessions must follow the procedures set out in the Sub-Decree on Economic Land Concessions.

Public Consultation and Environmental and Social Assessment

There are two main conditions required before granting an economic land concession, such as consultation Public consultation and environmental and social impact assessments. In most cases, the public consultations are not conducted in the community before the concession is awarded, nor is assessment Strictly And indeed, due to environmental and social impacts. This is generally not done in advance (Ministry of Agriculture [MA], 1990).

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For example, the initial environmental and social impact assessments are conducted for concessions of Sophea Trading Company and Sopheakdenika Company in Sesan District, Stung Treng. However, these assessments were conducted in 2006 after land concessions were awarded to both companies on 8 August 2005. According to the provincial environment department, a private development consulting firm that was contacted to conduct the assessment studied the land concession with the participation of locals and the public. However, locals said that they all refused to hand over land in their area to the company representatives. When company representatives came to tell the locals about the company's plans to develop and create jobs in the area in September 2005 and April 2006, the concessionaire held a ceremony for the locals, offering them wine and gifts, such as tractors, to encourage them to agree to the plans. Both concessions encroached on agricultural land and forests that the indigenous communities used to collect forest products. The provincial Department of Environment agreed that the concessions would affect the livelihoods and cultural traditions of the areas occupied by the indigenous people (DCPRP, 1989).

Global Agricultural Development Co. Development Asia World Agricultural Development Company and Green Island Agricultural Development Company have been granted land concessions for planting rice, covering an area of 29,383 hectares in Sambor District, Kratie. The affected communities learned about these concessions in April or May 2006, when a group of local government officials and company representatives visited the area, and a village chief was asked to accompany them to look at the land and forests in the area and to explain to them the types of land and land use in the commune. Six days later, the group made a second visit, accompanied by officials from the provincial environment department and military personnel, and measured the concession boundaries by setting stakes across villagers' rice fields in some areas. The concessionaire then established its base in Kbal Damrey commune and began clearing the forest and digging roads. Similarly, in Samrong District, Oddar Meanchey, Crystal Agro and Real Green signed contracts in June and July 2006, each with a concession of 8,000 hectares for cassava and agro-industrial crops. The affected villagers, including the Tuy ethnic minority, were not informed or consulted. They only learned of the existence of the concession when the company arrived and began clearing land. Real Green began its activities in late October 2006, affecting the residential and agricultural lands of about 70 families in Ktol Village. Crystal Agro began its activities in November 2006, and the company's clearing activities soon encroached on the agricultural lands and farmlands of many families in Phlong Village.

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Further evidence of the lack of public consultation and effective impact assessment is that residents are often unaware of the boundaries of concessions, and in areas with large concessions, they do not know which companies are affecting their land. For example, there are very few companies, six in total, that have been granted concessions in Sesan district, Stung Treng province. Many residents have argued about the impacts By the work activity The company owns the land. Their farms, but there is no information about the boundaries of these companies' land concessions, nor is it known which company affects which village.

Compliance with the Forest Protection Framework

Many economic land concessions are granted in forest areas that are public state land or in areas that were former forest concessions, contrary to the Sub-Decree on Forest Concession Management. These concessions are also granted in areas inhabited by indigenous peoples who have long traditions of using forest resources and wood by-products, such as rubber tapping as a livelihood (RGC, n.d). Since the 2004 report, at least five economic land concessions have been granted in areas formerly occupied by Kingwood Industry in Kratie and Stung Treng provinces (GADC, n.d). Similarly, HMH Co Ltd has been granted an economic land concession in Former forest area GAT International concession in Kampong Thom. In Sesan district, Stung Treng province , the concessionaire felled the trees owned by the local people and from which the resin was extracted, in violation of Article 29 of the Forestry Law. The felling of the trees is considered a forestry offence and a violation of the community's traditional use rights as recognized in Chapter 9 of the Forestry Law. The felling of the trees also occurred outside the Miring rubber plantation in Sandan district, Kampong Thom.

Beneficiaries of economic land concessions

A total of 36 economic land concessions were granted to foreigners or prominent business and political figures, accounting for 61 percent of all economic land concessions granted. This number does not include owners of economic land concessions of more than 1,000 hectares, as information on these concessions and their ownership is not disclosed. Analysis of information provided by the Ministry of Agriculture, Forestry and Fisheries showed that 25 economic land concessions were owned by foreigners, accounting for more than 42 percent of all economic land concessions granted. Of these, 12 are owned by Chinese nationals, 3 by Thai nationals, 3 by Vietnamese nationals, and 3 by Three Americans are Korean and one is Taiwanese. In addition, it was recently reported that Ministry of Agriculture, Forestry and Fisheries has agreed to lease 100,000 hectares of land to 10 Vietnamese companies to grow rubber. So far, 10,000 hectares of land have been leased. Hectares are determined (Cambodia Daily, 2007). Analysis of

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the same information also revealed that prominent Cambodian business and political figures, including senators and tycoons, own or have stakes in land concessions, at least 11 economic concessions. Other concessions may also be linked to these individuals, but this cannot be confirmed as the list of shareholders of the land concession companies and more detailed information about the beneficiaries of these concessions are not available.

Meeting the objectives of economic land concessions

Economic land concessions are targeted as part of the poverty reduction framework and Rural development, as stated in the National Strategic Development Plan 2006-2010. In particular, it aims to develop land in an appropriate and sustainable manner, based on appropriate environmental systems, increase employment in rural areas and generate national income. However, as this and other reports have shown, economic land concessions do not meet these goals. The analysis The Price of Poverty by the World Bank in 2006 recommended small-scale land ownership to increase agricultural production and reduce poverty, rather than large-scale land ownership in the form of agro-industrial plantations. The concessionaires do not manage land appropriately and sustainably within existing environmental systems. And it does not provide tangible benefits to the local community. In general, the concessions do not provide jobs to the affected rural communities. If jobs are available, in most cases, companies bring in workers from other provinces. If local people are hired to work, the wages are low compared to the wages they receive from agricultural and forestry products.

On the other hand, it is unclear how much economic land concessions contribute to Cambodia's national income, and the government should disclose the revenues generated by these concessions (Chan, 2007). Instead of promoting development and poverty reduction, economic land concessions have undermined economic, social and cultural rights of rural communities in Cambodia. Cambodia has not yet submitted its first report under the International Covenant on Economic, Social and Cultural Rights, which was due in 1994. In the current situation, it is essential that Cambodia fulfill its reporting obligation under the Covenant, which is a concrete step towards the effective implementation of the rights set forth in the Covenant. The General Comment of the Economic, Social and Cultural Committee recognized that the right to adequate housing includes a secure and just tenure system, and that sustainable food security for present and future generations is at the core of the right to food (Annual Report [GC], 1991, 1999).

The necessary requirements for additional legal provisions, decentralized planning and implementation structures, as well as the necessary coordination and cooperation between relevant ministries and government agencies will enable the social land concession program to play a significant role in

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providing the Royal Government of Cambodia with commitment to good governance. All support for the implementation of social land concession programs must be based on improved governance, which is directly linked to the success of equitable and equitable land distribution. In this sense, social land concession programs will be included in the transformation project category. Good institutions or governance and rural development projects. Coordination and collaboration at the National Social Land Concession Committee (NSLC) seems to be going smoothly. The committee must put pressure on its subordinate decentralized units to overcome any mistrust and ensure cooperation between them. It is also important in the preparation to ensure a clear understanding of what is needed for technical support from higher levels. Since higher administrative levels often underestimate the potential of their decentralized units, it is extremely dangerous to ignore the need for investment in capacity building (Sub-degree, 2002).

The newly established provincial and municipal land use and allocation committees must work closely with the provincial and municipal rural development committees, despite overlapping membership. Coordination between social land concession programs and development programs should not be a problem. However, there is still a need for information campaigns, training, and capacity building, especially addressing the weaknesses of technical support units at provincial, municipal, and sub-decentralized levels. Coordination and collaboration at the district and khan levels between different government agencies appears to be weak in a decentralized structure. Resource availability and/or allocation issues may be major constraints to local work, which is a necessary requirement for district and khan teams. The district and khan levels are perhaps the least capable and resourced levels compared to their expected roles in the program, guidance on priorities and resource allocation, along with the capacity building is an indispensable requirement (Sub-degree, 2000).

Villagers do not yet have full confidence in their elected commune councils. Most villagers would like to see an independent institution that would act as a facilitator for selecting beneficiaries and implementing the social land concession program. Villagers do not seem to have a narrow-minded view of allowing non-Khmer citizens to participate in the social land concession program, but despite this understanding, they would like to see their needs addressed first. The program may encounter some problems from local resistance when it comes to From citizens who do not have Cambodian nationality living in border areas. There are a number of technical aspects of the social land concession program that require careful consideration and/or adjustment. The main aspects are that the sustainability of land allocated for agricultural production needs to be ensured. Environmental considerations

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need to be considered. The conversion of degraded land to cropland needs to be examined. The principles of application and selection of beneficiaries need to take into account local conditions/traditions. The initiation of social land concession projects may take longer than expected. Social land concession planning and training on implementation need to be expanded. Non-governmental organizations will play an important role in implemented at the commune and sangkat levels and therefore they must be the most important agents in training Cause related to social land concessions (Sub-degree, 1999).

4. Conclusion

The provision of economic land concessions and social land must follow a proper and legal procedure. The process of granting the land concessions is due to the state's appeal and the appeal of the concessionaire or those who want to make the land concessions. Through the Land Law dated August 30, 2001 and other related documents, the mechanism to obtain land concessions is legally known about the procedures of granting land concessions from the first stage to the end. The state is the one who monitors and monitors the maintenance of state property, including economic land concessions and social land concessions. The state, which is the representative of the public institution, has granted land concessions to concessionaires to extract benefits from the concession. The acquisition of land concessions is in accordance with the land law. The provision of private land is issued by the state through a specific concession contract to concessionaires for use in agricultural and agro-industrial businesses – referring to cultivation of food crops, industrial crops, including the planting of trees as plantations, animal husbandry and aquaculture, construction, such as workshops or factories and equipment for processing agricultural raw materials Local.

Despite the progress, we have also observed some impacts that have been shown to include the lack of consultation with the local communities on land encroachment and the negative impact on their traditional livelihoods. On the other hand, concerns about the encroachment on forest areas by concession companies affected the environment through the use of pesticides and other chemicals that contaminate water and affect the health of communities and livestock. Because of all these concession projects, communities have lost their livelihoods from forest products. Because of all these problems, it causes residents to lose income and face difficulties in solving problems in their daily lives. Competent authority to sign the contract refers to the authority with legal authority to sign economic land concession contracts on behalf of the Royal Government of Cambodia, exercising that right as granted by the Prime Minister and performing its duties in accordance with the law.

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In brief, relevant institutions and authorities must comply with laws, sub-decrees, and other regulations related to land concessions. In particular, one must not do anything that goes against one's ideals and conscience as a Khmer child. One must protect national assets or the assets of the people so that their identity is not lost. Specifically, concessionaires, who have received the right from the state through a contract granting state land concessions, must be respected.

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Management Process of Preah Sihanouk Cambodia-China-Friendship Polytechnic Institute

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Abstract
With the contributions to socio-economic development, building a workforce that is capable and capable of using advanced technologies is an important obligation for Cambodia to achieve the goal of sustainable economic growth and social stability. Sihanoukville Polytechnic Institute has a number of action plans towards continuous development and transformation. In this spirit, the preparation and launch of National Policy on Technical and Vocational Education and Training 2017-2025 highlighted the need to create a strategy for technical and vocational education and training for workforce to respond to the labor market needs, especially contributions to the development of the industrial sector and create decent jobs. This aims to ensure the quality and high productivity of workforce that can better compete with countries in the region. In Cambodia, there are many agencies that are engaged in skills development, from public institutions, private institutions and NGOs. Collaboration between all these institutions is a key factor for successful workforce development. The national policies must include all of these institutions. The purpose of this policy is to create a framework for all partners to contribute to workforce development in a structured and systematic manner, leading to long-term initiatives and jobs. Royal Government of Cambodia therefore hopes that the success of this policy implementation will serve as a political message to promote investment in key sectors that support the national economy by providing an adequate supply of a highly productive workforce.

Key words: *management process, polytechnic, socio-economic, social stability, action plan*

1. Introduction
Through the development of society, there is a change of management from one era to another and from one generation to another, such as a wise and energetic leader and human capital development. Although the technical and vocational education and training receive great attention from the Royal Government, the quantity and quality of technical and vocational education and training are still limited. This, however, doen't respond to the needs of labor market, as well as technological development, which requires more attention from all relevant parties. In Cambodia, technical and vocational

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education and training was re-established in 1993 under the Ministry of Education, Youth and Sports, with support from the International Labour Organization. It has grown with support from the Asian Development Bank. The Ministry of Education, Youth and Sports and the former Ministry of Social Affairs, Labor, Vocational Training and Youth Rehabilitation have had primary responsibility for technical and vocational training, both in- and out-of-school (Royal Decree, 2005). Currently, Ministry of Labor and Vocational Training has a total of 107 institutions responsible for providing technical and vocational education and training services under its auspices, including 37 public technical and vocational education and training institutions and 70 private institutions covering all capitals and provinces to respond to labor market needs. The long-term and short-term training of the Cambodia-China Friendship Polytechnic Institute, Preah Sihanouk, with the job market

2. Conceptual Framework of Literature

Education system in Cambodia

The education system in Cambodia consists of two streams, such as Technical and Vocational Education and Training (TVET Stream) and the Academic Stream. The two education systems are distinct, with different teaching and learning methods, different career goals, and different skills development needs for students (Sub Decree. 2016). Technical and vocational education and training system TVET focuses on equipping the individuals with the practical skills, knowledge, and abilities required for a specific occupation or trade. It emphasizes hands-on, practical learning, and often involves training in technical fields such as mechanics, engineering, healthcare, hospitality, agriculture, and trade skills. The TVET programs include apprenticeships, vocational diplomas, certificates, and associate degrees (Sub Decree,1999). The key features of TVET include Practical orientation, such as TVET programs, industry relevance, diverse career paths, and flexible study paths. TVET programs emphasize the practical skills and workplace readiness, enabling students to directly apply their knowledge in the companies, factories, and industries. Industry relevance, such as TVET curricula, are designed in collaboration with industry stakeholders to ensure that graduates have skills and competencies that the job market demands. Diverse career paths of TVET offers a variety of the job opportunities in sectors such as construction, manufacturing, automotive, healthcare, information technology, and hospitality. Flexible study paths, such as TVET programs, often offer flexible study options, including part-time, evening, and online options that meet the needs of students who may be working or pursuing their education alongside other commitments (Circular of Royal govt, 2011).

With general education system, the academic stream is an education system that focuses on theoretical knowledge, critical thinking, and subjects, such as

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mathematics, physics, geography, chemistry, civics, science, social sciences, national language, and humanities. The Academic Stream typically focuses on preparing students for further education at the university or college and careers that require a strong academic foundation. The curriculum typically culminates in a high school diploma, college diploma, or university qualification (MLVT, 2013). The main characteristics of general education system are emphasis on theoretical learning, preparation for higher education, career paths graduates, and traditional assessment methods. Emphasis on theoretical learning that focuses on the the curriculum, emphasizes theory, research, analysis, and critical thinking skills. Preparation for higher education prepares or orients students for university or college by providing a solid academic foundation in a variety of subjects. Career paths graduates from this education system often pursue careers in fields, such as pharmacy, law, engineering, education, business, and research that require advanced degrees or specialized knowledge. Traditional assessment methods that emphasize assessment in this education system (Academic Stream) typically involves examinations, essays, research papers, and presentations to assess students' understanding of theoretical knowledge and academic abilities.

Technical and vocational education and training programs

At this point, the student will highlight the technical and vocational education and training programs currently being implemented by the Takeo Regional Polytechnic Institute. Post-secondary training programs have four levels, such as vocational certificate level and technical and vocational diploma levels 1, 2, and 3, which are given equivalent value to secondary education (Council of Ministers, 2016). From 1993 to present, institute has continued to provide short-term technical and vocational training to target groups from poor families, vulnerable groups, midwives and the general public with skill needs. Training is conducted at the institute, community, companies and workshops at various locations close to the learners. The training program has a minimum of 30 credits, with 1 credit equal to 15 hours of theoretical instruction and 30 hours of practical training in workshops or schools. For this certificate-level training, registration at a company, factory or enterprise is not required) (Council of Ministers, 20146).

The professional skills that the institute has provided training in the past have focused on the two-priority areas, such as service and agricultural sectors. The service sector (four-month study) focuses on many skills in line with the needs of job market, community requests, and project owners. These skills include motorcycle repair, car repair, small engine repair, magneto repair, television repair, car repair and maintenance, car lighting system repair, car air-conditioning-system repair, home-cooling-equipment repair, home electrical installation, computer services, hair cutting, fruit and vegetable

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processing, and clothing design, etc. For the agricultural sector (one-week study), there are many skills including rice cultivation, cucumber cultivation, corn cultivation, chicken farming, duck farming, cattle farming, pig farming, frog farming, fish farming, lobster farming, cricket farming, and composting, etc.

Technical and professional diploma level

The Technical and Vocational Diploma Training Program 1.2.3 is a one-year program, including an internship period. Currently, Ministry has shortened the study period to four months for the Monday to Friday study session, both morning and evening. For the Monday to Friday night study session, students must study for eight months, including an internship. For the Saturday and Sunday study session, both morning and evening, students must study for ten months, including internship period. This training program has a minimum of 30 credits, with 1 credit equal to 15 hours of theoretical teaching, 30 hours of practical work in workshops or schools, and 45 hours of practical work in companies, factories, enterprises, organizations, state institutions, and individuals. Implementing the Technical and Vocational Diploma Training Program 1.2.3, the institute has been providing vocational training in 13 out of 38 skills including bricklayer, plumbing, building electrical installation, printing, car maintenance and repair, car electrical maintenance and repair, car air conditioning maintenance and repair, home cooling equipment service, electrical welding, electronic equipment maintenance and repair, computer graphic design, beauty services and beverage business to target groups of young men and women from poor families, vulnerable families, families with health certificates, families with health equity fund cards and young men and women nominated by capital, province, city, district or khan administration, etc.

Higher education training programs

With the higher technical diploma level, the Advanced Technical/Specialized Diploma training program is a two-year study program. This training program has a minimum of 60 credits, with 1 credit equal to 15 hours of theoretical teaching, 60 hours of practical work in a workshop or school, and 45 hours of practical work in companies, factories, enterprises, organizations, and public and private institutions. Currently, the institute offers training at the senior diploma/technical associate/specialty level in eight majors, including automotive mechanics, civil engineering, electrical engineering, electronics, veterinary medicine, information technology, accounting and finance, and English literature (Forecasts by MLVT From 1993-2017). For Bachelor of Technology/ Engineering Certificate, the Bachelor of Technology/Diploma in Engineering training program is a two-year program. The training program has a minimum of 120 credits, with 1 credit equal to 15 hours of theoretical

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instruction, 30 hours of practical training in workshops or schools, and 45 hours of practical training or apprenticeship in the companies, factories, enterprises, government institutions, and individuals. Currently, the institute offers training at the Bachelor of Technology/Diploma of Engineering level in eight specializations, including Automotive Mechanics, Civil Engineering, Electrical Engineering, Electronics Engineering, Veterinary Engineering, Information Technology, Accounting and Finance, and English Literature (IMF, 2024).

Conditions of enrollment

Candidates who wish to enroll in vocational certificate level courses must be able to read, write, and do arithmetic, and have a physical ability appropriate to the skill they wish to study. With the study of technical and professional diploma level, the candidates, who wish to enroll in technical and vocational degree programs, must meet the following qualifications, such as 15 years old or older, young people from poor and vulnerable families (study for free and receive a stipend (4 months) during training), ndividuals from the informal and formal economy (attend free education but do not receive subsidies. However, the candidates, who wish to enroll in technical and vocational diploma courses, must have a technical and vocational diploma or an equivalent diploma and must be accompanied by a number of documents according to the requirements of the institute and the Ministry of Labor and Vocational Training. The candidates, who wish to enroll in technical and vocational courses, must have a technical and vocational diploma or an equivalent degree and must be accompanied by certain documents according to the requirements of the institute and the Ministry of Labor and Vocational Training. The candidates, who wish to enroll in a master's degree or associate degree in the technical studies, must have a 3-year technical and vocational diploma or pass or fail high school or have an equivalent diploma and must be accompanied by certain documents according to the requirements of the institute and the Ministry of Labor and Vocational Training. Candidates who wish to enroll in the Bachelor of Technology degree program leading to an engineering degree must have a high school diploma or equivalent degree and must attach a number of documents as required by the institute and the Ministry of Labor and Vocational Training.

To successfully complete the course, students of Techo Sen Takeo Regional Polytechnic Institute must meet the requirements, such as Professional certificate level (students must come to class regularly, and then trainees must pass a competency test at the end of the training course), Technical and Vocational Diploma Level 1 (students must complete all modules for at least 30 credits, sign up at least two weeks before the exam ends, and take the final exam (theory and practical) and obtain a score of 50% or higher), Technical

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and Vocational Diploma Level 2 (students must complete all modules for a minimum of 30 credits, sign up at least two weeks before the exam ends, and take the final exam (theory and practical) and obtain a score of 50% or higher), and Technical and Vocational Diploma Level 3 (students must complete all modules for a minimum of 30 credits, sign up at least two weeks before the exam ends, and attend the graduation exam (theory and practical) and obtain a score of at least 50% Up). With the higher technical diploma level, all students must study at least 60 credits in core subjects and minor subjects, complete an internship at a company, factory, or enterprise for at least 3 months, write a research report and defend the research report in front of the committee, and pass national exams (final exams on theory and practical subjects) in at least 3 (three) specialized subjects. Bachelor's degree in technology showed that all students must study at least 120 credits in core subjects and minor subjects. Studenta, however, must do an internship at a company, factory, or enterprise for at least 3 months. All students must write a thesis and present it in front of a committee. In addition to this, all students must take a national exam (final exam on theoretical and practical subjects), at least 3 (three) specialized subjects. Hence, all associate and bachelor's degree students, who fail the national exam (final exam), must wait to retake the exam according to the institute's regulations.

Communication and cooperation

The Institute has worked hard to find the development partners in companies, factories, and enterprises by signing the memorandums of understanding to collaborate on a number of tasks, as such opening the technical skills training courses to target groups, opening the training courses to enhance the skills of technical teachers and leaders, exchanging the experiences through study visits to workplaces, companies, and institutions, helping maintain equipment and materials for training work, providing the space for students to work and study abroad, offering the job opportunities for students and participate in providing feedback on curriculum development, participating in the various events organized by institute or company, and collaborating on other points according to necessity and further discussion. For international relations and cooperation, the institute has strived to find suitable partners to develop with the technical and vocational training institutions by signing a memorandum of understanding to cooperate on a number of tasks, as such exchanging work experience through study tour programs and joint camping trips, providing professional training to institutional leaders and technical instructors, giving scholarships to students to continue their studies, providing opportunities for institute students to conduct study tours, creating a common curriculum, and collaborate on other points according to necessity and further discussion (Curriculum Mapping, n.d). Quality assurance the system for technical and

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vocational education and training. To ensure that the management system and technical and vocational education and training are conducted with high quality, efficiency, and effectiveness, the institute receives evaluations on two quality standards each year:

Ministry of Labor and Vocational Training

Attention to the quality of management and leadership work and technical and vocational education and training programs is a must for institutions that provide technical and vocational education and training. By promoting and strengthening human resource capacity to have technical and vocational skills in response to labor market needs, the technical and vocational education and training institutions must educate and train students to have entrepreneurial ideas, creative ideas, work consciousness, sensible responsibility, innocent character, meaning, morality, and virtue. Human resource training requires regular monitoring, monitoring and evaluation. In the response to the above factors, the Ministry of Labor and Vocational Training has launched a quality assurance system for technical and vocational education and training and has launched an evaluation program for all technical and vocational education and training institutions under the Ministry. This quality assurance system evaluates six criteria, management and governance, physical resources, staff, civil servants and teachers, trainees and students, curriculum, teaching and learning, and research and development. From 2012 to present, the institute has received quality assessments in accordance with all 6 criteria and has achieved good and excellent results. This shows that the Polytechnic Institute of Techo Sen Takeo Region has paid great attention to the quality of technical and vocational education and training, especially the development of human resources with technology and technical skills with quality, efficiency and effectiveness for labor market and as an important resource for participating in the Royal Government of Cambodia in building and developing the nation (Samheng, 2023).

Company Guardian Independent Certification Ltd

The Institute first applied for accreditation of its Technical and Vocational Education and Training (TVET) programs from the Guardian Independent Certification Ltd in January 2015. By obtaining accreditation of its TVET programs, the Institute requested an assessment of a total of 29 core functions of its offices and departments. From January 2015, the initial date of the assessment application, until 2023, Institute has received seven assessments and good results every year. National Policy on Technical and Vocational Education and Training 2017-2025. The necessity of a national policy on technical and vocational education and training is an indispensable factor in socio-economic development. This encourages students to gain knowledge Technical skills with real capabilities, become a worker skills technician, and

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make important contributions to national social and economic development. Recently, the Royal Government of Cambodia has launched a number of the major national policies, including "Development Policy Cambodian industry sector 2015 - 2025 and National Policy on Occupations and Employment 2015 – 2025.

Contributing to the development of industrial sector will create the decent jobs and ensure quality and productivity with the high labor force that can compete better with regional countries. By participating in the decision, the goal of national policy set out above is national education and training policy. Technical and professional needs to be prepared by setting a vision, purpose, goal, and strategy in developing high-quality human resources, ability and skills to respond to economic development society today and in the future.

Overview of TVET in Cambodia and Region.

In ASEAN Skill development is progressing rapidly due to the perception, regarding as a factor and necessity for the economic growth. The change is supported through policies to develop skills that generally based on the needs and included in all ministries, as well as all relevant institutions provided training. In some countries, Technical and vocational education and training expanded and became an authority or independent agency within government and created standards for the priority sectors. ASEAN also plays an important role in supporting common regional skills standards. These benefits are seen in the hospitality sector, as well as traditional businesses.

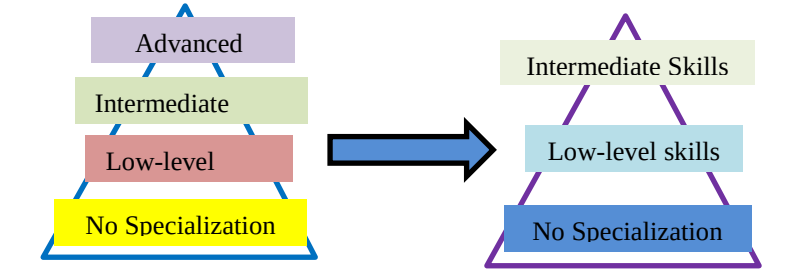
The Royal Government of Cambodia under the wise and highly intelligent leadership, Samdech Techo Hun Sen has payed close and strong attention in all areas, especially employment sector development, including job creation strengthening the harmony of relationships that is professionally related and promote technical and vocational education and training to respond to labor market needs, contribute to poverty reduction, improving the lives of citizens and socio-economic development Sustainable as reflected in the third phase of Quadrant Strategy. Strategic development plan National 2014 - 2018 also shows the government's commitment to the human resource training. This is clear evidence in the context of job creation to accelerate economic growth, and the strategic plan also identifies a number of key actions for the Ministry of Labor and Vocational Training to implement the priority policies of the Royal Government of Cambodia, especially training and vocational training, such as gross domestic product (GDP) doubled in 10 years (1998-2004), and tripled in 15 years (1994-2009), and in 2012, economic growth reached 7.3 percent with GDP per capita increasing from $60 in 2008 to $1,300 in 2016. Through this economic growth, Cambodia has moved from being a poor country to a "lower middle-income country," and the socio-economic goal of

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the Royal Government of Cambodia is to transform Cambodia into an upper middle-income country by 2030 and a "developed country" by 2050.

In 2015, the Kingdom of Cambodia had a total population of approximately 15,405,000, and a working-age population of 10,113,000, of which 8,359,000 were in the labor force. The education and skills of the labor force remain low, as such 13.50 percent of the labor force has no education; 27.80 percent have completed primary education; 14 percent have completed secondary education, 6.80 percent have completed high school; 5.40 percent have completed university. In addition, the quality of the labor force is still limited and is difficult to adapt to new technological developments due to the limited knowledge base of the labor force. Currently, Cambodia aims to transform a low-income country into a middle-income country, which requires upgrading the skills of the existing labor force and those ready to enter the labor force. Through this, the number of low-skilled workers will be reduced, while the small number of medium- and high-skilled workers will be increased, as shown in the following two pyramids.



Low-income countries situation

Middle-income country situation

Monitoring and Evaluation

By ensuring the progress of efficiency and effectiveness in monitoring and implementing this national policy, the Royal Government assign tasks to the national training committee through the Ministry of Labor and Training. The profession serves as a secretariat to organize and coordinate the effective implementation of monitoring system. Checking and evaluating include preparing annual reports on the implementation and compliance with this national policy submit to the government. Through this national training ocmmittee identifies challenges in terms of targets and indicators, this will serve as a basis for making decisions on urgent measures necessary to address emerging issues that arise during the implementation of this policy. Each measure must have an implementation plan with a specific duration. The results and impacts resulting from the implementation of this plan must be measurable. Each implementation plan must be accompanied by estimating the amount of money needed.

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3. Results

Student statistics from the academic year 2018-2024

Vocational certificate training is a training that relies on project funding provided by development partners such as the Asian Development Bank and separate or special funding packages from the Ministry of Economy and Finance through the Ministry of Labor and Vocational Training, which is an irregular provision of training like other levels. At this point, the researcher will only mention the statistics of students, who will be studying in the academic year 2021-2024 at the technical and vocational diploma level, the higher technical diploma level, and the bachelor of technology level.

Nº	Academic year	Academic level									
		Certificate (months 4)		Bridge to continue skills		C1 ,C2 ,C3		Bachelor's and Master's Degrees in Technology		Total	
		Total	F	Total	F	Total	F	Total	F	Total	F
1	2018-2017	150	30	0	0	106	28	0	0	256	56
2	2019-2018	165	15	50	31	78	23	183	68	476	137
3	2020-2019	195	7	75	37	120	57	258	87	648	188
4	2021-2020	375	46	0	0	886	359	295	120	1,556	528
5	2022-2021	210	44	0	0	694	274	303	126	1,207	444
6	2023-2022	150	30	0	0	663	234	312	151	1,125	415
7	2024-2023	0	0	100	55	878	272	323	146	1,158	443
Total		**1,245**	**172**	**225**	**123**	**3,282**	**1,217**	**1,674**	**698**	**6,426**	**2,210**

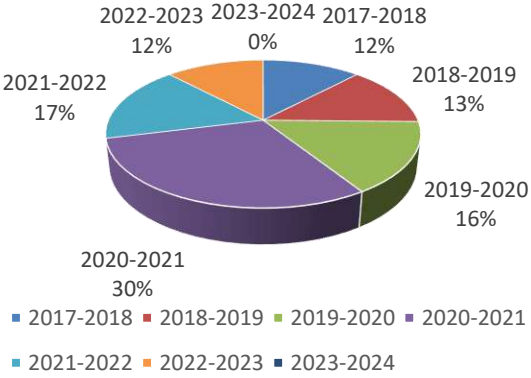
The graph3.1of the statistics of student enrollment in the academic year 2018-2024 showed that the number of the students registered and approved for admission from the Technical and Vocational Diploma 1 to the Bachelor of Technology level has increased every year. In the academic year 2018-2024, there were a total of 1,245 students, 172 of whom were female. And in the academic year 2018-2024 , there were a total of 1,150 students, 585 of whom were female. Statistics on students having jobs after graduation for 3 months from 2021-2024. At this point, the study only mentions statistics of students with technical and vocational diploma levels 1, 2, 3, higher technical diploma levels, and bachelor of technology levels who can find work and run their own businesses within 3 months after successfully graduating. A summary statistical graph on students who are employed 3 months after graduation.

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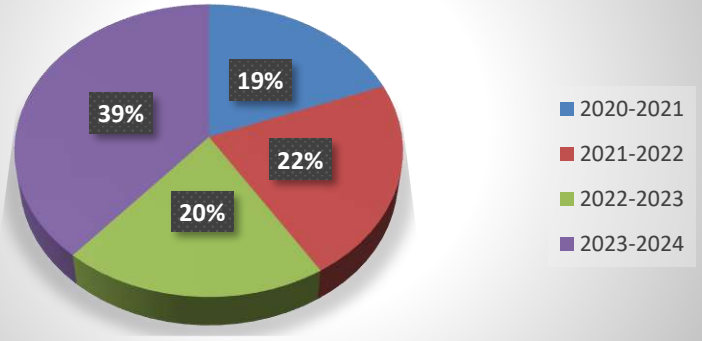
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Graph 3.1 statistics of student enrollment



The graph on the percentage of students who have jobs after graduation for 3 months from 2020-2021 to 2023-2024 shows that the number of students who have graduated and have jobs after graduation from the Technical and Vocational Diploma 1 level to the Bachelor of Technology level varies every year . In the academic year 2020-2021, there were a total of 309 students, 168 of whom were female. In the academic year 2021-2022, there were a total of 355 students, 181 of whom were female. In the academic year 2022-2023, there were a total of 326 students, 171 of whom were female. In the academic year 2023-2024, there were a total of 625 students, 188 of whom were female. Technical and vocational diploma

Graph 3.2 Percentage of students having job after graduation



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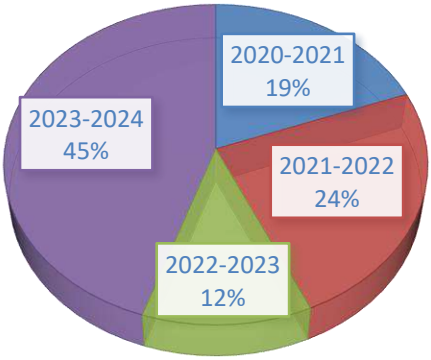
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Technical and Vocational Diploma 1

According to Graph3.3, students with Technical and Vocational Diploma 1 were able to find work (either working in private companies or running their own businesses) after successfully completing their studies within 3 months for the 2020-2021 academic year, there were 122 students, 79 females. For the 2021-2022 academic year, there were 153 students, 71 females, which is an increase of 31 students compared to the 2020-2021 academic year. In the 2022-2023 academic year, there were only 75 students, 23 females, because most students decided to continue their studies to Technical and Vocational Diploma 2. However, in the 2023-2024 academic year, there were 285 students, 85 females, an increase of 163 compared to the 2020-2021 academic year, and compared to the 2021 academic year, there was an increase of 132, but compared to the students who were looking for work in the 2022-2023 academic year, there was an increase of 210.

FIGURE 3.3 STATISTICS OF STUDENTS WITH JOBS WITHIN 3 MONTHS OF GRADUATION



Technical and Vocational Diploma 2

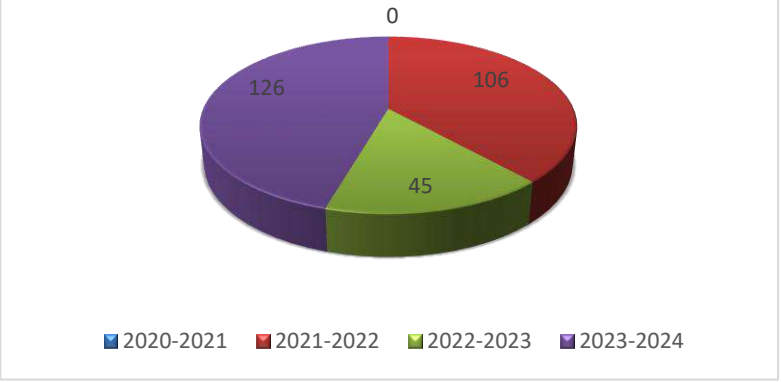
According to the graph3.4, students with Technical and Vocational Diploma Level 2 can find jobs (both working in private companies and running their own businesses) after successfully completing their studies within 3 months. For the 2020-2021 academic year, there were no students who were able to find jobs because the institute did not accept students to enroll in the 2019-2020 academic year because it was a time when the world, including Cambodia, was affected by the COVID-19 pandemic. By the 2021-2022 academic year, there were 106 students who were able to find jobs, 73 of whom were female. In the 2022-2023 academic year, the number of

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employed students decreased to only 45 students, 18 of whom were female, because most students decided to continue their studies with Technical and Vocational Diploma Level 3. However, in the 2023-2024 academic year, there were 126 employed students, 29 of whom were female, an increase of 20 compared to the 2021-2022 academic year, and an increase of 81 compared to the 2022-2023 academic year.

Graph 3.4 Statistics of students who have jobs within 3 months of graduation



Technical and Vocational Diploma 3

According to Graph 3.5, students with Technical and Vocational Diploma Level 3 were able to find work (either working in private companies or running their own businesses) after successfully graduating within 3 months for the 2020-2021 academic year, there were 19 students, 8 females. For the 2021-2022 academic year, there were no students looking for work, as they decided to continue their studies at the Technical Diploma or Associate Degree level. In the 2022-2023 academic year, the number of employed students was 84, 59 females, because some students decided to continue their studies at the Technical Diploma or Long Bachelor's Degree level, as in the 2021-2022 academic year. And in the 2023-2024 academic year, there were 42 students, 15 females, who were employed. Usually, some students who successfully graduated from the Technical and Vocational Diploma Level 3 decided to continue their studies at the Technical Diploma Level without looking for work, and some others decided to continue their studies and work.

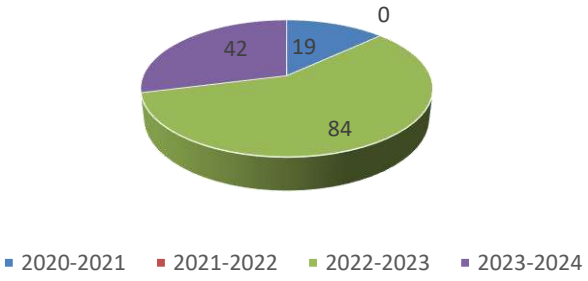
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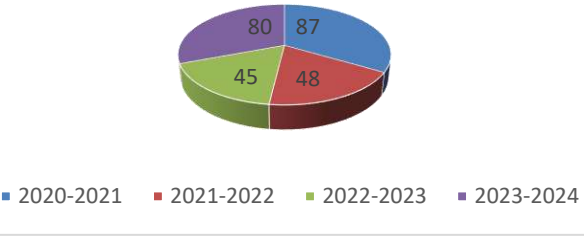
Graph 3.5 of students with 3-month employment after graduation



Higher technical diploma

According to Graph 3.6, students who studied a technical higher education degree were able to find work (either working in private companies or running their own businesses) after successfully completing their studies within 3 months for the 2020-2021 academic year. There were 87 students, 43 females. For the 2021-2022 academic year, there were 48 students, 11 females, meaning the number of employed students decreased by 39 compared to the previous academic year. In the 2022-2023 academic year, the number of employed students was only 45 students, 15 females. However, in the 2023-2024 academic year, there were 80 students, 18 females, a slight increase compared to the 2021-2022 and 2023-2023 academic years, but this number is still less than the 2020-2021 academic year. Usually, students who successfully complete a technical higher education degree or associate degree decide to find work or run their own businesses, and some decide to continue their studies for a bachelor's degree in technology.

Graph 3.6 statistics of students who have jobs within 3 months of graduating



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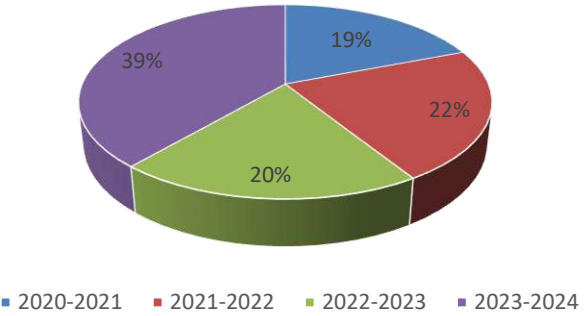
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Bachelor of Technology

According to Graph 3.7, students who studied a Bachelor of Technology degree were able to find a job (either working in private companies or running their own business) after successfully graduating within 3 months for the 2020-2021 academic year, there were 81 students, 38 females. For the 2021-2022 academic year, there were 48 students, 26 females, meaning the number of employed students decreased less than the previous academic year by 33. In the 2022-2023 academic year, the number of employed students was 77 students, 56 females, an increase of 29 compared to the 2021-2022 academic year, but a decrease of 4 compared to the 2020-2021 academic year. However, in the 2023-2024 academic year, there were 92 students, 41 females, a slight increase compared to the 2020-2021 academic year and the 2022-2023 academic year, namely an increase of 11 for the 2020-2021 academic year and 15 for the 2022-2023 academic year, but an increase of 44 compared to the 2021-2022 academic year. Typically, students who successfully complete a technical or bachelor's degree decide to find work or become self-employed, and some decide to continue their studies with a bachelor's degree in technology.

Graph 3.7 statistics of students with a Bachelor of Technology degree who have jobs within 3 months of graduation



4. Conclusion

The study was about the process of managing the training institution with accountability and transparency and a long-term perspective to ensure the stable and high-productivity operations in harmony. The efforts of ensuring the quality of technical and vocational education and training are the key aspects in strengthening the economy growth, expanding educational services, carrying out the value, and attracting development partners – participating in

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technical skills training cooperation and connecting the labor markets. In addition, this strived to monitor the challenges and problem-solving and to improve the operational management due to circumstances and opportunities. The long-term management strategies were implemented with the procedures, policy, and decision-making. This study significantly contributed Cambodia-China Friendship Polytechnic Institute satisfied and advanced the skills and competence. A large percentage of students chose majors other than technical and vocational.

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Ratanakiri Economic Development Based on the Rectangular Strategy

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Abstract
This study examined the economic development of Ratanakiri , Cambodia, within the framework of rectangular strategy (2018–2023), emphasizing infrastructure, human resource development, agriculture, and private sector promotion. By employing a mixed-methods design, data were collected from 154 samples of 250 stakeholders, including provincial officials, households, and small- and medium-sized enterprises (SMEs). Quantitative analysis was conducted to assess provincial outcomes in relation to national development objectives. Qualitative analysis was employed to determine the perceptions of economic development. Results revealed notable improvements in road accessibility, electricity coverage, internet penetration, literacy rates, health service provision, and SME employment. Despite these gains, the province continued to face significant challenges, including geographical isolation, socio-ethnic disparities, and limited institutional capacity, which constrained full realization of development goals. By using Amartya Sen's Development Theory as the analytical lens (Sen, 1999), this study interpreted development not solely as the economic growth but as the expansion of human capabilities and freedoms, highlighting the importance of enabling people to lead lives they value. Based on these findings, the study recommends strategic investments in infrastructure, enhanced education and vocational training programs, support for inclusive private sector growth, and strengthened governance and institutional capacity to maximize the effectiveness of the Rectangular Strategy. This study contributed to promote equitable, sustainable, and human-centered development in Ratanakiri, offering insights for policymakers and development practitioners in similar remote provinces.

Key words: *Rectangular Strategy, Economic Development, Human Capabilities, Provincial Governance, Practitioner*

1. Introduction
Cambodia has experienced sustained economic growth averaging around 7% per year in the decade preceding 2020, positioning itself as one of the fastest-growing economies in Southeast Asia (World Bank, 2021). This economic trajectory is underpinned by a combination of domestic reforms, foreign direct investment, and active engagement with international development partners. Structural reforms in governance, trade liberalization, and fiscal management have created an enabling environment for private sector growth,

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while investment in physical infrastructure and human capital has sought to enhance the country's productive capacity (Asian Development Bank [ADB], 2019). Cambodia's national development planning is the Rectangular Strategy (RS), introduced in 2004 and periodically updated to align with the Royal Government's long-term goals (Royal Government of Cambodia, 2018). The RS provides a comprehensive framework aimed at promoting sustained economic growth, social equity, efficiency in public administration, and employment creation (Royal Government of Cambodia, 2018). Its four strategic pillars—agriculture development, human resource development, physical infrastructure improvement, and private sector growth—reflect an integrated approach to development, emphasizing both economic expansion and social inclusion. The strategy has been complemented by Cambodia's alignment with the Sustainable Development Goals (SDGs), particularly those relating to poverty reduction, education, gender equality, and environmental sustainability (United Nations, 2015).

While the RS has contributed to significant national-level economic gains, its impact is uneven across provinces, particularly in remote and underdeveloped areas (ADB, 2019). Ratanakiri Province, located in northeastern Cambodia, represents a region where socio-economic disparities remain pronounced. The province is characterized by mountainous terrain, dense forests, and a sparse population distribution, which pose inherent challenges to infrastructure development, market access, and service delivery (UNDP, 2020). Historically, Ratanakiri has lagged behind the national average in indicators such as per capita income, literacy, healthcare access, and employment opportunities (ADB, 2019). Ratanakiri's economy remains predominantly agrarian, with subsistence and commercial agriculture forming the backbone of livelihoods. Rubber, cashew nuts, cassava, and other cash crops have increasingly contributed to household income, though agricultural productivity remains constrained by limited access to modern technologies, irrigation, and market linkages (FAO, 2018). Forestry, another key sector, is both an economic resource and a critical environmental asset; sustainable management of forest resources is essential for ecological balance and long-term development (World Bank, 2021). Moreover, ecotourism has emerged as a potential avenue for inclusive economic growth, given the province's rich biodiversity, scenic landscapes, and cultural heritage. However, the lack of adequate transport, hospitality infrastructure, and skilled labor has limited the sector's full potential (UNWTO, 2019).

Human capital development in Ratanakiri is a central concern. Educational attainment is lower than national average, with significant gaps in secondary and tertiary enrollment rates (UNESCO, 2019). Vocational training opportunities are limited, and the province faces a shortage of skilled

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professionals capable of supporting emerging industries and modern public administration (ADB, 2019). In addition, health outcomes and access to medical services are suboptimal, reflecting broader development challenges that intersect with infrastructure, governance, and socio-economic factors (WHO, 2020). The RS's focus on infrastructure and human resource development is particularly relevant to Ratanakiri. Investments in roads, electricity, and digital connectivity can enhance access to markets, facilitate investment, and stimulate private sector activity (Royal Government of Cambodia, 2018). Concurrently, targeted human resource development programs, including vocational training and capacity-building initiatives, can equip local populations with the skills needed to participate effectively in economic and social development (ADB, 2019). Assessing how the RS has been implemented in Ratanakiri provides the valuable insights into the effectiveness of national strategies in remote provinces, highlighting both successes and gaps in policy translation (UNDP, 2020).

Further, Ratanakiri presents a unique case for understanding the dynamics of the sub-national development in Cambodia. Its multi-ethnic population—including indigenous communities with distinct cultural and land-use practices—necessitates development approaches that are sensitive to local contexts and inclusive of marginalized groups (UNDP, 2020). Policies that prioritize agricultural modernization, sustainable resource management, and community-based development are essential for promoting equitable growth while preserving cultural and environmental heritage (FAO, 2018; UNWTO, 2019). In light of these considerations, this study aims to examine the economic development of Ratanakiri during 2018–2023, with a specific focus on the role of the Rectangular Strategy in shaping infrastructure, human resource capacity, and private sector growth. By analyzing quantitative and qualitative data on the economic activities, investment trends, and social indicators, the study seeks to assess the effectiveness, challenges, and opportunities associated with the national development strategies at the provincial level (ADB, 2019; UNDP, 2020). An investigation contributes to both academic discourse and policy-making by providing evidence. Key challenges include limited infrastructure and connectivity, insufficient energy and digital infrastructure, and constraints in human resource development and capacity building, particularly for ethnic minority communities. This study mainly focuses on the analysis of Ratanakiri's economic structure and development trends (2018–2023), assessment of RS pillar implementation at the provincial level, identity of successes and challenges in provincial strategy implementation, evaluation of moderating factors (geography, ethnic composition, institutional capacity), and provision of evidence-based policy recommendations.

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2. Literature Review & Theoretical Framework

Theoretical Framework of Economic Development

The study linked RS practices to provincial economic outcomes, moderated by geographic, demographic, and institutional factors. Development is multi-dimensional, encompassing economic growth, human capabilities, and social well-being. Amartya Sen emphasizes expanding capabilities and freedoms as central measure of development. Understanding foundations of economics provided a framework for analyzing provincial development and policy interventions, such as those under Cambodia's Rectangular Strategy. Economic theory and methods guided decision-making, resource allocation, and policy design, helping scholars and policymakers interpret complex socio-economic dynamics. With the nature and methods of economics, economics was the study of how the individuals, firms, and governments allocated scarce resources to meet competing needs and wants (Samuelson & Nordhaus, 2010). It explored interactions between production, distribution, and consumption of goods and services, providing insights into the economic behaviors and societal welfare.

Macroeconomics examined aggregate phenomena, including national income, employment, inflation, and economic growth, providing the basis for policy formulation. Economics also had the practical applications for citizenship and personal decision-making. Citizens used economic principles to understand markets, make informed choices about the consumption and savings, and evaluate public policies. Economic analysis employs systematic methods to understand patterns, trends, and causal relationships. Descriptive economics focused on the patterns and trends in employment, income, productivity, and trade (Mankiw, 2019). Economic theory went beyond description to explain the mechanisms driving economic growth, resource allocation, and market behavior. Industrialization, structural change, and development economics clarified how infrastructure, human capital, and private sector development interact to promote provincial economic growth (Todaro & Smith, 2015). Economic theory also guided predictive modeling, scenario planning, and policy recommendations.

Policy and Normative Economics

Policy economics applies economic analysis to guide decision-making and governance, helping translate theory into actionable strategies. It is generally divided into two complementary approaches, such as positive and normative economics. Positive economics dealt with objective description and analysis of economic facts, identifying causation and relationships without value judgments (Friedman, 1953). This approach provided evidence-based inputs for planning and evaluating provincial programs. Normative economics

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incorporated the value judgments and prescriptive recommendations to guide policy choices (Sen, 1999).

The economizing problem addressed the fundamental challenge of limited resources and unlimited human wants, which lied at the core of economic analysis (Samuelson & Nordhaus, 2010). Understanding this problem was critical for evaluating the development strategies and resource allocation. The principle of economy required that the resources were used efficiently, minimizing waste while maximizing output and social welfare. Governments, households, and enterprises must prioritize spending, production, and investment decisions under conditions of scarcity. Human wants were virtually unlimited, ranging from basic needs like food, water, and shelter to higher-order needs such as education, health, and leisure. Resources, however, were finite, including land, labor, capital, and infrastructure. The relative scarcity of resources necessitated careful planning, choice-making, and trade-offs, particularly in remote provinces where infrastructure and human capital are limited.

Economic activity involved the production, distribution, and consumption of goods and services. Efficiency measured how well resources were utilized to achieve the desired outcomes. Economic growth was achieved when activity increased output and income, but growth must be inclusive and sustainable to improve human well-being (Todaro & Smith, 2015). The economizing problem highlighted the importance of forward-looking strategies, such as investment in education, health, and infrastructure, to expand future opportunities. In line with Sen's development framework, addressing scarcity was not only about producing more goods but also about expanding human capabilities, freedoms, and quality of life, ensuring that development was equitable and sustainable.

Understanding of Economic Development Theory

Amartya Sen's Development Theory provided a human-centered approach to understanding the development, emphasizing that true progress was not measured solely by economic growth or GDP, but by the enhancement of people's capabilities, freedoms, and well-being (Sen, 1999). This theoretical lens was particularly relevant to provinces, where development challenges were shaped by geographical isolation, limited infrastructure, ethnic diversity, and low human capital. Sen's framework allowed policymakers and researchers to evaluate development outcomes beyond income metrics, considering the qualitative aspects of human life. Capabilities referred to the real opportunities or abilities that individuals possessed to pursue the life they value. They encompassed a broad range of skills, knowledge, and resources that enabled people to make meaningful choices in their lives (Sen, 1999).

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Functioning are the realized achievements or states of being and doing that result from the exercise of capabilities. These include tangible outcomes such as literacy, employment, health status, and participation in community life (Sen, 1999). Functioning were the observable indicators that provided measurable evidence of the effectiveness of development initiatives. While capabilities represented potential, functioning reflected the extent to which that potential was translated into real improvements in people's lives. Freedom was an intrinsic goal and instrumental means of the development. Political freedoms, such as the ability to participate in governance, and economic freedoms, such as access to markets and resources, expanded the individual choices and collective welfare (Sen, 1999). A key insight of Sen's framework was that poverty should be understood as capability deprivation rather than merely income deficiency (Sen, 1999). Infrastructure projects, human resource development, agricultural programs, and private sector promotion were evaluated not only in terms of economic impact but also in terms of their effect on local capabilities, functioning, and freedoms.

Key Factors for Economic Growth

Key Factors affected the economic growth, including human and physical capital, institutions, political stability, technological advancement, natural resources, macroeconomic policy. The economic growth and policy helped processing structural transformation, institutional effectiveness, and human behavior in the context of sub-national development. Industrialization theory emphasized the role of industrial development in driving economic growth and structural transformation (Lewis, 1954). According to this theory, shifting labor from low-productivity agriculture to higher-productivity industrial sectors generated increased income, employment, and capital accumulation. Industrialization theory underscored the importance of promoting industrial activities alongside agricultural modernization to achieve sustained economic growth. Structural change theory focused on the dynamic reallocation of the resources between sectors (Kuznets, 1966). Mixed economic development theory posited that sustainable growth required a combination of the market mechanisms and state intervention (Hirschman, 1958). While private sector investment drove efficiency and innovation, government policies ensuring equity, provided public goods, and regulated externalities.

New institutional economics (NIE) highlighted the importance of formal and informal institutions, rules, and governance structures in shaping economic outcomes (North, 1990). Institutions reduced the transaction costs, provided incentives, and stabilized economic interactions. Strong institutional capacity was critical for efficient public service delivery, investment facilitation, and poverty reduction. Public policy implementation theory examined the processes through which policies were translated into action and achieve

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intended outcomes (Pressman & Wildavsky, 1973). This perspective was essential for understanding how national strategies, such as the Rectangular Strategy, are operationalized at the provincial level. Policy success depended on clear objectives, administrative capacity, stakeholder coordination, and continuous monitoring. Implementation theory also highlighted the potential obstacles, such as resource limitations, coordination failures, or socio-cultural barriers, that can impede policy effectiveness.

Economic behavior theory explored how the individual and organizational decision-making, incentives, and behavioral patterns affected the economic outcomes (Simon, 1955). This theoretical lens provided insights into how households, SMEs, and local officials responded to the policy interventions, market opportunities, and infrastructure improvements. Collectively, these theories provided a multi-dimensional framework for analyzing provincial development. Industrialization and structural change theories explained the economic transformation, mixed development theory and public policy theory that focused on government-market interactions and implementation, while new institutional economics and economic behavior theory highlighted governance, institutions, and human decision-making.

Governance and Institutional Theories

Understanding the economic development required a thorough analysis of governance and institutional dynamics. Governance and institutional theories provided frameworks for examining how the public administration, policy implementation, decentralization, and local empowerment influenced the development outcomes, particularly in regions with geographical isolation, multi-ethnic populations, and limited institutional capacity. Governance theory emphasized the structures, processes, and practices through which the public, private, and civil society actors interacted to manage resources, deliver services, and achieve collective goals (Kooiman, 2003). Good governance was characterized by transparency, accountability, participation, and responsiveness. Decentralization theory posited that transferring decision-making authority from central to sub-national levels improved efficiency, accountability, and responsiveness to local needs (Rondinelli, Nellis, & Cheema, 1983).

Local empowerment theory focused on building capacities of communities and individuals to participate meaningfully in development decision-making (Narayan, 2002). Empowered communities can identify priorities, manage resources, and engage in economic activities. Empowerment initiatives may include participatory planning, vocational training, and local governance committees that enabled citizens to influence infrastructure, education, and economic policies. Besides, the sustainable development theory integrated economic growth, social equity, and environmental protection to ensure long-

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term prosperity (Brundtland Commission, 1987). For this sense, governance and institutional mechanisms were central to achieving sustainability by enforcing the regulations, allocating the resources efficiently, and engaging communities in environmental stewardship.

Institutional theories also examined provincial inequalities and their origins in administrative capacity, resource distribution, and policy implementation (Rodrik, 2000). Governance and institutional frameworks were essential for reducing these inequalities, through targeted policies, capacity-building programs, and effective monitoring and evaluation mechanisms. With the policy framework and legal norms, Cambodia's socio-economic development was guided by a set of strategic policies and legal norms that align national objectives with provincial development priorities. These strategies served as the policy backbone for translating Rectangular Strategy (RS) into actionable programs across sectors, including agriculture, tourism, trade, industry, and revenue mobilization. In addition, regional integration frameworks, such as ASEAN, provided the comparative benchmarks and highlighted the potential research gaps in local policy implementation. The Agricultural and Rural Development Strategy (ARDS) emphasized the sustainable agricultural production, rural livelihoods, and food security (Royal Government of Cambodia, 2015). The strategy prioritized modernization of crop production, irrigation expansion, soil management, and rural infrastructure to increase productivity and income for farmers.

Revenue Tourism and Mobilization Strategy

Tourism Development Strategy (TDS) aimed to promote Cambodia as a competitive and sustainable tourism destination while generating income and employment, particularly in rural provinces (Ministry of Tourism, 2015). This strategy focused on eco-tourism and community-based tourism, leveraging natural landscapes, indigenous culture, and biodiversity. Policy priorities included developing tourist infrastructure, training local service providers, ensuring environmental conservation, and enhancing safety standards. Despite these efforts, limitations in road connectivity, hospitality services, and marketing continue to hinder full tourism potential. The Trade and Economic Integration Strategy (TEIS) was designed to enhance Cambodia's participation in regional and global markets by reducing trade barriers, strengthening institutional frameworks, and supporting export-oriented industries (Ministry of Commerce, 2015). However, the challenges included limited logistics infrastructure, low awareness of market standards, and inadequate support for micro and small enterprises to scale operations.

Similarly, the industrial and energy development strategy (IEDS) focused on industrial diversification, energy security, and promotion of sustainable manufacturing and energy sectors (Ministry of Industry, Science, Technology

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& Innovation, 2015). Industrial hubs, energy generation projects, and small-scale processing units were prioritized to create employment and stimulate regional economies. Further, Revenue Mobilization Strategy (RMS) aimed to strengthen domestic revenue collection, improve tax compliance, and ensure sustainable fiscal capacity (Ministry of Economy and Finance, 2019). Enhanced revenue enables the government to fund infrastructure, social services, and human development initiatives, particularly in underserved provinces. With the National Development Strategy: Rectangular Strategy Phases I–IV (2003–2023), Rectangular Strategy (RS) served as Cambodia's overarching national development blueprint, with four phases spanning 2003–2023. Each phase has emphasized growth, equity, efficiency, and employment, operationalized through sector-specific strategies, including agriculture, human resource development, infrastructure, and private sector promotion (Royal Government of Cambodia, 2018). The RS provided policy coherence across the multiple ministries, linking national priorities with provincial development.

Research Gaps

Comparative analysis with ASEAN member states provided the insights into effective policy implementation and identifies research gaps. For example, Vietnam and Thailand demonstrated successful integration of rural provinces into national growth through targeted infrastructure, human resource investment, and private sector facilitation (World Bank, 2020). The Philippines similarly leveraged community-based tourism and agricultural modernization to promote inclusive development.

3. Research Methodology

This study adopted a mixed methods-research design, combining quantitative and qualitative research approaches. The quantitative component was used to examine the measurable outcomes of Rectangular Strategy implementation in Ratanakiri, including infrastructure, human resource development, and private sector growth. The qualitative component explored perspectives from local targeted stakeholders, providing insights into challenges, governance effectiveness, and capability expansion. The mixed methods-research design allowed in ensuring comprehensive understanding by integrating statistical analysis with the in-depth qualitative interpretations. This approach was appropriate given the multi-dimensional nature of economic development, including social, institutional, and geographic factors.

The target population included households, local government officials, SMEs, and ethnic minority community representatives in Ratanakiri. 154 samples of 250 participants were employed, with random sampling, based on the representativeness and logistical feasibility. Households: 54 participants, sampled from rural and semi-urban areas. Provincial officials and community

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leaders: 60 participants, purposively selected to provide expert insights. SMEs and business owners: 40 participants, selected from main economic sectors such as agriculture, trade, and tourism. Sampling Method included random sampling for quantitative research in ensuring that the proportional representation from different districts and ethnic groups. Purposive Sampling was used to target the key informants who possess in-depth knowledge of policy implementation and provincial governance.

With Data Collection Methods, survey-questionnaires were employed to distribute to households and SMEs in collecting quantitative data on income, employment, market access, infrastructure use, and economic activities. The Key Informant Interviews (KIIs) were conducted with provincial officials, local administrators, and development partners to understand governance practices, capacity-building initiatives, and RS implementation challenges. In addition, focus group discussions (FGDs) were used in holding with the community representatives and ethnic minority groups to capture qualitative perspectives on human capability, social inclusion, and local economic opportunities. Document Review was also used in examining government reports, RS progress documents, statistical data, and policy briefs to validate findings and contextualize local development outcomes.

With the data analysis methods, this used the descriptive statistics analysis for examine the mean, percentage, growth rate in order to summarize trends in infrastructure, literacy, health access, and SME employment. Correlation and cross-tabulation analyses were also used to explore relationships between RS pillars and provincial development indicators. However, thematic coding of interview and FGD transcripts were employed for qualitative analysis in order to identify recurring patterns, governance challenges, and stakeholder perceptions. Integration with Amartya Sen's framework was used to assess whether the RS interventions effectively expanded the human capabilities and freedoms.

By ensuing the reliability and validity of this study, instrument pre-testing, such as survey and interview guides were piloted in select villages to ensure clarity and relevance. Triangulation was also used for cross-verification of data from surveys, interviews, FGDs, and official reports enhances reliability. Likely, peer review, such as independent review of qualitative coding and interpretation ensures analytical rigor were conducted.

With ethical considerations and informed consent, participants were informed about the purpose, procedures, and voluntary nature of the study. This study carried out the confidentiality with the personal identifiers that were removed to protect privacy. The tudy protocol received approval from provincial authorities and adheres to ethical research guidelines.

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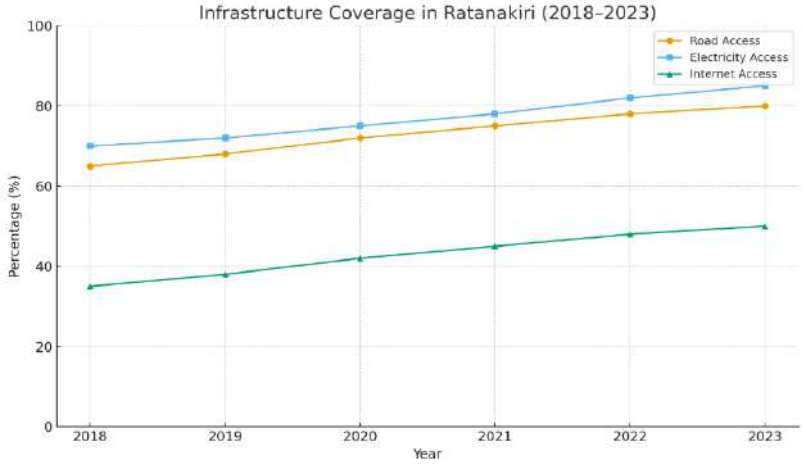
4. Results and Discussion

Economic and Social Situation of Ratanakiri

This study showed the geography and demographics, economic sector, infrastructure, social protection, and governance. The geography and demographics focused on the remote, mountainous, multi-ethnic population (~200,000–250,000). Geographic isolation affected the market access and service delivery. Economic Sector, such as agriculture dominated livelihoods, forestry and ecotourism emerging. Land ownership and conflicts remained challenges and SME development and trade expansion. Furthermore, the infrastructure included road network, such as progress from 65% paved (2018) to 80% (2023). Electricity was with the coverage 70% to 85%. The digital connectivity was about 35% to 50%, and human capital was with the literacy rate: 75% to 82%. Health access consists of 60% to 72%. This study also mentioned the social protection that focused on the vulnerable populations, such as children, elderly, disabled, clean water, sanitation, and health infrastructure improvements. Governance was important for decentralization that initiative improving local accountability and citizen participation in communal decisions increasing.

Infrastructure and Connectivity

Incremental improvements enhanced economic activity and market access
Line chart illustration: Road, electricity, internet growth 2018–2023.



Human Resource Development

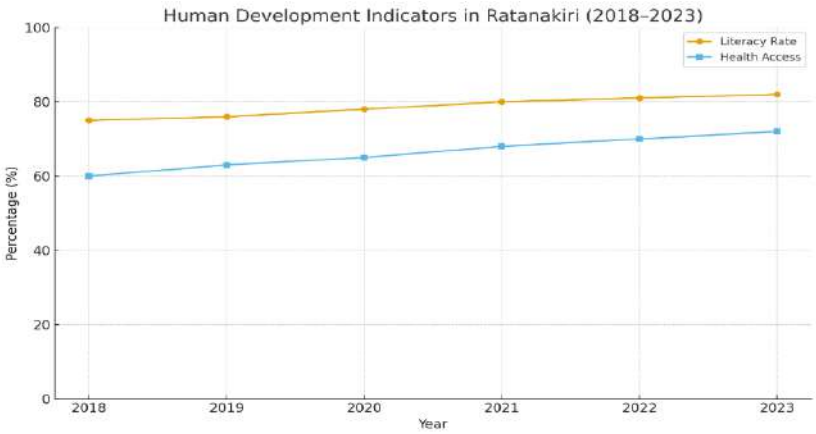
Developing the human resource focused on the literacy and health improvements, vocational training impact on employment. Line chart illustrated the literacy and health access trends.

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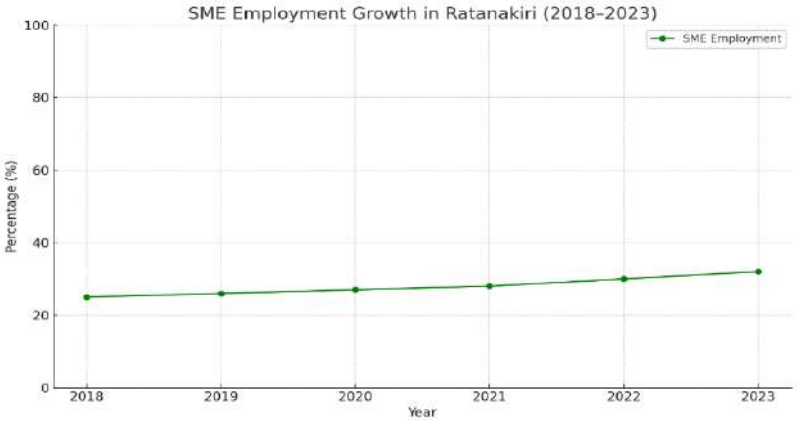
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Agriculture and Private Sector Promotion

SME employment growth was from 25% to 32%. Diversification of agribusiness and ecotourism was with the line chart illustration: SME employment growth.



Based upon the research results, economic development is very important for Ratanakiri, where needs to have measurable progress under RS pillars. However, the geographic and institutional constraints persist in developing the provincial economic. With the comparison with the ASEAN provinces, Ratanakiri has the similar rural development challenges. Importantly, Policy alignment and local adaptation are crucial for effectiveness of economic development, emphasizing on the human-centered growth rather than output-only metrics.

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4. Conclusion

This study examined the economic development in Ratankiri, focusing on the road, electricity, and internet coverage that were significantly increased. Literacy and health outcomes were improved. SME employment and income diversification were also increased. However, the gaps in remote areas, ethnic minorities, and institutional capacity were remained. With economic policy, Ratanakiri prioritized the remote area infrastructure and expanded vocational and educational programs for the key factors for economic development. Similarly, strengthening the inclusive private sector development was needed. It was essential to enhance governance and capacity building at sub-national levels. This study significantly contributed to evaluate RS Phase V outcomes (2023–2028), conduct the comparative studies across provinces and ASEAN countries, and detailed gender and minority-focused economic impact studies.

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Effectiveness of Management Practices at the Techo Sen National Polytechnic Institute, Cambodia (2018–2023)

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Abstract
This study examined the effectiveness of management practices at the Techo Sen National Polytechnic Institute, located in Kandal, Cambodia, within context of Technical and Vocational Education and Training (TVET) in Southeast Asia. With this study design, the theoretical research design was used. Secondary data analysis and SWOT frameworks were carried out in presenting the results. Findings revealed that the institute demonstrated strong alignment with national TVET policies, effective leadership, and comprehensive capacity-building initiatives. The key challenges included limited financial and physical resources, infrastructure constraints, and gaps between curricula and labor market demands. The study provided practical implications to strengthen governance, optimize resource utilization, and improve program relevance, offering the insights for policymakers, educational administrators, and development partners. By situating Cambodia's experience within regional TVET landscape, the research contributes to understanding how Southeast Asian polytechnic institutions enhance management effectiveness and workforce readiness in resource-constrained contexts.

Key words: *TVET, Polytechnic, Institutional Effectiveness, Leadership, Capacity Building, Governance*

1. Introduction
Technical and Vocational Education and Training (TVET) is recognized as a critical mechanism for enhancing the human capital, fostering economic development, and reducing unemployment (Becker, 1964; UNESCO, 2013). With the individuals of the practical skills and specialized knowledge, TVET institutions play a vital role in bridging the gap between education and labor market demands. In Southeast Asia, Vietnam, Thailand, and the Philippines have demonstrated how the strategic investment in vocational education that contributes to industrial growth, technological advancement, and workforce competitiveness (ADB, 2014; Meyer, 2008). In Cambodia, the government has emphasized the development of polytechnic and vocational institutes as

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part of national strategy for industrialization and modernization. The National Policy on TVET (2014–2023) aims to create a skilled workforce capable of supporting emerging the industries, enhancing productivity, and promoting the sustainable economic growth (Ministry of Education, Youth, and Sport [MoEYS], 2014). Polytechnic institutes, such as the National Polytechnic Institute of Techo Sen in Kandal, serve as the pivotal institutions in this framework, tasked with equipping students with both technical competencies and soft skills for the contemporary labor market.

Effective management of TVET institutions is central to achieving these policy objectives. Management practices that emphasize strategic leadership, governance, and resource optimization ensure that institutions can respond effectively to evolving industry needs (Harman, 2004; Kirkpatrick, 2006). Strong leadership is associated with improved curriculum design, better staff performance, and enhanced the institutional reputation, while the governance structures provide accountability, transparency, and coordination between administrative and academic functions. Further, capacity-building programs for staff and faculty members strengthen the institutional ability to deliver high-quality training and adapt to technological and pedagogical innovations (UNESCO-UNEVOC, 2015). Despite these efforts, Cambodia's TVET sector continues to face multiple challenges. First, limited infrastructure—including outdated laboratories, insufficient training equipment, and inadequate classroom facilities—constrains quality of technical education (ADB, 2014). Second, insufficiently trained staff affects both teaching and administrative quality of polytechnic institutes, limiting their ability to implement modern pedagogical methods or manage institutional operations effectively (UNDP, 2009). Third, misalignment between training programs and labor market needs reduces graduates' employability, as many curricula remain theoretical rather than competency-based and industry-focused. This misalignment is exacerbated by the rapid pace of industrial and technological change, which requires continuous curriculum updates and close collaboration between educational institutions and industry partners.

This study is to exploring management philosophy, operational strategies, and effectiveness of strengthening the governance, optimizing the resources, and enhancing the performance of Techo Sen National Polytechnic Institute. Management philosophy encompasses the values, beliefs, and principles that guide institutional leadership in decision-making, planning, and governance (Harman, 2004). The philosophy shapes the organizational culture, motivates staff, and influences the adoption of innovative practices. In the context of Cambodian TVET, management philosophy emphasizes the human resource development, institutional autonomy, and performance-based management (Royal Government of Cambodia, 2018). With the philosophical framework,

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the management strategies translate these principles into the practical actions (Kirkpatrick, 2006). Effective management strategies ensure that institutional resources—human, financial, and physical—are utilized. Leadership engages staff and stakeholders to achieve the institutional goals, integrates policy directives, and adapts to evolving challenges in the TVET sector. SWOT analysis reveals about the institute's management and offers a systematic approach to evaluating both internal capacities and external influences on institutional performance (Panagiotou, 2003).

2. Frameworks of Literature Review

TVET System in Cambodian Education

The Cambodian TVET system was influenced by broader socio-economic and policy contexts. As a developing country transitioning from an agrarian-based economy to an industrialized and service-oriented economy, Cambodia faced pressures to scale up vocational education while maintaining the quality and relevance (World Bank, 2020). Government initiatives emphasized the human resource development, effective management, strategic leadership, and robust governance mechanisms. In Vietnam, TVET institutions leveraged industry partnerships to enhance curriculum relevance and apprenticeship programs that link students directly to employment opportunities (Nguyen & Tran, 2017). In Thailand, the decentralized governance models enable polytechnics to tailor programs to regional labor market demands while maintaining compliance with national standards (Kongkerd, 2015). These examples illustrated the importance of aligning management practices with both policy directives and market realities.

Techo Sen National Polytechnic Institute, therefore, represented a microcosm of Cambodia's broader TVET challenges and opportunities. The management practices, leadership structures, and effective governance provided insights into capacity of Cambodian polytechnics to meet the national development objectives. Effective management of TVET institutions intrinsically linked to the national development, the human capital formation, and the economic competitiveness. Polytechnic sector contributed meaningfully to workforce readiness, industrial growth, and sustainable development. The effective management in Technical and Vocational Education and Training (TVET) institutions is recognized as critical determinant of institutional performance, workforce readiness, and contribution to national development goals (Becker, 1964; UNESCO, 2013). In Cambodia, polytechnic institutes were central to government's strategy to produce a skilled workforce capable of supporting industrialization, technological innovation, and socio-economic growth (MoEYS, 2014). Despite significant investment in expanding TVET access, challenges in institutional management remain, which can hinder the achievement of the national and regional development objectives (Asian

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Development Bank, 2014; UNDP, 2009). These challenges included limited infrastructure, inadequate staff capacity, and misalignment between training programs and labor market needs, which collectively affected the quality, relevance, and impact of vocational education.

Concepts and Functions in TVET Management

Management in education was a multifaceted process that involved planning, organizing, leading, and controlling institutional resources to achieve defined objectives effectively and efficiently (Bolman & Deal, 1997; Mintzberg, 1979). In the context of Technical and Vocational Education and Training (TVET), management encompassed not only administrative and operational functions but also strategic planning, curriculum development, human resource management, and alignment with labor market requirements (Deming, 1986; Harvey & Green, 1993). Effective TVET management was essential to ensure that institutions produce graduates who are technically competent, employable, and capable of contributing to national and regional economic development. Planning in TVET involved setting institutional goals, developing strategic and operational plans, and forecasting future resource needs (Bolman & Deal, 1997). Effective planning ensured that polytechnic institutes can anticipate the labor market trends, respond to technological changes, and align curricula with industrial and economic priorities. For example, in Cambodia, national TVET policies emphasized producing graduates who meet the skill demands of emerging industries, such as manufacturing, construction, and information technology (MoEYS, 2014). Strategic planning also included budgeting, infrastructure development, and human resource planning to ensure that institutions have the necessary resources to deliver quality education.

Organizing was about structuring of human, physical, and financial resources to implement plans effectively. In TVET institutions, this involved defining administrative hierarchies, departmental responsibilities, workflow processes, and communicative channels(Mintzberg, 1979). Organizational effectiveness depended on clarity of roles, coordination between academic and technical departments, and the establishment of mechanisms for monitoring and accountability. Effective organization also fostered the collaboration among faculty, administrative staff, and industry partners, which was critical for aligning training programs with labor market needs. In addition, leadership in TVET involved influencing and motivating staff, faculty, and students toward achieving institutional goals (Northouse, 2016). Leadership practices in polytechnic institutions were central to fostering a culture of innovation, professional development, and continuous improvement. Transformational leadership, which emphasized the vision, motivation, and staff empowerment, was widely recognized as effective in education management (Bass, 1990;

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Bolman & Deal, 1997). Leaders in TVET not only oversaw administrative functions but also championed the curriculum modernization, staff training programs, and industry partnerships that enhance graduate employability.

Controlling involved establishing standards, monitoring performance, and implementing corrective actions to ensure that institutional objectives are met (Deming, 1986). In TVET, this included quality assurance of the academic programs, evaluation of staff performance, assessment of student learning outcomes, and compliance with national education regulations. Effective control systems helped institutions identify weaknesses, optimize resource utilization, and maintain alignment with national and regional TVET policies.

Educational and Institutional Management

Effective management of educational institutions, particularly TVET, relied on the theoretical frameworks that guided decision-making, leadership, and institutional development. Organization functioned as the interdependent systems composed of the multiple components that interacted to achieve common goals (Weber, 1978; Vygotsky, 1978). In an educational context, the academic departments, administrative units, students, faculty, and external stakeholders were interconnected, and changed in one component affected the entire system. For example, aligning the curriculum with labor market demands required not only academic input but also administrative support, adequate facilities, and engagement with employers. Institution management focused on evaluating the performance of educational institutions through measurable outcomes, governance mechanisms, and organizational culture (Birnbaum, 1988; Bess & Dee, 2012). According to this, an institution's effectiveness was determined not only by student outcomes but also by its ability to implement policies, foster accountability, and cultivate a supportive organizational culture.

Investments in education and training enhanced the individuals' productivity and capabilities, which in turn improved the organizational performance and contributes to economic development (Becker, 1964; Schultz, 1961). In the context of educational management, this emphasized the critical role of staff development in improving institutional effectiveness. For example, well-trained personnel can deliver high-quality instruction, implement modern pedagogical techniques, and engage effectively with the industry partners, thereby improving the student outcomes and institutional performance. In Cambodia, investing in human capital of polytechnic staff was particularly relevant, given the historical gaps in training, exposure to the modern technologies, and pedagogical skills (Asian Development Bank, 2014). Programs such as workshops, industry attachments, and capacity-building initiatives not only enhanced staff competencies but also fostered institutional innovation, better governance, and alignment with labor market needs.

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Transformational Leadership

Transformational Leadership emphasized the role of leaders in inspiring and motivating staff by articulating a compelling vision, fostering professional development, and encouraging innovative practices (Leithwood, 1994; Bass, 1990). Unlike transactional leadership, which focused on rules, rewards, and compliance, transformational leadership sought to elevate the motivation, engagement, and employee performance, aligning goals with institutional objectives. In the TVET context, transformational leaders play a crucial role in driving curriculum innovation, improving teaching quality, and promoting staff engagement in continuous professional development. Integrating these theories provided a comprehensive framework for managing the polytechnic institutions. All institutional components were aligned and coordinated. Institutional effectiveness theory significantly provided the mechanisms for measuring performance and identifying areas for improvement. Human Capital Theory emphasized the importance of investing in staff skills and competencies, while Transformational Leadership focused on motivating and inspiring staff to achieve strategic goals.

Practical and conceptual guidance for enhancing management effectiveness of Cambodian polytechnic institutes. Strategic planning, staff development programs, governance structures, and leadership practices can meet policy objectives, respond to the labor market demands, and produce competent, employable graduates, and professional growth (Bolman & Deal, 1997; Leithwood, 1994). SWOT analysis provided a structured method to assess the strengths, weaknesses, opportunities, and threats in educational institutions (Wilson, 2016). Strengths and weaknesses were the internal factors, while the opportunities and threats were the external factors influenced by policy, labor markets, and socio-economic trends, emphasizing the importance of effective management, governance, and leadership in the polytechnic institutions to achieve policy objectives and improve institutional performance (UNESCO, 2013; Meyer, 2008; ADB, 2014).

3. Methodology

A case study design was adopted with theoretical research design in providing a comprehensive assessment of the management effectiveness. This study used secondary data analysis, such as document analysis, institutional reports, strategic plans, and policy documents (2018–2023). With data Analysis, this study used thematic analysis and SWOT Analysis to identify institutional strengths, weaknesses, opportunities, and threats. In addition, triangulation was employed to ensure reliability by cross-verifying data from multiple sources. With the ethical Considerations, Informed consent was obtained from relevant documents. Confidentiality and anonymity were maintained.

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4. Results

Philosophy of Educational and Institutional Management

The management philosophy of the National Polytechnic Institute of Techo Sen reflected a combination of participatory governance and alignment with Cambodia's national TVET policy(2017–2025). This philosophy emphasized the integration of national priorities, institutional goals, and stakeholder engagement to ensure effective leadership and organizational performance. Participatory governance was a central feature of the institute's management philosophy, allowing for inclusive decision-making and active involvement of faculty, administrative staff, and, in certain cases, student representatives. This approach aligned with international best practices in educational governance, which recognized that institutional performance improved when multiple stakeholders contributed to strategic decisions (Bolman & Deal, 1997). Within the practice, participatory governance at Techo Sen included collaborative curriculum review sessions, departmental planning meetings, and consultation with industry partners to ensure that programs remain relevant and responsive to labor market needs.

With the vision and strategic alignment, the institute's overarching vision was to produce a skilled workforce aligned with the requirements of Cambodia's evolving labor market. This vision was embedded in institutional policies, operational strategies, and day-to-day management practices, reflecting strong alignment with the national TVET framework (MoEYS, 2017). By emphasizing employability and competency-based education, the institute ensured that the graduates acquired both theoretical knowledge and practical skills, enhancing their readiness for industry employment. The leadership style at the institute combined administrative control with transformational behaviors (Leithwood, 1994; Bolman & Deal, 1997). Administrative control ensured compliance with the national regulations, institutional policies, and internal procedures, providing a structured framework for governance. Transformational leadership significantly promoted motivation, professional growth, and innovation among staff. Leaders articulated a clear vision, encouraged participatory decision-making, and fostered a culture of the accountability and continuous improvement. This dual approach balanced regulatory compliance with institutional dynamism, enabling the polytechnic to maintain operational efficiency while supporting staff and student development.

Cultural Contexts and Programs of TVET Institutional Management

Management philosophy cultivated a culture of collaboration, transparency, and responsiveness within the institute. Staff report feeling empowered to participate in decision-making, contribute to curriculum design, and engage in the professional development. This also strengthened relationships with

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external stakeholders, including industry partners and government agencies and enhancing institutional credibility and relevance in Cambodia's TVET landscape. The management strategies of the National Polytechnic Institute of Techo Sen translated the institution's philosophy into operational practices that guided planning, resource allocation, and performance management. These strategies encompassed strategic planning, monitoring and evaluation, and capacity-building programs, which collectively aimed to improve the institutional effectiveness and staff competencies. Strategic planning was a core component of the institute's management strategy. Curriculum Review was as regular assessment and revision of technical and vocational programs to align with labor market trends, technological advancements, and employer requirements. The review process involved the faculty members, industry representatives, and external experts to ensure relevance and quality.

Staff Development Programs that were defined as structured initiatives, such as professional workshops, certification courses, and mentorship programs, were implemented to enhance the competencies of administrative staff and instructors. These programs strengthened the pedagogical skills, technical expertise, and leadership capacities. With the partnership Initiatives, strategic collaborations with industry, government agencies, and regional educational institutions facilitated the student internships, faculty attachments, and joint projects. These partnerships enhanced the practical training opportunities and bridge the gap between theoretical instruction and labor market requirements.

Monitoring and Evaluation Systems in TVET Management

Monitoring and evaluation (M&E) systems were in place to assess the institutional performance, staff effectiveness, and student outcomes. These TVET systems included performance appraisal tools, internal audits, and compliance checked aligned with national TVET standards. While the M&E framework is robust in theory, its implementation is sometimes limited by bureaucratic procedures, which can slow decision-making and reduce the responsiveness of interventions. Despite these challenges, the institute demonstrated a commitment to continuous improvement, using M&E results to inform the policy adjustments, staff training priorities, and curriculum enhancements. Capacity-building programs was a key strategic focus, reflecting the application of Human Capital Theory in practice (Becker, 1964; Schultz, 1961).

The institute conducted professional development at multiple levels, such as individual, department, and institutional levels. For Individual Level, Training sessions improved technical skills, pedagogical knowledge, and administrative competencies. By focusing on departmental level, workshops and collaborative projects strengthened teamwork, departmental coordination, and curriculum delivery. Similarly, institutional level carried out leadership

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training and strategic management programs that enhanced the governance capabilities and institutional resilience. The impact of the capacity-building initiatives was evident in improving the teaching quality, effective administrative-processes, and enhanced engagement with industry partners. By investing in human capital, the institute ensured that staff were capable of delivering high-quality education and supporting national TVET objectives.

With integration of strategies and philosophy, the institute's management strategies are closely aligned with its philosophy. Participatory governance was embedded in strategic planning and curriculum review, transformational leadership driven the staff engagement in capacity-building initiatives, and monitoring systems ensure accountability and performance alignment with the national standards. This integration created a coherent management framework that promoted institutional effectiveness, staff development, and graduate employability. Leadership significantly encouraged staff participation in decision-making. Staff highlighted the need for advanced technical training and infrastructure upgrades. Institutional processes were more effective but sometimes slowed by administrative procedures.

SWOT Analysis

SWOT Category	Findings
Strengths	Policy alignment, skilled staff, structured capacity-building programs, governance framework
Weaknesses	Limited infrastructure, insufficient funding, gaps in technical skills
Opportunities	National policy support, industry partnerships, labor market demands
Threats	Labor market mismatch, rapid technological changes, regional competition

5. Discussion

Human Capital and Capacity-Building Initiatives

Educational management plays a main role in effectively managing the TVET institution and leadership practices. The management philosophy, strategies, and capacity-building initiatives are consistent with theoretical frameworks and best practices. With the transformational leadership and participatory governance, the combination of transformational leadership and participatory governance significantly enhances institutional effectiveness. Leaders adopt a dual approach and balance the administrative control with inspiration, motivation, and engagement of staff, which is consistent with the principles outlined by Leithwood (1994) and Bolman & Deal (1997). Transformational leadership encourages staff to align their individual goals with institutional objectives, promotes professional growth, and fosters a culture of innovation.

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This aligns with broader literature, which emphasizes that transformational leaders in educational institutions enhance organizational performance by cultivating motivation, commitment, and collaboration among employees. Participatory governance, on the other hand, ensures inclusive decision-making, giving staff and, in certain cases, student representatives the opportunity to contribute to curriculum design, operational planning, and policy implementation. The integration of these leadership approaches reflects the best practices for increasing staff engagement, improving institutional performance, and fostering accountability (Bush, 2011; Harris, 2013).

Capacity-building initiatives at the institute highlight the critical role of Human Capital Theory (Becker, 1964; Schultz, 1961) in improving institutional performance. Training programs, professional workshops, and mentorship schemes have strengthened staff competencies in technical instruction, administration, and leadership. These findings align with previous research emphasizing that investment in staff development is a key determinant of organizational effectiveness in TVET institutions (Asian Development Bank, 2014; UNESCO-UNEVOC, 2015). Human Capital Theory posits that the knowledge, skills, and competencies of individuals directly contribute to institutional productivity and performance. Enhancing staff skills have translated into improved curriculum delivery, better student outcomes, and more effective engagement with industry partners. This demonstrates that systematic investment in human capital is a practical strategy for enhancing the quality and relevance of technical and vocational education in developing countries.

While Cambodian polytechnic institutes, including Techo Sen, have made significant progress in implementing management practices, they still lag behind more advanced systems in countries such as Singapore and Malaysia in terms of resource allocation, infrastructure quality, and industry collaboration (Loo, 2013; Tan & Chua, 2017). In Singapore, Polytechnic institutions benefit from well-established public-private partnerships, modern training facilities, and highly skilled instructors. Industry involvement in curriculum development ensures graduates are workforce-ready upon completion. TVET institutions in Malaysia emphasize competency-based education, certification aligned with international standards, and structured apprenticeship programs in partnership with industries. In Cambodia, while progress is evident in curriculum development, staff capacity-building, and governance structures, challenges persist, including limited financial resources, infrastructure gaps, and restricted industry engagement.

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Integration of Educational and Institutional Management

Effectiveness of Institutional management (Birnbaum, 1988; Bess & Dee, 2012) is important in evaluating TVET performance. Effective management practices, such as participatory governance, capacity-building initiatives, and monitoring systems, contribute to measurable outcomes, including improved graduate competencies, enhanced staff performance, and more efficient institutional processes. By systematically applying institutional effectiveness frameworks, the National Polytechnic Institute of Techo Sen can continue to identify strengths and weaknesses, address challenges, and implement evidence-based improvements that align with national TVET policies. Greatly, the management philosophy and strategies are consistent with the established educational management theories and regional best practices. With leadership practice, transformational leadership significantly enhances staff motivation, innovation, and institutional performance. Capacity-building programs strengthen staff skills, improving curriculum delivery and student outcomes. Participatory governance and adherence to national TVET policies ensure the institutional accountability and relevance. Cambodia's polytechnics are progressing in management practices but require strategic investments to match ASEAN peers in resource utilization and industry partnerships.

Enhancement of Leadership Training Programs

While the institute demonstrates a combination of administrative control and transformational leadership, there is an ongoing need to enhance leadership capacities to foster innovation, strategic vision, and adaptive management practices. Leadership training programs should be designed to develop Strategic Thinking Skills, equipping leaders with ability to anticipate changes in labor market demands, technological developments, and policy shifts, enabling proactive decision-making. By promoting the leadership behavior transformation, it encourages leaders to inspire and motivate staff, nurture professional growth, and cultivate a shared vision for institutional development (Leithwood, 1994). Strengthen Participatory Governance is to train leaders in collaborative decision-making, conflict resolution, and stakeholder engagement, ensuring all staff members contribute meaningfully to institutional planning and policy implementation. By investing in structured leadership development programs, the institute can enhance its capacity to implement strategic initiatives, foster innovation, and ensure that institutional goals are met efficiently. Leadership training also supports succession planning, preparing mid-level managers to take on future leadership roles while maintaining institutional stability and continuity.

Another critical implication is the need to enhance collaboration with the industry partners to address skills gaps in the labor market. By developing the

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curriculum, it involves industry experts in reviewing and updating curricula to ensure alignment with current technologies, standards, and workplace practices. Develop structured internship programs that provide students with hands-on experience, enhancing employability and bridging the gap between theoretical instruction and practical skills. Partner with companies to conduct applied research, innovation projects, and technical problem-solving exercises that benefit both students and industry. Strengthening industry partnerships ensures that graduates possess relevant competencies, improves institutional reputation, and contributes to regional economic development. It also facilitates knowledge transfer between academia and industry, enabling polytechnic staff to stay updated with technological trends and best practices.

Implement Continuous Quality Assurance and Monitoring Systems

The study emphasizes the importance of continuous quality assurance (QA) and monitoring systems to maintain institutional effectiveness and improve performance outcomes. While current monitoring and evaluation mechanisms exist, they are limited by bureaucratic procedures and delayed implementation. Comprehensive QA Frameworks establish clear standards, benchmarks, and performance indicators for teaching, administration, and student outcomes, consistent with national TVET policies and international best practices. Implement Real-Time Monitoring Tools help use the digital dashboards and reporting systems to track student performance, staff productivity, and resource utilization, enabling timely decision-making and intervention. Periodic Audits and Feedback Mechanisms conduct internal audits, surveys, and stakeholder consultations to identify strengths and weaknesses, and use findings to guide institutional improvements.

Continuous QA and monitoring systems not only enhance accountability and transparency but also support data-driven management, allowing the institute to identify gaps, allocate resources effectively, and respond to emerging challenges in a timely manner. By combining leadership enhancement, industry collaboration, and robust quality assurance, the institute can create a synergistic management framework that promotes staff motivation, innovation, and professional growth. This ensures graduates possess skills aligned with labor market needs. It also strengthens institutional performance, governance, and accountability. These practical implications are grounded and supported by the theoretical frameworks, such as Transformational Leadership Theory, Human Capital Theory, and Institutional Effectiveness Theory, demonstrating that strategic investment in leadership, partnerships, and monitoring systems is critical for enhancing the TVET institutional effectiveness in Cambodia

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6. Conclusion

The National Polytechnic Institute of Techo Sen demonstrates effective management practices aligned with Cambodia's national TVET policy. Transformational leadership, structured governance, and capacity-building programs significantly contribute to institutional effectiveness. Challenges include infrastructure limitations, bureaucratic delays, and labor market alignment issues. Continuous professional development is essential for staff and leadership. Strategic industry partnerships are needed to enhance the skill relevance. Regular institutional audits and quality assurance mechanisms is the requirement for enhancing management in TVET institutes. Identifying strengths helps highlight areas of excellence, effective leadership, capacity-building initiatives, and policy compliance. Recognizing weaknesses exposes limitations, including infrastructure deficits, insufficient staff competencies, and gaps in program relevance. Opportunities reveal external factors that the institute can leverage, such as partnerships with industry, government initiatives, and regional collaborations, while threats indicate challenges, including technological changes, labor market shifts, and resource constraints. Conducting a SWOT analysis enables a comprehensive understanding of the institutional performance and provides an evidence-based foundation for improving the management effectiveness and institutional sustainability. The significance of this study lies in its potential contributions to both theory and practice in the field of TVET, particularly within Cambodian and Southeast Asian contexts. The study provides a comprehensive understanding of how leadership philosophy, operational strategies, and governance structures impact institutional effectiveness, staff capacity, and student outcomes. The study provides new insights into how institutional management practices can influence the sustainability of vocational education programs. Furthermore, the research situates Cambodia's experience within the broader Southeast Asian context, offering comparative insights for regional TVET development, and highlighting best practices and challenges that may inform future studies in similar contexts (Nguyen & Tran, 2017; Kongkerd, 2015).

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Quality Improvement of Salt Products in Cambodia

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Abstract
The study examined the betterment of salt production, focusing on the quality, salt marketing, salt strategy-planning, and salt-quality sustainability. This study mostly focused on the key aspects of enhancing the salt production, such as quality, quantity, and sustainability of salt production in Cambodia. This study employed the qualitative research design to collect and analyze the data through secondary data analysis. The study highlighted the quality development of salt production and salt strategy-planning. The results of the SWOT analysis focus on the sustainability of salt production and salt marketing in Cambodia. The study also argued that the salt marketing transformation in terms of increasing the quality and quantity of salt production. This study proffered the potential contributions of designing an effective strategy-planning, salt-marketing transformation, trends of the salt production, and salt-production sustainability.

Keywords: *Quality, salt production, strategy-planning, salt market, transformation*

1. Introduction
Salt is essential to human daily life, and the salt demand in the food industry is expected to increase steadily. The supply of high-quality salt remains a challenge worldwide due to technical factors and climate change (MISTI, 2022). The salt sector needs strong support from the Royal Government in terms of the development and modernization of physical infrastructure to promote salt production, processing, and packaging through technology, promotion, and product marketing (MEF, 2021). Salt product is based on the weather (Ministry of Industry & Handicraft [MIH], 2015). Salt production is to improve quality, starting with a salt export industry (Kimsay, 2014; Vannak, 2017). With the failure of salt production, it is necessary to improve quality (Chann, 2018; MIH, 2015, 2019). Salt suitable for export to markets will increase production capacity, establish a refinery, and enable the export of sea salt, with encourage and promoting salt production (MEF, 2021). Similarly, the increase in salt productivity and development of salt-product quality

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boosts the competitiveness of salt products and promotes investment in small and medium-sized enterprises and salt communities (MISTI, 2021).

With the challenges of salt-product markets, the salt-production quality is the requirement to be developed. Therefore, this study aims to examine methods, techniques, and strategies in developing the salt production quality, meeting local and international market demands.

2. Literature Frameworks

Salt-Production in Cambodia

In the Cambodian context, salt production was carried out based on the weather, seawater, and family situations (MISTI, 2023). The salt product was challenged with the impact of waste and sewage discharge into sea channels and rice fields, the damage to seawater drainage channels into rice fields, the deterioration of the quality of seawater discharged into rice fields, the distance from the sea or sea channels, and the development trend of salt fields. These caused the salt production in Cambodia to have limited improvement in the quality and productivity (Aulia et al., 2022; MISTI, 2023). The salt-product cultures needed to be adopted by a government, institution, company, or individual (Samnob, 2016). The long-term development of salt products was the trend for businesses, companies, enterprises, industries, communities, and ministries/institutions with quality development (GSGDA, 2010). In this sense, the sustainable betterment through science, technology, and innovation was about the concern with salt-development strategy, linking agriculture and industry, improving transparency and accountability of the salt products, and accelerating economic growth and standard of human living (RGC, 2013, 2021).

Organization, process, and implementation were cultural tasks in developing the salt product (Eger, 2015). The process, methods, and trends of advancing the salt production and human resources (Carlson et al., 2006; Dessler, 2013). Production development played a vital role in the competitive trends, both national and global quality of the salt products (Dietz et al., 2006). Skilled planning of production development was the cultural practice of salt-product cultivation (Kotey & Folker, 2007). Salt production was the activity of producing and processing salt (MISTI, 2023). Salt production was in demand by people in the country, region, and internationally (Al-Amien & Adrienne, 2020). Salt production played an important role in helping to strengthen the business of salt farmers, increasing the income growth of salt farmers (Aulia et al., 2022; Kuswanto et al., 2024). Salt is a commodity with great potential for the people, with salt-market open (Chauhan et al., 2016; Diananing et al., 2021; Tanaka et al., 2015; Wenten et al., 2017).

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Salt Production for Marketing and Human Life

Salt production was the most necessary for marketing and human life (RGC, 2020). Salt production supported and promoted the welfare of salt farmers, and it helped strengthen the people's salt business, increase the income of salt farmers, and provide innovation in salt production at the local level (Aulia et al., 2022). This helped reduce the people's poverty (Tim Nasional Percepatan Penanggulangan Kemiskinan [TNP2K], 2011). Based on the salt production, salt farmers were required to improve the salt quality and quantity (Al-Amien & Adrienne, 2020; Ihsanuddin et al., 2018; Izzaty & Permana, 2011; Konelya, 2021; Yektiningsih et al., 2020). According to Rochwulaningsih (2007), salt farmers on the Bali coast increased the productivity of salt farmers. Thus, salt production was important for national economic growth and promoted the business of salt farmers (Baihaki, 2013).

According to the report on salt production by Mr. Hort Pheng, representative of the Ministry of Industry, Science, Technology, and Innovation (2020), salt production in Cambodia faced many challenges, such as extreme weather conditions, a lack of salt production techniques, and funding to support salt production and storage. Salt production played a vital role in the development of the country and human live (Office of the Council of Ministers-OCM, 2022), business running, and salt product marketing (Sudaryana & Pramesti, 2018; Nuswardani, 2019; Rahayu et al., 2021). Salt production empowered salt farmers to be economically successful in salt farming communities by increasing salt production in quantity and quality (Utami, 2016; Wulandari, 2021; Pranowo & Muhadjir, 2015; Amanda & Buchori, 2015; Sari et al., 2015; Wardono & Istiana, 2014). Salt farming communities created productive networks through social cohesion, fostering interaction and collaboration (Syarifudin & Ishak, 2020).

Pandopotan (2019) suggested that salt production was a producer’s economic activity, living in accordance with the social needs of global civilization. Salt production management can be the key aspect in the long-term development of communities (Sumada, 2017). An important aspect of the development of salt production was that the community-based policy that defined a series of concrete actions in decision-making and decision-making methods in solving specific life-problems (Hill & Varon, 2021). However, salt production control was a perspective of public policymaking, focusing on decision-making networks (Sabatier & Mazmanian, 1980; Sari et al., 2015; Wardono & Istiana, 2014). (Sumada, 2017). Salt production policy aligned with the sustainable development tasks involving networks of local activities and organizations to respond to local conditions and interests (Monaghan, 2009; Sefyang & Smith, 2007).

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SWOT Analysis of Salt-Production Quality in Cambodia

Quality of salt production was a set of developing salt production for people's daily utilization (RGC, 2017). This aimed to qualify the salt production by increasing production values, with competitiveness, development and quality assurance (Probosari, Ardhanariswari, & Wijayani, 2021). The development of salt production is the basic requirements of business companies, industries, and enterprises, which are the pillars of development of economic sector and the financial system (RGC, 2021). The salt development played an important role in formulating a salt strategy to develop the sustainable salt production and to promote food security and nutrition (CSSDS, 2022). The policy of bettering the salt production aims to meet the local and global salt demand (Yonvitner & Surya, 2018). Salt production development was the potential for the salt sector to produce the qualified salt in the national salt protection area (DKP Sumbawa Regency, 2020; Syafruddin, 2020).

Accordingly, SWOT analysis was an important option for developing the salt production (Danu Kusbandono, 2019; Rahmayati HM, 2015). The strategy of salt production advancement can be an important mechanism in increasing the strengths and opportunities of decision-making (Ninik Probosari, 2019; Probosari et al., 2021; Rangkuti, 2008). With the SWOT analysis, Rangkuti (2013) argued that a systematic identification was the key factors to develop a company's strategy in producing the salt quality. However, Susanto (2014) pointed out the framework of the salt production development and identified factors conducive to achieving quality of salt products (Dess, 2018). Further, the development of salt product quality required the salt farmers to have the nutritional and salt production market (Montojo et al., 2024). In this sense, the salt farms need to bridge the knowledge gap in qualifying salt production. Market competition and product quality were important for formulating the policies to enhance the salt production quality (Francisco et al., 2022; Montojo et al., 2024).

3. Methodology

This study used a qualitative research design (Chhorn, 2021, 2024; Collins, 2018; Creswell & Creswell, 2018; Denzin & Lincon, 1995; Gates, 2008; Ivankova & Creswell, 2009). This study used the secondary data analysis. The content analysis (Harwood & Garry, 2003) was employed to analyze and interpret the research results. Therefore, the secondary analysis played a vital role in analyzing and addressing the betterment of salt product quality, with research ethics.

4. Critical Arguments

Strategy-Planning for Enhancing the Salt Production

The strategy-planning is part of developing salt production. Salt production mostly depends on the temperature, humidity, rainfall, wind speed, and solar

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radiation (Helmia & Sasaoka, 2018; Roland et al., 2019). With the climate change, strategy-planning plays a role in helping salt farmers and industries qualify the salt products (Francisco et al., 2022; USAID, 2017). Improvement of salt product quality requires the equipment and tools, such as salt pans, bulldozers, tractors, dump trucks, and sand dredgers (Tan et al, 2022). The salt industry needs to have the potential strategy-planning and conciseness of action plan, and budget plan (Chanco, 2022; De Leon 2022; Moran, 2018; Santos, 2022; Tan et al. 2022). Strategy-planning help increase the domestic salt production with opportunities for the local and salt enterprises (Chanco, 2022).

The base of salt production addressed the policy gaps and necessary support (Delos Reyes et al., 2021; Majaski, 2023). With the previous studies by some researchers (e.g., Moran, 2018; Chanco, 2022; Santos, 2022), it carries out the challenges to the domestic salt production. Strategy-planning facilitates operations in efficient manner and highlights the relationship with suppliers, customers, services, and competitors (Tan et al., 2022). Salt production strategy must comply with regulatory standards of food safety, sanitation, and quality and market salt-production price (Muyot & Asuncion (2022). Iodized salt testing is required to comply with the FDA standards of salt production (Llaguno & Palma 2017; Tan et al., 2022).

Quality Sustainability of Salt-Production

Sustainability of salt production is necessary for the development of the salt production (RGC, 2020). Salt production policy is the support for the salt sustainability and helps innovate the salt production (Aulia et al., 2022). The salt-quality sustainability helps increase the people's income (TNP2K, 2011) and improve the quantity of salt production (Al-Amien & Adrienne, 2020; Ihsanuddin et al., 2018; Konelya, 2021; Yektiningsih et al., 2020). However, salt production management is also important to keep the sustainability of salt production and national economic growth (Baihaki, 2013). With the policy measures of salt production, Cambodian salt production faces the challenges, such as technical support, weather conditions, and funding support to the salt production and storage. Salt production management plays an important role in developing the salt production (Nuswardani, 2019; OCM, 2022; Rahayu et al., 2021; Sudaryana & Pramesti, 2018). The salt-farming community might develop the salt productive through interaction and collaboration (Syarifudin & Ishak, 2020).

Policies of salt production development are economic activities of producers, with the social needs (Pandopotan, 2019). Salt production sustainability can be the key to long-term development of salt communities (Sumada, 2017). The key aspect of salt production sustainability is conducive to community foundations and public salt policies (Hill & Varon, 2021). However, the

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perspective of salt product policy always plays a role in controlling over the salt production quality. The sustainability of salt production is a strategy that has the decision-making networks and salt-policy implementation (Sabatier & Mazmanian, 1980; Sari et al., 2015; Sumada, 2017; Wardono & Istiana, 2014). Therefore, the sustainability of salt product involves lower-level (local) actors in the decision-making process. Local salt policies are based on the concept of local innovation and are defined as sustainable development tasks involving local networks of activities (Monaghan, 2009; Sefyang & Smith, 2007). Indeed, the cooperation of local cultures embrace diversity based on empirical evidence, a willingness, and social experiences (Leach et al., 2012; Sefyang & Longhurst, 2016).

Marketing Transformation of Salt-Production

Transformation of salt marketing is a strategy of strengthening, promoting and developing the salt production (RGC, 2017), economic well-being, and competitiveness of salt production (Probosari et al., 2021). This increases business financing, salt-production development, salt production innovation, salt-supporting facilities and cooperation, and business associations of salt experiences to world production. The pillars of salt-marketing transformation are the development of financial systems (RGC, 2021) and salt production polies (CSSDS, 2022). The salt industry is the potential of salt-production demand (De Leon 2022) and salt import and export (Chanco, 2022; Moran, 2018; Santos, 2022). The salt-supply chain serves as the way of transforming the salt production (Tan et al. 2022).

The increase of domestic salt production is the opportunity for local and salt enterprises to transform their salt production in reaching the salt-marketing demands (Chanco, 2022; Delos Reyes et al., 2021). Transparency, negotiation and special treatment are the key aspects of salt marketing transformation to promote economic recovery (Majaski, 2023). The challenge of domestic salt production is to compete on price (Chanco, 2022; Moran, 2018; Santos, 2022). Marketing transformation of salt production is beneficial to increase the salt production prices, strengthen market positions, and improve access to capital (Tan et al., 2022). Salt production quality and price also are the salt-marketing aspects (Muyot & Asuncion (2022) in being a strong network of the chain salt production.

5. Conclusion

The results of this study shed a line with the insights of developing the salt production quality. For this sense, the study carried out with the cultures of salt production and salt production strategies. This study, however, showed the key aspects of salt production market and demands, such as the number of salt productions, salt marketing competition, salt sustainability, and quality development of salt production.

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Magazine for Economic Analysis of Family Duck Raising in Serey Sophorn

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Abstract
Family-based agriculture, crop cultivation, and livestock raising, such as ducks, chickens, geese, pigs, cattle, and buffalo, are extremely important for rural populations in Cambodia. These activities contribute to improving household livelihoods, reducing rural poverty, and strengthening food security and the national economy. In particular, family-based duck farming plays a significant role in enhancing household income, supplying food, and supporting national economic development. Family-based duck farming demonstrates strong production capacity and effective management. Market access is convenient, as buyers typically purchase products directly at the farm. Production capital is sourced entirely from farmers' own funds. On average, a farmer can generate 211,490,000 riels per production cycle. Land productivity yields an income of 2,298,804,300 riels per hectare. Annual depreciation costs amount to 4,544,100 riels, fixed capital costs to 64,557,200 riels, and working capital costs to 89,443,300 riels, resulting in total production costs of 93,987,400 riels. Net profit reaches 328,992,600 riels. The efficiency per unit of production capital is 4.50 riels, fixed capital efficiency is 0.01 riels, and working capital efficiency is 0.21 riels. The break-even point is 14,810 duck eggs at a price of 400 riels per egg. In brief, family-based duck farmers demonstrate prudent and effective business management, enabling them to achieve profitability through efficient investment and appropriate use of labor. Therefore, family-based duck farming can sustainably continue, allowing farmers to recover their investment within one year and achieve maximum profit per production cycle.

Key words: *Family-based agriculture, cultivation, duck raising, cycle, livestock, economy*

1. Introduction
The Cambodian majority relies on the agricultural sector, where the sector plays an important role in driving economic growth and family economic development of people in rural and suburban areas, and it also participates in the development of the Cambodian national economy. Currently, family animal husbandry is part of agricultural sector, which provides benefits to many people such as: food for daily consumption, running business, and serving various processed productions. On the other hand, Cambodia also has the potential and favourable climate of nature suitable for animal husbandry,

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seeing that at present, some Cambodians have been very interested in animal husbandry, especially duck farming, whether it is family duck breeding production or duck farm production. It has provided many benefits in the daily livelihood of Cambodian people, including providing duck meat and eggs for cooking, manure for fertilizer, feathers and duck wings as brooms, as well as many other daily utilities. Feeding the ducks a day, we have to feed them twice a day, morning and evening, limiting one duck head to only 1.3 bites.Moreover, they need to regularly clean the nests for feeding the ducklings and put plenty of feed in place to avoid them feeding unevenly, they need to make cages wide, taller, with a zinc roof, cover with leaves or palm leaves, and put a veil from under the roof to reduce the heat. We have to limit the ducks to five hours a day by letting them play from 10 a.m. onwards This natural feeding will make the ducks healthy, the big red eggs are less smelly, the eggs give more eggs, the eaters also get safe food, the source stated that after raising the ducks for three years, we have to sell those ducks out because they are old and the egg delivery is also declining. Doing this can help provide warmth to the ducks and can also use these beads as fertilizer.

Family-based duck production in Cambodia has prompted an understanding of the incomes, costs and profits earned by the population and the potential of family duck farming. Duck eggs contain approximately 215 mg of cholesterol in one red egg, whereas white eggs have no cholesterol but are rich in protein. Recognizing that family duck production is important in supplying the livelihoods of people living in the rural and suburban areas, contributing to helping increase people's income and supplying the demand in the district for easy feeding, and recognizing the value of family duck production. Let's conduct a research study with the aim of studying the performance of duck production and analyzing the economic efficiency, strengths, weaknesses, opportunities and hindrances in duck production in farms. Raising ducks is an important economic activity for farming families in Siem Siet District in Siephon Province who take up raising ducks in addition to various jobs to earn an income. Although the geographical situation of the area is favorable for the development of the duck farming sector, duck farming in Seri Sophon district has always faced many problems, such as increasing feed days, animal diseases, limited market access, etc., especially the up-and-down days of duck meat and eggs, which is the reason for income instability for duck farmers.

In the absence of an in-depth economic analysis of duck farming in the area, farmers practising duck farming mostly suffer from losses to bankruptcy, whereas those who intend to raise ducks as a source of income are more difficult to make decisions in investing in this regime. Therefore, studying,

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researching, analyzing the cost of origin, income, and the economic efficiency index in practitioners as a source of income to promote livelihood and reduce poverty is an essential requirement to support the accomplishment of those who wish to do so, including development policymakers.

2. Conceptual Framework of Literature

Geographical Status and Rearing of Ducks for Family Development

Vĩnh Province is one of theprovinces of Cambodia, located at northwestern tip of Cambodia, along the National Highway 5, 359 km from Phnom Penh. The province has the following concerns North Adjacent to the, South next to the Centennial, East borders Siem Reap, and West Adjacent to Thailand. The province has been given development opportunities – firstly due to its strategic location along the international border with Thailand, and secondly due to the development of Southern Economic Corridor (National Highway 5 and No. 6), one of the major international economic corridors of Mekong Subregion. But these geographical advantages and expanded development opportunities have not yet benefited province as a whole. By sustainability and balance in the province. Serei Sophon Municipality has a total area of 269 km2, this size lies between its two neighboring provincial towns with the largest inhabitants in Cambodia, in order, namely Siem Reap Province, 470 km2 and Chia Mai, 15.44 km2. is agricultural land and is being used for crop cultivation. The city is located in the heart of the central region of the province and the Sophon, which has high agricultural productivity, geographically and economically, the city has become a core hub and plays an important role in the agricultural services sector in the province.

General Situation and Geographical Location of the Pentagon

The district has a total of 07 villages, namely: Kao Village, Kam Prin Village, Phen Nhat Village, Khuta Village, New Village, Reunification Village and Outdoor School Village, and the people there are practitioners who make a living by relying on a number of occupations such as: farming, shopping, animal husbandry and wage labor.The total area of the district totaled 29,926,36 hectares, of which 0 hectares of forest area, 10,000 hectares of lake area, 10,810 hectares of farmland and 9,116,36 hectares of residential area.

Development is the process of expanding people's choices (UNDP, 1991). Development is meant to be inherently progressive (DBI, 1967). Development is the process by which someone or something grows, transforms into more advanced, better (Cambridge Dictionary, n.d). Development is the process of variation of socio-economic, cultural, and institutional structures that facilitate or facilitate economic growth and make economic growth sustainable for a long time, or in other words, development, trigger the conditions for a sustainable economy.

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In an economic sense, development is related to an improvement in people's economic situation, a better quality of living, an income growth rate per citizen, or national product per citizen. Individually, as well as in the country as a whole, development is raised in the form of reducing and eradicating poverty, extent and poverty, etc. The farm is built on approximately 2 acres of field land, with the farm far away from the villagers' houses so as not to disturb the livelihood of the villagers. Whereas the geography of the farm is in the District of Orange County (Pan Friendship, 2025). He is 41 years old and his wife, Ra, Mao, live in the Silk Road District, he has 3 children who are studying in primary and secondary schools. It came from a career as a teacher at an elementary school in the Songsong District, Binh Province and the opening of a duck farm that enabled him to earn a daily income (National Institute of Statistics [NIS], 2025).

3. Critical Arguments

Raising ducksin the Farm

Raising ducklings for sale is a big objective that Uncle Hibora expects to receive from his farm to earn additional income for the family. On the other hand, as mentioned above, Uncle has 3 children. In addition, he understands that this duck raising job can help him to earn more income for his children's education supplies when they have more needs (Song Dani, 2025). In 2020, Bora attended a workshop hosted by CEDAC on the duck farming and community development for two weeks. Through various considerations and consultations, Mr. Hibora also decided to capitalize (duck farming) with some confidence and capital. He started the first duck farming with 370 ducks and cost capital of approximately 20,000,000 riels and till date he has probably over 10,000 ducks with total cost Nearly 347,400,000 KHR or USD 86,850 (NIS). Bora has a lot of chances to succeed with this duck rearing position because he has a number of resources that are potentially and conducive to this one. Personal farmland away from residents does not pose a nuisance to the population and creates an environment ideal for ducks. An area with a climate where ducks can live and thrive. The location of the land in the fields may yield some forage in the fields. There is sufficient funding to cover the process of nurturing. There is enough strength to take care of the ducks.

The Process of Farm Arrangement

Farms need to be constantly sanitized, both sleeping cages and play cages, ukuba. Breed selection is done meticulously, Mr. Bora understands that breed selection is important to be taken into account. In rearing, make sure that the breed of duck being raised is suitable to the purpose of rearing, i.e. if there is an egg-raising purpose, what kind of breed to choose and what kind of breed to raise meat, he thinks very much before deciding to invest in something because he does not have much capital for loss. For domestic breeds: easy to

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raise as a family, disease resistant, weather friendly, but slow growing (DGAP, 2025). For imported varieties: Requires high maintenance, has little tolerance to weather conditions but is large in size, fast growing, and highly profitable on compliance with the right techniques. The breed of duck that Uncle Bora raises is a tribal duck breed because it gives a lot of eggs for raising eggs like him. Breeds produce a lot of eggs, large egg sizes, shells. Know the background: Duck sources come from places where there has never been a spread of diseases, especially smallpox, Be bright-eyed, witty, Heavyweight Healthy, weather-sensitive to the area to be taken to feed.

Nesting is also a factor to ensure the prevention of ducks from getting sick, as if the cages we have built, there is not enough light, there is no sanitation, there are germs that can make our ducks sick and cause the ducks to get sick all the time. Bora chose his plot of land, which is located about 3 kilometers away from the village, 3 hectares of land, with a pond of about 750 square meters, and he built his duck shed away from the sun, using cement as a pole, a shingle for the roof and a shed under the nest to keep moisture out, along with a net for surrounding the duckweed. The duck cage needs to be spacious and dry so that the ducks can absorb the air and make it easier for them to spawn. As already mentioned, the cage needs to be at least 2 meters to 2.5 meters high (Bora Kati, 2024). Water system is an important, indispensable factor in providing as a source of water for the ducks, we observed that the interior of his 5 nests, each of which we see has a water system, easy for the ducks to drink, is that he has taken a plastic hose, intertwined in a bundle, which protrudes from its large reservoir.

4. Conclusion

Duck farmers buy the duck eggs to be raised daily, and then harvests duck eggs every day for two days until they sells them at the market, the average price at which the farm sells duck eggs. One of the major potentials associated with duck farming is location of duck farming facilities, favorable climatic conditions, adequate water sources, and the market pushing for more ducks to flourish. By evaluating the economic efficiency of small-scale meat duck production and analyzing the strengths, weaknesses and restraint factors of meat duck production, it was actual situation of better and highly profitable farms. The farm owner paid attention to the environment without causing odors to affect the livelihood of the citizens by using locations far from the village and relocating multiple places according to specific conditions. On the whole, the farm owner was actually profitable because his farm was economically efficient.

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