


Proceeding Paper

# Localizing SDGs in Thailand: Towards a More Inclusive National Science, Research, and Innovation (SRI) Plan <sup>†</sup>

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**Abstract:** The Science, Research, and Innovation Plan 2023–2027 (SRI Plan) is a national policy that will support researchers to steer Thailand towards a more sustainable path. In contrast to most existing policies, which focus on poverty reduction through economic growth schemes, and national security, Thailand Science, Research, and Innovation (TSRI) aims at balancing the social, economic, and environmental aspects of the SRI Plan. While the TSRI has been incorporating the Sustainable Development Goals (SDGs) into its policies, it realized that there is the need to cater for diverse lives across Thailand. This research aims to support the TSRI in drafting a more inclusive SRI Plan, especially during the COVID-19 outbreak. Through the SDGs' lens, the researchers collaborated with regional investigators to examine the area-specific needs across six regions of Thailand. Given the COVID-19 constraints, the horizon scanning and modified Delphi technique were used to collect data from April 2020 to April 2021. The results obtained from the participants unveiled that, while several issues are shared, each region ranked mostly different issues as their development concerns. The TSRI stands to benefit from these insights by drafting a region-specific national research plan. Regarding the shared concerns, the economic slowdown was ranked as one of the most grievous matters concerning the regions. Interestingly, through the interlinkage approach highlighted by the SDGs, the participants associated this economic problem with other issues unique to their regions, such as multidimensional poverty, loss of tourists due to the global pandemic, and drug-related crimes. Unfortunately, the relevant authorities usually treat these problems as being separate issues. A silo-dominant administrative system, combined with rigid regulations, prevents efficient cooperation. In addition to the economic issues, waste management and water-related problems due to climate change were ranked as significant concerns. Lastly, the participants also viewed injustice and the lack of good governance as drawbacks to sustainable development. From these results, it is evident that TSRI can draft a more inclusive SRI Plan to support research for sustainable development through the SDGs' lens. Indeed, the Plan would reflect a more balanced view of regional needs than those formulated through the usual technocratic techniques.

**Keywords:** Sustainable Development Goals (SDGs); Agenda 2030; localizing the SDGs; Thailand; policy research; future studies



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## 1. Introduction

As the Science, Research, and Innovation Plan (SRI Plan) 2020–2022 is scheduled to end in August 2023, the Government of Thailand has appointed the Thailand Science, Research, and Innovation (TSRI), an organization under the Ministry of Higher Education,

Science, Research, and Innovation (MHESI), to draft a new policy, the Science, Research, and Innovation Plan (SRI Plan) 2023–2027, to support researchers and think-tanks academically and financially so that they are able to steer Thailand towards a more-sustainable path [1]. In contrast to most existing policies, which focus heavily on poverty reduction through economic growth schemes, and national security, the TSRI aims at balancing the social, economic, and environmental aspects of development, along with responding to the impacts of the global pandemic of the coronavirus disease 2019 (COVID-19) in the SRI Plan. As an organization that actively promotes the Sustainable Development Goals (SDGs) through research and innovation, the TSRI views the 17 Global Goals and its 5Ps (People, Prosperity, Planet, Peace, and Partnership) as reference frameworks for this endeavour. Indeed, it has been incorporating the SDGs into its research policies. While collecting essential data, the TSRI realized that there is the need to cater for diverse lives across the country, engage with other sectors, including academia, and leave no one behind. TSRI, nonetheless, fears that, without solid empirical evidence of regional needs, it may be pressured to align its SRI policy along with the national policy norm. Consequently, the organization commissioned academic institutions to collect data and insights and provide scholastic support in defending its standpoint.

The purpose of this paper is to highlight how the researchers assisted the TSRI in drafting a more inclusive SRI Plan 2023–2027 by highlighting localized needs and focusing on shared concerns along the lines of the 17 Global Goals. To fit the context of Thailand, Goal 5: Gender Equality encompasses all genders, in addition to just equality between males and females. Furthermore, the paper also wants to illustrate that, even with the constrictions posted by COVID-19, data on important development issues can still be obtained through the foresight technique of horizon scanning and the Delphi method.

## 2. Sustainable Development in Thailand

The concept of sustainable development has a long history. It received its first significant international recognition in 1972 at the United Nations (UN) Conference on Human Environment held in Stockholm, Sweden [2]. The term was further universalized 15 years later in the Report of the World Commission on Environment and Development: Our Common Future (also known as the Brundtland Report), which defined sustainable development as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” [3]. The Brundtland Report investigated numerous concerns that had been raised in the 1960s, and the 1970s, including Rachel Carson’s *Silent Spring* (1962), Garret Hardin’s *Tragedy of the Commons* (1968), Edward Goldsmith and Robert Allen’s *the Blueprint for Survival* (1972), and the Club of Rome’s *Limits to Growth* (1972). Countries, including Thailand, began to take sustainable development more seriously following the UN Conference on Environment and Development (Rio Summit) in 1992 [4], and later the Millennium Development Goals (MDGs) from 2000 to 2015, where the social and economic aspects were mainstreamed alongside the environmental aspect of sustainable development. Finally, in September 2015, the United Nations, along with 193 member states, adopted the Sustainable Development Goals (SDGs), a collection of 17 interlinked Global Goals [5], as a universal call for action to end poverty, eliminate hunger, promote inclusive economic growth, maintain peace and justice in society, protect the environment, and ensure that no one is left behind.

Thailand’s development in the past was strongly influenced by neoliberalism [6] and the free-market capitalism model of development or the Washington Consensus [7]. This development trend was evident in the first to the seventh National Economic and Social Development Plans, from 1961 to 1996 [8]. Most policies were overwhelmingly concentrated on economic development and paid less attention to the development of human resources, social welfare systems, gender equality, and the natural environment. While the country enjoyed rapid economic growth, up until the 1997 Asian Financial Crisis, growth-oriented policies brought about problems, such as the depletion of natural resources,

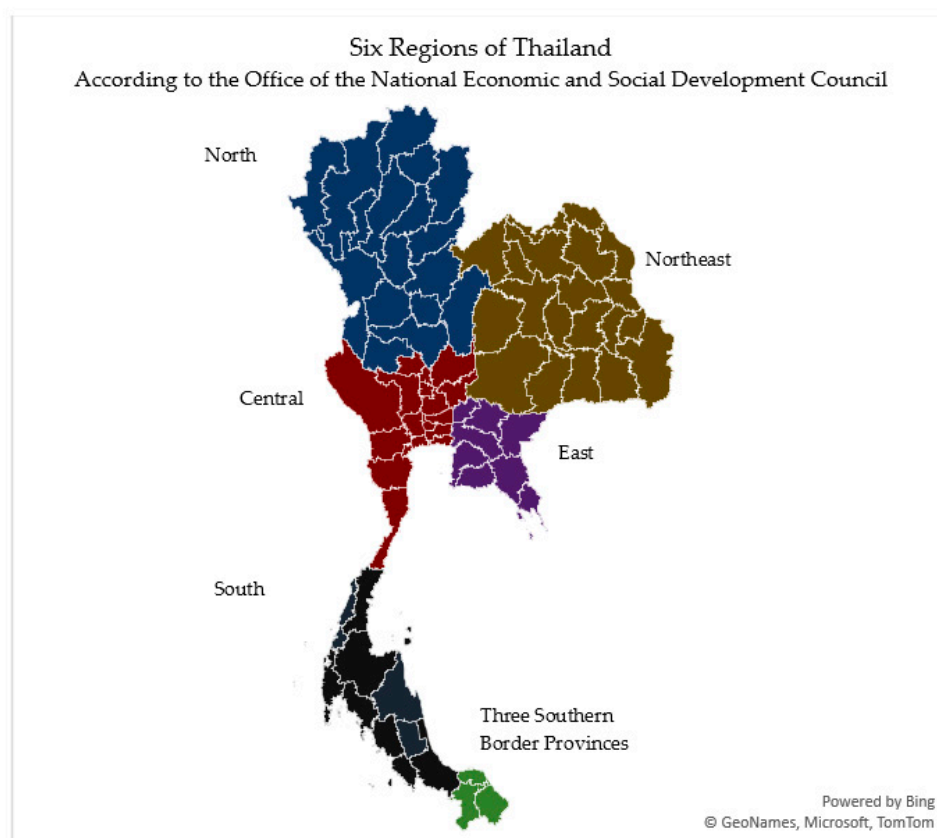
overconsumption, waste management issues, overdependency on foreign markets, lack of good governance, and unequal wealth distribution.

Nowadays, Thailand has adjusted its development to be more in line with sustainable development. The 2017 Constitution of Thailand, as well as other national-level plans, such as the 20-year National Strategy (2018–2037), the Digital Economy and Society Development Plan, the Twelfth National Economic and Social Development Plan (2017–2021) [9] and the Thirteenth National Economic and Social Development Plan (2022–2027) [10], have been drafted with the inclusion of the Sustainable Development Goals (SDGs). Nevertheless, the top-down approach continues to be the norm, and many of the existing plans do not necessarily address people's needs in different regions.

Instead of simply aligning its SRI Plan to the SDGs, the TSRI wants to emphasize the SDGs' principles to support the academic sector better. Unquestionably, the SRI Plan must be inclusive, universal, integrated, and underline the importance of local needs.

### 3. Methods

Through the SDGs' lens, the researchers collaborated with regional researchers to examine the area-specific needs across six regions of Thailand. These regions are Northern Thailand, Northeast Thailand, Central Thailand, Eastern Thailand, Southern Thailand, and the Three Southern Border Provinces (Figure 1). Given the constraints posted by the COVID-19, horizon scanning and the Delphi method were utilized.



**Figure 1.** Six Regions of Thailand.

#### 3.1. Horizon Scanning

Horizon scanning, a technique used for “seeking and researching signals of change in the present and their potential future impacts” ([11], p. 2), was conducted from March 2020 to April 2020. The researchers identified themes and keywords for every SDGs by studying 169 Targets and their indicators. These themes and keywords served as a guideline to help the regional research teams to identify SDG-related issues. The researchers examined data to

pinpoint SDG-related issues primarily from four sources. The first source was the National Research Council of Thailand's (NRCT) research database. The second source of data came from international-level and local-level organizations, especially those responsible for providing data on every Global Goal, such as UN agencies, the Asia Development Bank, and the National Statistic Office of Thailand. The quantitative data provided by these organizations enabled the researchers to identify development trends. The third source of information came from online news articles, including mainstream news, alternative news, and local news, in addition to Twitter's trends, from 2017 to 2020. The last source of information was the 20-Year National Strategy 2018–2037, where researchers conducted content analysis to study how different plans would affect the SDGs. Along with these four sources, the six regional research groups obtained additional trends from interacting with regional leaders, officials, and academia.

### 3.2. Modified Delphi Method

The obtained data from horizon scanning were used to identify SDG-related issues. These issues were utilized in the modified Delphi method, a process used to arrive at a group opinion by surveying a panel of experts without them knowing how other experts responded. Altogether, four rounds of Delphi surveys were conducted to gather adequate opinions on various issues for the TSRI. The benefit of using SDGs as the lens to identify important issues and their root causes is that it forces the experts to think beyond the topic(s) with which they are familiar and consider all aspects of development.

In the first phase of the project, two online Delphi surveys were conducted from May to June 2020. The first round of the Delphi survey was conducted to verify whether the issues that the researchers found, both at the national and regional levels, were pressing regional concerns. In the second round, there were two groups of respondents, those who responded to the national-level-development issues and regional experts who responded to the regional ones. Both groups of respondents were asked to assess the impact of development issues. Simultaneously, they were asked to evaluate the country's readiness to deal with each issue and provide further-relevant information. The results of this phase were also used to help the TSRI to prepare the revised version of the SRI Plan 2020–2022.

The project resumed a few months later, and another two rounds of Delphi surveys were conducted from March to April 2021. National-level issues were integrated into the regional ones, and respondents were asked whether the issues from the first phase of the Delphi process continued to be the concerns in their regions, considering the impacts from COVID-19. Participants could choose whether they wanted to respond to either the issues belonging to the "P" of the 5Ps, to those in which they had the expertise in or to every issue. The researchers from the Eastern Region and the Southern Three Border Provinces were unable to conduct this round of the survey due to time limitations and COVID-19-related constraints. Instead, the local teams of these two regions performed the verification.

Finally, participants in every region were asked to take part in the final round of the Delphi survey to evaluate, out of ten, every issue's severity, impact, and the effectiveness of relevant or existing policies in abating or solving that issue. The researchers evaluated the importance of every issue based on the participants' inputs to rank the development needs of every region, using Equation (1):

$$\text{Importance} = \text{Severity} + \text{Impact} - \text{Effectiveness of relevant policies} \quad (1)$$

Throughout the Delphi processes, the researchers tried to ensure the diversity of the experts participating in this study. While almost half of the experts who participated in this study belong to the public sector, the other half of the participants belong to the private sector, civil society organizations (CSOs), and the academic sector. Different groups of people, such as the elderly, people with disabilities, youth, and LGBTQI, were included in the study. Regrettably, due to time limitations and the constraints posted by the COVID-19 pandemic, the researchers could not recruit many people with disabilities, youth, and

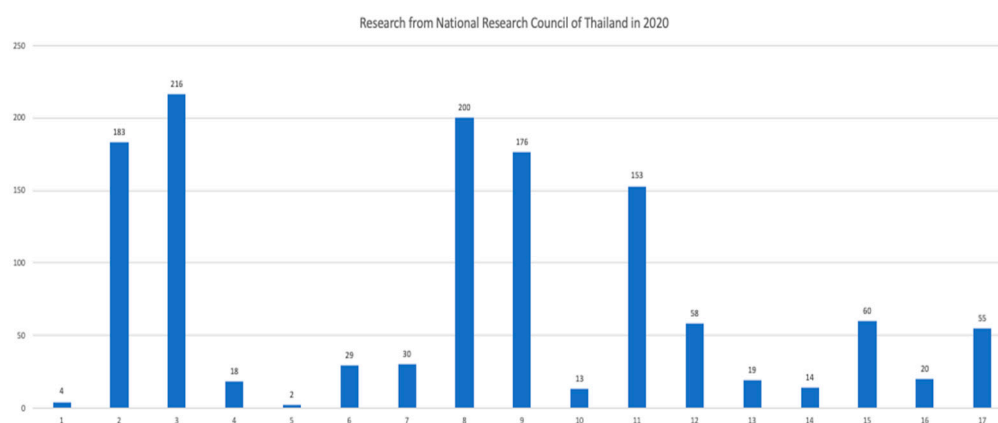
LGBTQI to participate in this study. This underrepresentation might have affected the results of this study.

#### 4. Results

Due to the nature of this research, the results of this study are vast. Only significant results are presented in this paper.

##### 4.1. Results from Horizon Scanning

The researchers conducted the SDG analysis of the National Research Council of Thailand (NRCT) research in 2020. The result is shown in Figure 2. Indeed, an overwhelming number of works are within the purviews of Goal 3: Good Health and Well Being, Goal 8: Decent Work and Economic Growth, Goal 2: Zero Hunger, Goal 9: Industry, Innovation and Infrastructure, and Goal 11: Sustainable Cities and Communities. Goals belonging to Planet (the environmental aspect of sustainable development) generally receive less attention. Still, the two Goals with the least amount of research are in the People (or social aspect of sustainable development). These two Goals are Goal 1: No Poverty and Goal 5: Gender Equality.



**Figure 2.** Research from the National Research Council of Thailand.

The researchers analysed 963 online news articles. The contents of 653 articles (67.8%) can be associated with the Goals in the People aspect of the SDGs. In comparison, 142 articles (14.7%) can be associated with the Goals in the Prosperity (economic) aspect. Additionally, 118 articles (12.3%) were related to Technology, which the TSRI wanted to highlight in the SRI Plan. Articles having their contents associated with the Goals in the Planet (environmental) aspect of the SDGs are minuscule, with only 50 articles or 5.2%. From these results, it can be deduced that the public is very concerned about the well-being of society. The environment received relatively low emphasis from the fund-granting agency and very low consideration from the public. The results, however, do not necessarily imply that the people are not worried about the environment. Instead, people might perceive environmental problems, such as climate change, as distant problems, or something that is inevitable.

The content analysis of the 20-year National Strategy (2018–2037), more specifically, the Master Plan under National Strategy, the Country Reform Plan, the Twelfth National Economic and Social Development Plan (2017–2021), and the National Security Policy and Plan, unveiled that, while the national plans address the development of all 17 SDGs, an overwhelming weight was placed on Goal 8: Decent Work and Economic Growth and Goal 9: Industry, Innovation and Infrastructure, and outstandingly high on Goal 16: Peace, Justice and Strong Institution. In the research in the National Research Council of Thailand database, there is a low level of importance placed on the People aspect of the SDGs, with Goal 5: Gender Equality being the least-mentioned SDG in the plans.

With these results, in combination with the analysis of quantitative data, the researchers identified a total of 39 issues at the national level. At the regional level, the researchers of every region also identified crucial development issues. These issues were presented to the experts during the Delphi surveys so they could help to cultivate ideas about potential future developments around every issue.

#### 4.2. Results from Delphi Surveys

At the national level, 36 respondents participated in the first round of the Delphi survey, and 51 respondents participated in the second round. It was remarked that experts in the fields relevant to Goal 14: Life Below Water were the most difficult to find. At the regional level, every region maintained that at least 25 respondents participated in the first and second rounds of the Delphi survey. For the third round of the Delphi survey, there were a total of 472 respondents that participated. In the last round of the Delphi survey, 557 respondents took part. There were about 100 respondents who participated in all four rounds of the Delphi survey.

Following the four rounds of the Delphi survey, the top ten important development issues of the Northern Region are harmful particulate pollution (PM<sub>2.5</sub>), climate-change-related disasters, food insecurity, land ownership disputes, deforestation and the need for forest management, waste management, unsustainable farming practices, drought, unequal-opportunity educational system, and insufficient access to resources and welfare facilities, in order of importance.

The ten most pressing development issues of the Northeastern Region are poverty, inequality, low level of human development, drought, waste management, violence and injustice, slow economic growth, inadequate agricultural-supporting facilities, the uncertain change of lifestyle due to modernization, and food insecurity, in order of importance.

The most evident development issues of the Central Region, where the Bangkok Metropolitan Region lies, are the contraction of the tourism industry, increasing drug-related crimes, swelling household debts, slow economic growth, communicable diseases (including COVID-19), poverty, the inequitable distribution of wealth, the low level of fair access to farming technology, air pollution, and the lack good governance, in order of importance.

As for the issues concerning the development of the Eastern Region, where the Eastern Economic Corridor (EEC) is located, industrial waste management, drought, climate-change-related disasters, loss of mangrove forests, marine pollution, low-quality water supply, expensive raw materials and that are often in short supply for industrial production, household debts, the shortage of recycling facilities, and food insecurity (due to drought) stand out as the most-glaring concerns, in order of importance.

As for the Southern Region, the development issues of the most-pressing concern are waste management, rapid contraction of the tourism industry (due to COVID-19), spiralling drug-related crimes, poverty, the prevalent destruction of the ecosystem, the perennial lack of good governance, the continuing degradation of the morals of children and youths, inequality and inequity, the education system that does not fit the local context, and drought, in order of importance.

Finally, the most prominent development issues of the Three Southern Border Provinces are the increasing tumour of the widespread incidence of drug-related crimes, the flawed system of the administration of peace, injustice, human rights violation, poor quality education, reduced border trade, widespread unemployment among return-workforce from Malaysia and the Middle East (due to COVID-19), slow economic growth, the shrinking base of the agricultural sector of the economy, continual violence against the citizens, and the impacts of decade-long unrest on youth and children, in order of importance.

When compared important issues to the SDGs, 10 out of 60 issues were development issues related to Goal 8, and 9 were issues relevant to Goal 16. The three SDGs that did not have serious development issues in all six regions are Goal 5: Gender Equality, Goal 7: Affordable and Clean Energy, and Goal 17: Partnerships for the Goals.



## 5. Discussion

### 5.1. Trends from Horizon Scanning

While the trends are used mainly to formulate the Delphi survey, the results of the horizon scanning can provide crucial information for the TSRI. Based on the analysis of the NRCT research (Figure 2), a lot of research fell within the economic aspect of development (Goal 8, Goal 9, and Goal 11). This high number of research on the economic element aligned with the priority of most government agencies, which advocates for economic growth. Furthermore, since many Thai people continue to engage in agricultural activities, substantial supports for research to improve productivities and improve farmers' livelihood (Goal 2) was anticipated.

Similarly, from the same analysis, there is no surprise that there were many health-related research endeavours (Goal 3) since there is a growing demand for health care locally and from abroad, in addition to strong government support [12]. Likewise, with the COVID-19 pandemic, it is expected that the funding for healthcare, nursing, and medical research will continue to rise.

A low amount of research on poverty reduction (Goal 1) and gender equality (Goal 5) is not unexpected. It has been a general belief among economists that economic growth benefits nearly all citizens of a country and would reduce poverty. Sadly, economic growth does not guarantee that poverty will be lessened. Many other problems, such as the unfair distribution of wealth, continue to keep many people in poverty [13]. In this manner, it might be beneficial for the TSRI to support and sway more researchers to focus on finding the root causes of poverty that are unique to different regions and explore more deeply the issues of the fair distribution of wealth. Such research would also fit in with the general trend of the public, based on the results from the analysis of news articles and Twitter trends. Vital information gathered from the news articles and Twitter trend indicated that many people were concerned with the twin problem of inequality and inequity, the unfair domination of certain businesses entities, and the lack of good governance that would make it hard for many people to escape poverty.

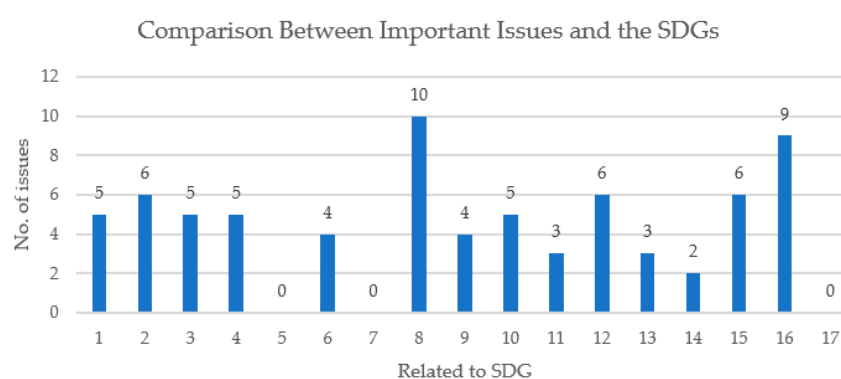
Regarding the point on gender-based issues (Goal 5), despite a low amount of research, there was a clear spike in conversation on gender rights and equality in Thailand in the past few years. This growth is likely due to the rise of feminism across the globe, in addition to the legalization of same-sex marriage in Taiwan [14,15]. However, intriguingly, many people in Thailand believe that gender equality is not a concern. Women are generally viewed as equal to men, and society essentially accepts LGBTQI. Regarding women's rights, many people do not consider that there is any problem since women have as much say in socio-economic matters. In fact, women hold a more significant percentage of senior leadership positions than the average in the Asia-Pacific region and globally. In 2020, official data indicated that women in Thailand held 32% of senior leadership positions, while globally, women held 27%, and 26% in the Asia-Pacific region [16]. Nonetheless, participants cited that gender-related problems existed in Thailand. Some women still face discrimination and exploitation. These women usually live in rural and minority-dominated areas. While Thai women are performing well in the socio-economic arenas, this is not the case for the political scene. There is a low percentage of women holding political power in the parliament. Thus, women's concerns are often not included in many policies. TSRI should include the themes in Goal 5 into its SRI policy. It should pay particular attention to the more impoverished areas in the Northeast Region, as well as some areas of the Northern Region and the Three Border Provinces where there is a high proportion of minorities.

Finally, all trends reveal low concern for the environmental-centred aspects of the SDGs. Considering that many problems are direct consequences of climate change, this trend is worrisome. The low conversation among the public and the lack of support from the government indicate that, while there may be an awareness that climate change is happening, the awareness of what ought to be done and that everybody is responsible for adapting to climate change remains low. This result should prompt the TSRI that future

research on climate change should not be just about scientific findings on climate change or new adaptation technology. Research on communication and ways to disseminate facts and finding means to convince the authorities and the people to act radically become crucial.

## 5.2. Results from Delphi Surveys

The results of the Delphi method unveil many development issues that would benefit the TSRI in drafting a more inclusive SRI Plan. Through the surveys, experts describe different consequences and even different root causes. Many identified issues are extraordinarily complicated and are often associated with other aspects of development. This paper will illustrate some of the shared issues, highlighting some of the differences and how they will affect other issues. It is ironic that, while most policies and concerns were geared towards economic growth, as well as improving peace and justice, through Delphi surveys, participants identified many important issues that hinder the success of Goal 8: Decent Work and Economic Growth and Goal 16: Peace, Justice and Strong Institution (Figure 3).



**Figure 3.** Comparison between important issues and the SDGs.

Experts from five out of six regions rated economic-related issues as one of the most pressing development issues. The problem with the current system is that most policy-makers often fail to see the linkage among the different problems. Even if they do, a silo structure within government organizations dissuades officials from working cooperatively across agencies, concentrating instead on their priorities [17]. Many policies are also drafted by those in Bangkok, who might not even know the reality of many people across the six regions. For instance, while the country suffered from the consequences of the COVID-19 pandemic, the associated economic slowdown did not affect everyone uniformly. Yet, most policies were not designed to accommodate these differences. This lack of consideration was evident through the government's efforts to support its citizens and encourage more spending to facilitate economic activities. Government schemes, such as *Khon La Khrueng* (Let us Go Halves), assumed that everyone owned smartphones, had internet access and were familiar with electronic registration and cashless payment [17]. Unfortunately, this was not the case. The poor, people with visual impairment, many elderly individuals, and those who live in remote locations could not enjoy the benefits of this scheme [17].

In addition, many participants feared that impoverished communities in the Northeast, Central, and South would suffer the most from economic slowdown due to the COVID-19 pandemic. Experts from the Southern Region and the Three Border Province also voiced their concerns that economic recession would increase drug trafficking activities along the Thai–Malaysian border and lead to more violence in the areas. Violence in Southern Thailand is usually blamed on terrorism linked to the ethnic and religious separatist insurgency. However, from the Delphi survey, some experts felt that violence in the South and the Three Border Provinces was more likely the result of poverty and the feeling of being left behind, something many policymakers failed to discern. Undeniably, supports for more research in this area are urgently required.



Another vital issue that TSRI must address is unsustainable farming. According to all the rounds of the Delphi survey conducted, there were three agricultural-centred issues that the experts of the Northern Region were concerned about. The experts of the Northeastern Region could not help but stress the more-pressing concerns on hunger and food security. In contrast, the experts of the Central Region were more concerned about unequal access to farming technology, and those of the Three Southern Provinces were more concerned about the shrinking agricultural-based economy. Even though the Eastern Region did not have an agricultural-related matter as one of its top ten most pressing issues, experts did highlight the fact that many farmers in the region, although relatively small in number, were experiencing problems with access to farming technology. Correspondingly, farmers of the Southern Region were experiencing a decline in agricultural outputs due to drought.

Education-related issues were identified in five out of six regions. The SDGs forced the experts to think beyond the issue of quality of education and delve more deeply into matters such as quality of teachers and whether the learning materials fit in with the context of the local economy or highlight environmental protection. In Northern Thailand, experts were concerned that the current education system did not feature the lessons on the cultures of various ethnic groups living in the region. Experts from the Northeast and Eastern Region felt that the current education system failed to sufficiently prepare younger generations to become an efficient workforce, affecting the competitiveness of Thailand on the world stage. Experts of the Southern Region and Three Southern Provinces felt that there was a lack of lessons on good morals and critical thinking.

Furthermore, experts of all regions saw matters concerning the environment as paramount issues. In contrast with policymakers and the public, the experts were concerned with topics such as waste management and the effects of climate change, particularly drought. The adverse effects of improper waste management lead to unpleasant scenes to behold and unleashes negative effects on the overall economy of a country. Communities dependent on the environment also face a significant threat due to the oil spills and the leaching of chemicals, which directly cause soil and water contamination. The burning of any disposed waste and plastic materials results in air pollution, impacting the health of the people. In addition, drought, as an effect from climate change, has already affected all regions. Many people developed anxiety or depression about economic losses. People living in different areas of the country got into conflicts when there was not enough water. Drought causes reduced incomes, fewer recreational activities, and higher incidents of heatstroke.

The last point that many experts of all regions mentioned were good governance. Respondents affirmed emphatically that good governance would accelerate sustainable development in Thailand. During these few years, especially, incidents and cases of high-level corruption, violence and injustice have multiplied. Scholars can support justice-related agencies in finding ways to improve the situation and help to build better governance.

## 6. Conclusions

Being tasked to draft the Science, Research, and Innovation Plan (SRI Plan) 2023–2027, Thailand Science, Research, and Innovation (TSRI) proposes to balance the social, economic, and environmental aspects of development, along with responding to the impacts of COVID-19 pandemic in the Plan. This paper highlighted how the academic sector assisted the TSRI in drafting a more inclusive SRI Plan by emphasizing localized needs and focusing on shared concerns along the lines of the SDGs.

Through horizon scanning, followed by the Delphi method, the researchers acquired significant trends and development issues in all six regions of the country (Figure 1). The results obtained from the respondents, many of whom are experts in their fields, disclosed that, while each region faces different issues, they are also several shared concerns. For instance, matters concerning economic slowdown were ranked as one of the most worrying issues in all six regions. Nonetheless, through the interlinkage approach stressed by the SDGs, the respondents associated this economic problem with other social, political, and

environmental issues distinctive to each region. These problems include multidimensional poverty, loss of tourists due to COVID-19, and drug-related crimes. Unquestionably, to improve the Thai economy, Thailand must simultaneously unravel the problems that stemmed from poverty, the global pandemic, and drug-related crimes. In terms of poverty, it cannot assume that economic growth will automatically eliminate poverty.

Along with issues associated with the economic slowdown, the respondents also identified many local-specific problems that can be grouped under the lack of sound governance. These issues impede the achievement of Goal 16: Peace, Justice and Strong Institution. Other notable issues include unsustainable farming, education-related concerns, impacts of climate change, particularly drought, and inefficient waste management.

Most respondents recommended that policymakers consider all SDGs to expand their horizons before formulating any policy. Consideration should be given to issues associated with all 17 Goals, even issues, such as gender-related topics highlighted by Goal 5, that the public might not see as grievous problems. It is, however, still rational to prioritize research and innovation to help to alleviate the pressing issues unique to each region. Indeed, the TSRI can use the insights from this research to develop a more sustainable and inclusive SRI Plan.

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