

THE DEMAND FOR VOCATIONAL WORKERS AND THE DESIRABLE ATTRIBUTES IN “THE ECONOMIC TRIANGLE OF STABILITY, PROSPERITY, AND SUSTAINABILITY” 2020-2025 (PATTANI, YALA, and NARATHIWAT PROVINCES)

Ratrisawat Thananan^{1*}, Racha Chusuwan² and Chawalit Kerdtip³

¹A Doctoral Student of Doctor of Education Program, Faculty of Education, Prince of Songkla University,

²Dr., Faculty of Education, Prince of Songkla University, Songkhla 90112, Thailand

³Asst. Prof., Dr., Faculty of Education, Prince of Songkla University, , Songkhla 90112, Thailand

*Corresponding author e-mail: sawatdeeevec64@gmail.com

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ABSTRACT

The objective of this research was to study the demand for vocational workers and the desirable attributes to support the model city policy of “the Economic Triangle of Stability, Prosperity, and Sustainability” in Thailand. Qualitative research, which consisted of document synthesis and the interviews, was used. 10 people from the target group were interviewed and the information was evaluated by 3 experts having roles in issuing policies and monitoring the work, who were Deputy Permanent Secretary, Ministry of Education; Advisor to the Special Representative of government sector of the Southern Border Provinces; and Director of the National Economic and Social Development Council for the South. The study was focused on vocational workers’ attributes needed to support model city policy of “the Economic Triangle of Stability, Prosperity, and Sustainability “ in the Southern Border Provinces (Pattani, Yala, and Narathiwat) of Thailand. The results of the research showed that within 5 years from 2020-2025, there would be a demand for 324 positions of vocational workers per year. The top three industries that needed vocational workers were 1) rubber, palm, fruit processing industries, 2) halal food industries, and 3) fishery. The top 3 labor attributes needed were 1) having knowledge including skills in Thai and English, Electrical skills (Electrical work, industrial control of electrical work, technology work for the power generation industry, and electrical transmission technology work); 2) physical aspect (being endurance, and skill of problem-solving with scientific thinking; and 3) psychological aspect (being moral and honest).

Keywords: Worker characteristics, Vocational workers, Model city policy “The Economic Triangle of Stability, Prosperity, and Sustainability”

Introduction

The 10th to 12th National Economic and Social Development Plans all highlight the importance of vocational workers and state that economic competitive advantage must come from having a sufficient number and quality of vocational workers (Office of the National Economic and Social Development Board Version. 10, 11 and 12) and the ability of Thai people who can extend their knowledge to develop products and create new innovations by themselves, and the innovations must be appropriate to the fundamental factors or existing capital in the country. Therefore, the country's production structure must be strengthened and competitive in the agricultural, industrial, and service sectors. The production should be based on knowledge by emphasizing creating value for Thai products and services that highlight culture, courtesy, hospitality, and Thai identity in order to develop “brilliance” in the globalization era. (Office of the National Economic and Social Development Board, 2017)

In the 12th Education Development Plan of the Ministry of Education (2017-2021), there are two focus areas: 1) the development of the agro-industry and agricultural processing industry; and 2) the development of border towns to become trade and tourism cities. These can be done along with strengthening the community, and there are development guidelines that are in line with the 20-year national strategic plan in which people must be able to operate in 6 areas: 1) security, 2) building competitiveness, 3) developing and building human capacity, 4) creating equal opportunities and social equality, 5) creating growth on the quality of life that is environmentally friendly, and 6) balancing and developing the government management system. And when considering the three southern border provinces, the researcher found that the focus of the three border provinces is different. In Pattani Province, the emphasis is on the agro-industry and agricultural processing industry. In Yala Province, the focus is on trade and cultural tourism, and in Narathiwat Province, the focus is on the border special economic development zone, and the hub to support the transportation of goods and logistics. This is called the model city policy “the Triangle of Stability, Prosperity, and Sustainability” (Office of the Permanent Secretary, Ministry of Education, 2016).

The government is very interested in the management of education in the southern border regions. The Ministry of Education has set up a committee to drive the integration of regional education of the Fiscal Year 2019 and held a meeting with a resolution on October 9, 2018. There are important matters about education in the southern border provinces that must adhere to the 6 principles of the national strategies and the 12th National Economic and Social Development Plan (2017-2021). The focus of target goal is to be an important source of agricultural production and processing industries of the country and to be border provinces that link trade and tourism in the southern area, and the focus is also on the economic development of both Malaysia and Singapore (Office of the Permanent Secretary, Ministry of Education, 2019). The development is in line with the focus of the model cities, “The Triangle of Stability, Prosperity, and Sustainability”. In the 2018 academic year, the Ministry of Education outlined a vision of education in the southern border provinces, which indicated that people in the southern border provinces should get quality education and life-long learning, live happily in a multicultural society, adhere to the philosophy of sufficiency economy, and reconcile to changes in the 21st century (Coordinating and Administrative Center for Education in the Southern Border Provinces, 2020).

Therefore, it is an important opportunity for vocational colleges in 3 provinces, namely Pattani, Yala, and Narathiwat to develop vocational students to be able to work or support the policy of “Triangle of Stability, Prosperity, and Sustainability” by considering the required number of workers and desirable attributes of the future industry in the model city areas of “Triangle of Stability, Prosperity, and Sustainability”. The development should be in line with UNESCO's definition of vocational education. Vocational education depends on design for the development of workers to be well-equipped with knowledge, skills, professional abilities, information, and understanding to meet the needs of entrepreneurs at all levels of business (Moodie, 2008).

Objectives of the study

To study the demand for vocational workers and attributes of vocational workers to support model city policy of “Triangle of Stability, Prosperity, and Sustainability” in Thailand.

Literature review

Labor development planning

The Office of the Civil Service Commission (2009) defined human resource planning as a systematic process of analyzing and forecasting demand and supply of manpower, leading to the determination of strategies to provide a sufficient number and quality of manpower with adequate knowledge and competence to work when needed. There is a plan to use and develop those human resources efficiently and continually in order to continually maintain the appropriate manpower for the organization to work with its full potential.

The Chartered Institute of Personnel and Development (2018) stated that labor planning is the process of analyzing the current workforce, defining the future labor demand, and finding gaps in the number of employees required and the needs for future employees. To solve the problems so that the organization can achieve its goals, the institute must set missions, goals, and strategic plans. The main steps in the workforce planning process are: 1) determining the strategic direction, 2) analyzing the workforce and developing strategies, 3) implementation of labor plans, and 4) monitoring, evaluating, and improving labor plans.

Model city development policy “The Triangle of Stability, Prosperity, and Sustainability”

Principles, conceptual frameworks and guidelines for model city development “The Triangle of Stability, Prosperity, and Sustainability” can be summarized as follows: (Cabinet Office, 2016)

1. A conceptual framework was developed under the concept of model cities “Triangle of Stability, Prosperity, and Sustainability” by developing the economy in 3 districts, namely Nong Chik District, Pattani Province; Su-ngai Kolok District, Narathiwat Province; and Betong District, Yala Province, to be model cities in special development areas and to allow investment from private sectors to create jobs, generate income for neighboring areas, and make them safer areas.

2. The objectives are to develop the southern border provinces into special economic areas and stimulate investment, as well as to improve the quality of life of people in the areas and neighboring areas.

3. The objectives are to develop Nong Chik District, Pattani Province, to be a “model city of agricultural processing industry”; Su-ngai Kolok District, Narathiwat Province,

to be an “international trading center”; and Betong District, Yala Province, to be a “model city for sustainable self-reliance development”.

4. Development guidelines are divided into 3 phases as follows:

4.1 An urgent phase is to enhance the investment climate, such as issuing measures on investment privileges, establishing a new business promotion fund for each district, and etc.

4.2 Phase 2 in the following year is to support investment in the first phase:

1) Nong Chik District promotes the processing of agricultural products into OTOP products and improves Pattani port and roads, 2) Su-ngai Kolok District establishes a Free Trade Zone, constructs the 2nd Kolok Bridge, and examines the suitability of distribution centers, warehouses, factories, exhibition centers, etc., and 3) Betong District develops integrated tourism and new tourist attractions, as well as improving the quality of electrical systems and other infrastructure systems.

4.3 The final phase is to link all transport systems to different regions, both domestically and internationally.

The Ministry of Education attached great importance to education management in the southern border provinces so that they can solve the problems in the area in a unified and complete manner. Especially since 2004, there have been problems of unrest in the southern border provinces which have affected the educational quality development. If the problems are not systematically updated, there will be a serious problem to developing population quality. Consequently, the Ministry of Education established the Education Coordination and Administration Center in the Southern Border Provinces in 2004 and revised its authority by the mission. According to the Ministry of Education's announcement, it has been a government agency under the Office of the Permanent Secretary, Ministry of Education, situated at the 12th Office of the Inspector General of the Ministry of Education in Yala or it is now the Office of Education Region 8. The authority has been set up and they appointed Executive for the Coordinating and Administration Center for Education in the Southern Border Provinces. In addition, the Minister of Education entrusted the Deputy Minister of Education to instruct government officials and to work in the area to integrate and jointly develop policies, strategies, and educational development measures in accordance with education reform policies and local conditions in the three southern border

provinces including the model city area of “Triangle of Stability, Prosperity, and Sustainability” (Office of the Permanent Secretary, Ministry of Education, 2018).

Labor attributes

It is important to develop labor attributes to meet entrepreneurs’ needs. Attributes mean a sign or thing that indicates goodness or characteristics that a person had before obtaining the rights and positions (Soonthornsing & Chuanchom, 2008.) For labor development guidelines, they improved and promoted the process that makes workers skillful, knowledgeable, competent, and have professional ethics and a good attitude about work. They used training methods and skill development and then they set up labor skill standards and other relevant measures (Department of Skill Development, 2017) under the Skill Development Promotion Act, B.E. 2545 to allow employers or entrepreneurs to take part more in skill development.

The Future S-Curve Industry and the New-S-Curve Industry

In 2016, there was a total of 10 industries which consisted of 1) Modern automotive industry (Next-Generation Automotive), 2) Smart Electronics, 3) Affluent, Medical and Wellness Tourism, 4) Agriculture and Biotechnology, 5) Industry Food for the Future, 6) Industrial Robotics, 7) Aviation and Logistics, 8) Biofuels and Biochemical, 9) Digital Industry, and 10) Medical Hub Industry. These industries not only originated in the area but also formed the model city area of “Triangle of Stability, Prosperity, Sustainability”.

Research methodology

Step 1 Study of the documents on vocational labor requirements

Step 2 Study of labor demand data and attributes of vocational workers. Key informants were selected by purposive sampling (Law et al., 1998). Key informants were divided into 2 groups. The first group, which was people involved in production and workforce development policies, consisted of the chairman of the Provincial Vocational Education and administrators of vocational colleges. The second group, which was people related to the industry or business establishments, consisted of entrepreneurs of the Provincial Chamber of Commerce and Provincial Industry Council. There was a total of 10 key informants. The data collection tool was a Semi-Structured Interview Protocol. Data were collected through in-depth interviews, and then they were analyzed and interpreted. Next, the researcher investigated the data with triangulation to ensure the accuracy of the

collected information and used Typology and Taxonomy techniques, and analytic induction to classify and organize the data system. For the interview questions, there are 2 items as follows: 1) What industry is growing and how many vocational workers do they need in the “Triangle of Stability, Prosperity, and Sustainability” in 5 years (2020-2025)? and 2) what desirable attributes of vocational workers do they need for vocational industries in the “Triangle of Stability, Prosperity, and Sustainability”?

Step 3: The findings were rechecked and 3 experts having roles in policy issuing and monitoring practices provided the opinions. The experts consisted of Deputy Permanent Secretary for Education, Special Representative of the Government for Education in the Southern Border Provinces, and Director of the Office of Social and Economic Development for the Southern Region.

Research Result

Table 1 The summary of the opinions of 10 experts from 2 questions, item 1: What industry is growing and how many vocational workers do they need in the “Triangle of Stability, Prosperity, and Sustainability” in 5 years (2020-2025)? and item 2: what desirable attributes of vocational workers do they need for vocational industries in the “Triangle of Stability, Prosperity, and Sustainability”?

Expert	Type of industry and number of vocational workers required	Labor attributes that come from vocational education			
		physical	mental	social	Knowledge & skill
1.	For rubber Processing/ People, Fruit Processing/ People, they will need 1,500 positions of vocational labor for another 5 years in 3 provinces.		moral		basic language skills
2.	For border trade/ people, processing local products/ people, processing local fruits/ people, wholesale, Retail/ people, they will need 1,500 positions of vocational labor for another 5 years in 3 provinces.	endurance diligent	honest		specific language skills

Table 1 (continued)

Expert	Type of industry and number of vocational workers required	Labor attributes that come from vocational education			
		physical	mental	social	Knowledge & skill
3.	Automotive, food, rubber farming, palm, animal husbandry, fishery, logistics, agricultural innovation, Health	endurance	honest	disciplined	English and Malay
	industry will need about 2,000 vocational workers within 5 years in Narathiwat, Yala, and Pattani.				
4.	Agricultural industry will be popular, and fishery, fruit processing, the halal food will be very advanced in all 3 southern border provinces. For the need for vocational workers in 5 years, 2,000 positions will be required.	Scientific aspect	-	punctual	Thai and Malay
5.	In agro-industry, logistics, product processing industry, tourism industry, and trade industry, 1,500 positions of vocational workers will be needed in 3 southern border provinces within 5 years.	endurance	honest	Open-minded	Electrical-Electronics skills, Thai, Bahasa
6.	In Processed agro-industry, construction, stone mill, processed agriculture, durian export, confectionery factory, organic fertilizer factory, 1,500 vocational workers will be needed for over the next 5 years.	safety rules sacrifice	Sacrifice discipline	compatible with the old workers.	Love to learn new things

Table 1 (continued)

Expert	Type of industry and number of vocational workers required	Labor attributes that come from vocational education			
		physical	mental	social	Knowledge & skill
7.	In Economic crops industry such as palm oil and coconut, durian, processing, fishery, the halal food, food science-based industries, there will be 2,000 positions for vocational workers in 3 southern border provinces for the next 5 years.	Problem solver	Determined and understanding	Knowledge seeker	Electrical and engineering skills
8.	General industries in the southern border provinces will need 1,000 vocational workers for the next 5 years.	endurance, diligent	punctual moral	Infrequent absence	English, Thai Bahasa, and Burmese
9.	Seafood industry, fishing industry, agro-processing industry durian, oil palm, food science industry will need 2,000 positions of vocational jobs in 3 southern border provinces in the next 5 years.	Diligent Self-responsible		compatible with their colleagues	English and Chinese
10.	The industry in general fixed area in the next 5 years, will need 1,000 vocational workers of all types.	-	-	-	Bahasa Thai language Mandarin English

Table 1 provides information from 2 questions; details are as follows:

Part 1 Types of Industry required in 3 Southern Border Provinces of “Triangle of Stability, Prosperity, and Sustainability”

1st rank is the rubber processing industry, palm processing industry, and fruit processing industry such as durian.

2nd rank is the Halal food industry

3rd rank is the fishing industry.

4th rank is tourism, stone mills, organic fertilizers, animal husbandry, retail, and the S-Curve and New S-Curve industries, with equal numbers on average.

Part 2 Number of vocational workers needed within 5 years in the aforementioned industry sectors, 1,620 positions will be needed, or 324 positions will be needed per year.

Part 3 Desirable Labor Attributes from Vocational Education

1st rank: Necessary knowledge and skills consist of Thai, English, Chinese, Bahasa, Burmese, electricity (electrical work, industrial control, electrical power work, technology work for the power generation industry, and electrical transmission technology works), electronics, and engineering.

2nd rank: the physical aspects consisted of endurance, problem-solving, diligence, and self-responsibility, scientific thinking, and work safety.

3rd rank: the mental aspects include morality, honesty, determination, understanding things, and sacrifice.

4th rank: the social aspects consist of social discipline, punctuality, compatibility with old-age workers and people in the area, and being open-minded people with infrequent absenteeism.

Conclusion

When applying the findings in Table 1, 3 experts assessed them with a 5-level assessment score. The results of the assessment of the number of industries that require labor and vocational jobs are consistent with the government policy at 4.33 which means that they are very consistent, and they can be used for action plan at 4.33 which means they are very practical. The results of the assessment of vocational labor characteristics are consistent with the government policy at 4.45 which means they are very consistent, and they can be used to implement the plan at 4.45 which means they are very practical.

Within 5 years (2021-2025), in the area of “Triangle of Stability, Prosperity, and Sustainability area, a total of 1,620 vocational workers will be required, or an average of 324 positions will be required per year. Vocational workers will work in the following types of industry: No. 1: rubber processing industry, palm industry, fruit processing industry such as durian, No. 2: the Halal food industry, No. 3: fishery industry, No. 4: tourism industry, stone mill, organic fertilizer industry, animal husbandry, tourism, retail, and S-Curve and New S-

Curve industries. Within 5 years, vocational workers will work in the dimension of S-Curve more than New S-Curve at a rate of 2:1.

However, this does not include vocational workers engaged in occupations and continue working from the aforementioned industries. There are also vocational workers who will do other jobs, including mechanics, cost accountants, agriculturalists, workers in production of raw materials for industrial plants, electricians (electrical work, industrial control for electrical work, work for the power generation industry, and electrical transmission technology work), welders, rubber wood processors, furniture makers, workers in pillow production, grocery store, clothing production, confectionery, local cooking, public relations officers, salespeople, technologists, and computer technicians.

In this regard, the desirable vocational labor attributes of the industrial sector are as follows: the first rank is knowledge and skills characteristics which consist of Thai, English, Chinese, Bahasa, Burmese, electrical skills (electrical work, industrial control of electrical work, technology work for the power generation industry, and electrical transmission technology), and electronics engineers. Rank 2 is physical attributes which consist of endurance, problem-solving, diligence, self-responsibility, work ability, scientific thinking, and work safety. Rank 3 is mental attributes which consist of morality, honesty, determination, understanding things, and sacrifice. Rank 4 is social attributes which include social discipline, punctuality, and compatibility with old-age workers, being open-minded, and infrequent absenteeism.

Discussion

Within 5 years, the number one preferred vocational education labor is the rubber industry, palm, and fruit processing industries such as durian. This is in line with the research of Phongprom et al. (2017) who found that rubber, palm, and processed fruits are needed a lot in other foreign countries, especially China. However, modern technology must be used in the production so that quality and quantity will be obtained for the industries. There are minor demands for other industries. The result agrees with the area setting based on the policy of “Triangle of Stability, Prosperity, and Sustainability” that has a more focus on processing agricultural products for export, and tourism than any other industries (Model City Policy, 2016).

The overall demand for labor in “Strong Triangle, Wealth, Sustainability” averages 324 positions per year, or within 5 years, 1,620 positions. The demand may be a small number in the first phase. This corresponds to the number of 1,590 factories in the 3 southern border provinces where the turnover rate of employees with low skill levels or vocational education levels is low (Department of Industrial Works, 2018).

As for the attributes of vocational workers in knowledge, the use of the Thai language ranked first, and this is consistent with the context of students in the three southern border provinces where reading and speaking Thai at a young age are rare, so students have less aptitude for Thai (Madeeyoh & Charumanee, 2013). When they work, the feature of the Thai language is still necessary. The characteristic of endurance is the number 1 desired physical attribute. This is in line with research by Thuannadee (2016) who found that industrial workers should have the attribute of endurance. For the mental attributes, the first attribute is morality, and this is in accordance with the six principles of good governance (King Prajadhipok's Institute, 2019). Finally, the first required social attribute is discipline, and this is consistent with the principles of industrial work where there are frequent dangers from many machines, therefore, discipline is required in work in order that workers are safe from using machines (Srimarut, 2012).

Recommendations

Policy for executives

In organizing the curriculums, the administrators not only focus on sending skilled workers to the industrial system, but they also take into account the production of entrepreneurs or workers for other occupations that are Supply Chains of the mentioned industries as well. The administrators should also use the existing vocational training centers in the three southern border provinces. They are sources or places to practice developing new innovations for former students who have already worked. There should also be the registration of licensed special vocational teachers as the former Deputy Minister of Education has initiated to help teach in the new and improved curriculum.

Policy for operators

1. While striving to produce skills for vocational workers, teachers should also develop themselves to keep up with the changes in the body of knowledge in teaching students.

2. Vocational teachers should look for opportunities to work or do holiday internships with the industry, and this is popularly practiced by foreign countries.

3. Vocational teachers should explore occupations or jobs that are the supply chains of the industry to develop students who will receive that opportunity.

4. The Ministry of Labor's Department, the Provincial Vocational Offices in Pattani, Yala, and Narathiwat, as well as the most important agency, the Employment Guidance Center of all vocational colleges, should work together to train and develop the characteristics of vocational workers in a concrete way.

For the next research issue

In further research, the Big Data system should be researched on the needs for vocational workers in “the Triangle of Stability, Prosperity, and Sustainability” which will result in actual and practical policy.

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