

The Strategies of SEAMEO Regional Centres Management in Literacy and Numeracy Enhancement in Southeast Asian Countries

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Abstract— The purpose of this study aims to enhance the understanding of the importance of Southeast Asian Ministers of Education Organization (SEAMEO) regional centres ^roles in development of literacy and numeracy in Southeast Asia and to find more information on the governments^ support and their supporting management. Some important influencing factors are financial supporting, centres^ programme, and networks. This research is conducted by descriptive analysis by delivering questionnaires to 26 SEAMEO regional centres to find deep relevant information. The results show that SEAMEO Regional Centres positively support the development of literacy and numeracy in Southeast Asian countries. Each centre varies on financial support provided by the government, centre^s programme, and networking. From a practical perspective, the research emphasizes the needs of SEAMEO centres to effectively operate the centres with existing financial support, develop various innovative programme/ activities, and expands networks.

Keywords— Regional Centres; management; literacy; numeracy; Southeast Asian countries

INTRODUCTION

Education is the main tool to build human capacity. It forms the human capital investment giving economical values in human lives [1]. The human capital is important in ensuring economic growth expressed as gross domestic product per capita. The model revealed a positive relationship, statistically significant between GDP per capita and innovative capacity of human capital (evidenced by the number of patents) and qualification of employees (secondary education) as expected according to economic theory [2].

The educational activities include the production and distribution of knowledge in formal and nonformal as well as in public and private institutions [3].

There are numerous educational institutions or organizations aiming to improve the quality of human life. One of them is the Southeast Asian Ministers of

Education Organization (SEAMEO). It is a regional intergovernmental organization established in 1965 among governments of Southeast Asian countries to promote regional cooperation in education, science and culture in the region. As an organization that has continued to nurture human capacities and explored the peoples' fullest potential, the SEAMEO maintains its work and aspirations for development with peoples of the region to make lives better in quality and equity in education, preventive health education, culture and tradition, information and communication technology, languages, poverty alleviation and agriculture and natural resources.

The organization represents the eleven Southeast Asian countries consisting Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Republic of the Union of Myanmar, Philippines, Singapore, Thailand, Timor-Leste, and Socialist Republic of Vietnam. Currently there are 26 SEAMEO Regional Centres across Southeast Asian countries with different focuses and niches as follows.

Figure 1 Map of SEAMEO Regional Centres

SEAMEO Regional centres strive for excellence in the following Core Competencies:

1. Technical and scientific expertise in areas of specialization,
2. Governance and management skills,
3. Collaborative partnership and networking skills
4. Research, creativity and innovative skills.

SEAMEO prides itself in its technical and scientific expertise in various fields of specialisation, its strength in governance and management, partnership, networking and collaborative skills. It sets the pace in research, creativity and innovative programmes in education, science and culture in the region.

The important management aspects supporting the operation of an organization include man, money, materials, mechanics, minutes [3]. The Centres' operational budget, capital and annually recurring costs of each Centre are underwritten by their host countries. However, the Operational Budget for the SEAMEO Secretariat, as the coordinator of all SEAMEO regional centres, is underwritten by the Member Countries whereby the respective annual share is determined by the Asian Development Bank contribution index. The Operational Budget of the TROPMED Central Network likewise is equally shared by the SEAMEO Member Countries.

The centres operate in the basis of the 7 Priority Areas as the umbrella of all programmes and activities executed which are:

1. Early Childhood Care and Education
2. Addressing Barriers to Inclusion
3. Resiliency in the Face of Emergencies
4. Promoting Technical and Vocational Education and Training
5. Revitalizing Teacher Education
6. Promoting Harmonization in Higher Education and Research
7. Adopting a 21st Century Curriculum

All of them show the support of Southeast Asian countries as the global members to improve the quality of human life through the improvement of literacy and numeracy in the region.

In order to run the vision and missions, the 26 SEAMEO regional centres operate and develop themselves in different ways. The support of the country to the centre depends on the ability of each government

to provide financial resources and relevant policies.



Considering the number of financial support given to the centres, it is important for the centres to define best strategies to gain best benefits on their programmes in the region. The research is conducted to have a look at the correlation between the financial support received by the centres, varieties of programmes and activities, and strategies taken to maximize the benefits supporting the literacy and numeracy level in Southeast Asian countries.

LITERATURE REVIEW

A. Literacy

Literacy is an integral part of lifelong learning. Literacy is critical in helping us make sense of our world. From the time we wake up to the time we go to sleep, we are constantly making meaning of the world around us. Literacy is the ability, confidence and willingness to engage with language to acquire, construct and communicate meaning in all aspects of daily *living*. Language is explained as a socially and culturally constructed system of communication. (Alberta Education).

Many organizations take part in promoting it worldwide. It becomes a part of the 2030 Agenda for Sustainable Development [5]. SEAMEO and other similar organizations take the following approaches to promote literacy worldwide, with an emphasis on youth and adults.

- Building strong foundations through early childhood care and education
- Providing quality basic education for all children

- Scaling-up functional literacy levels for youth and adults who lack basic literacy skills
- Developing literate environments

People realize that the development of human capital is an essential drive towards the sustenance of socioeconomic and political development of any nation [6]. Human capital itself has to be established by investing money on education, training, health, information, and the mobility of human labor. It is relevant to Fleischhauer [7] that ‘*Human Capital investments are expenditures on education, training, health, information, and labor mobility*’.

This informs the massive investment in literacy education programmes for the creation of access and equalization of literacy opportunities to all citizens irrespective of creed and economic.

B. Numeracy

Cairns [7] mentioned that numeracy represents the human ability to use or understand numerical techniques of mathematics. Even if adequate numerical data were available, the important decisions humankind makes regarding sustainable use of the planet should not be guided by numerical information alone, such as economic numbers, but by eco-and sustainability ethics, which provide a values framework that indicates how the numbers should be used and interpreted .

A young generation’s literacy and numeracy skills underpin their future workforce participation and productivity, and can also impact on their long-term social and health outcomes. The growth of new technologies and new industries has led to an increasing need for science, technology, engineering and mathematics (STEM) expertise in the workforce [8]. Education organizations emerge to give their best support on literacy and numeracy for the global sustainable development.

C. Sustainable Development Goals

The Sustainable Development Goals (SDGs) are the urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our

oceans and forests [9]. It provides a shared blueprint for peace and prosperity for people and the planet, now and into the future which was established on 2015 by United Nation Member States.

Supporting the SDGs, Southeast Asian Ministers of Education Organization presents the programmes and activities. In the implementation it cannot stand itself. It requires supports from other relevant parties such as government, private sectors, NGOs, and society.

D. SEAMEO and the Sustainable Development

SEAMEO is to promote cooperation in education, science, and culture in the Southeast Asian region. Its mission is to enhance regional understanding and cooperation and unity of purpose among member countries and achieve a better quality of life through the establishment of networks and partnerships, the provision of an intellectual forum for policy makers and experts, and the promotion of sustainable human resource development. SEAMEO Charter is the important document to be the umbrella of countries involved for all programmes executed to support the Sustainable Development Goals to improve the human life.

RESEARCH METHODOLOGY

A. Statement of the Problems

This study was conducted to determine the Management aspects of the SEAMEO Regional Centres. The number of governmental financial support to the centres’ operation and the programme varieties of each centre in improving literacy and numeracy guide the centres’ strategy to expand networks.

B. Significance of the Study

The results of this study shall give benefits to government officials, the faculty, the students, and the public in general especially to those who are interested in learning regional or international organization. The results would give description of current regional organization, SEAMEO, and the elaboration of empirical basis in the improvement of the existing organizational policies supporting the achievement of SEAMEO regional centres in Southeast Asia and other regional organization in the world.

C. Scope and Limitation of the Study

Due to time and financial constraints, this study

recognizes many limitations not only in terms of its scope and focus but also in its statistical tools, time frame, sampling methods, and others.

The financial support of the government of Southeast Asian countries as the main finance contributors, varieties of programme and activities, and the strategies of networking establishment and expansion enhance the role of SEAMEO Regional centres to support the advancement of literacy and numeracy in the region. Moreover, only basic information and statistics were derived and employed since the study is the descriptive one. Finally, the purposive questions listed in questionnaires were distributed to 26 SEAMEO regional centres to provide relevant information requested.

D. Setting of the Study

The fiscal year applied to SEAMEO regional centres starts on July to June. The study was conducted in first semester of fiscal year 2021/2022. It was on October to November 2021. In general, this study employed a descriptive tool. Research design consisted of finding description of the financial support of the government, the programme and activity varieties, and the strategy to expand networks.

E. Respondent of the Study

The respondents of the study were the 26 SEAMEO regional centres in Southeast Asian countries represented by the relevant assigned person.

F. Research Instrument

In gathering the primary data, the instrument used in this research was only a questionnaire asking for relevant requested information.

G. Data Gathering Procedure

First, the researchers emailed a letter addressed to the SEAMEO regional asking permission to share questionnaire relating to this study. After having the permission, the questionnaire was distributed to fill out and return to the researcher.

H. Statistical Analysis

The statistical tools used in the study were the descriptive statistics such as number of annual financial support, list of programme and activities conducted per year, and list of networks. Furthermore,

all data were collected, counted, and classified, then analyzed to have a look at the trend.

RESEARCH FINDINGS

The data received provide information that can be classified into (1) the trend of financial support from each government of Southeast Asian countries to their SEAMEO regional centres in 2017-2021, (2) varieties of programme and activities conducted, and (3) network establishment to support the programmes and activities enhancing the improvement of literacy and numeracy in Southeast Asian countries to anticipate the decreasing financial support received.

A. Financial Support from the Government

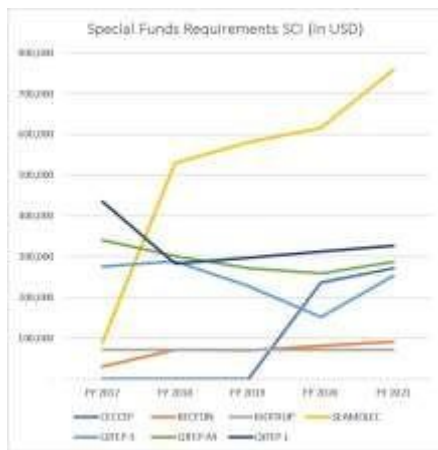
The data of financial support received to run the annual programmes and activities in the year of 2017 to 2021 shows no significant increase. Moreover, seven out of 26 centres have decreasing numbers.

Governmental Finance Support for SEAMEO Regional Centres							
No.	Centres Name	Special Funds Requirements (in USD)					Increase (%)
		FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	
1	TED	-	-	-	-	60,375	100%
2	SEPS	-	-	-	-	119,504	100%
3	CED	-	-	-	106,000	220,000	76%
4	DECCEP	-	-	-	236,787	272,305	57%
5	STEM-ED	-	-	-	-	359,785	100%
6	CHAT	10,770	20,700	24,300	24,300	24,500	16%
7	RECFCN	31,017	71,527	70,583	81,544	91,637	20%
8	BIOTROP	71,000	71,000	71,000	71,000	71,000	0%
9	CELL	77,205	75,236	82,782	144,000	107,000	4%
10	INMTECH	75,134	75,240	50,000	50,000	56,672	-11%
11	SEAMOLEC	89,036	529,387	580,504	616,365	758,343	29%
12	RHED	120,900	224,800	235,800	246,600	233,000	12%
13	SPAFA	129,286	134,409	141,984	141,984	141,984	2%
14	RECSAM	145,714	127,500	187,263	139,439	175,284	0%
15	QITEP-5	275,852	288,071	227,383	152,229	254,072	-8%
16	VOCTECH	299,404	299,404	299,405	299,404	299,403	0%
17	SEARCA	309,069	340,365	411,000	496,078	703,464	18%
18	QITEP-M	341,397	301,274	272,081	258,462	287,494	-5%
19							
20							
21	TROPMEQ	426,300	246,500	251,500	251,500	251,500	-18%
22							
23	QITEP-L	435,356	283,263	297,425	312,297	326,141	-10%
24	SEN	660,156	400,911	483,847	226,250	120,000	-62%
25	RETRAC	704,200	357,200	357,200	332,200	242,200	-95%
26	RELIC	1,136,458	1,179,037	1,122,500	1,166,519	1,180,741	1%
	TOTAL	5,342,255	5,025,768	5,176,357	5,352,958	6,356,414	4%

Table 2. List of Financial Supports Received by Centres

The most centres are in Indonesia. Here is the graph of financial support received by Indonesian centres. It also shows the decreasing trend.

Figure 2 Graph of Indonesian Centres' Financial Support



The similar situation happened to other SEAMEO Regional Centres located in Malaysia. The two centres receive decreasing special fund requirement from local government described in the following graph.

Figure 3 Graph of Malaysian Centres' Financial Support



The decreasing numbers of financial support challenge the centres to find out other supports that enable them to accomplish all set-up programmes and activities.

B. Networks

To support the limited financial resources, the centres conduct their activities in collaboration with other public and private institution with the same interests. They share roles and financial support from partner institutions under formal agreement such as Memorandum of Understanding.

The partners are from local, regional, and international public and/or private institutions. The

centres find the importance to expand networks in the relevance of support the limitation of their financial capacity. The recipients of the benefits of their programmes are widened and increased.

The website of SEAMEO provides information about the kinds of SEAMEO membership other than SEAMEO member countries. They associate and affiliate members. The associate members are the membership of a country, which is not Southeast Asian countries, to join and provide support for SEAMEO activities. Meanwhile, the affiliate members are the membership of organization to join and provide support for SEAMEO and SEAMEO centres activities. Their support and participation can be in numbers of money and in-kind numbers.

The membership is increasing. The Associate Membership consists of non-Asian countries namely Australia, Canada, France, Germany, Netherlands, New Zealand, Spain and United Kingdom. The newest associate member is The Kingdom of Morocco in 2021.

The Affiliate Membership consists of organizations from nonSEAMEO member countries. They have strong commitment to help and support the SEAMEO programmes and activities. The new organization joining Affiliate Members are Asia-Pacific Centre of Education for International Understanding (APCEIU) joining in 2017 and British Columbia Council for International Education (BCCIE) in 2020[11].

C. Varieties of Programmes and Activities

The 26 SEAMEO Regional Centre have different vision and missions. They are all implemented in different programme and activities that can be classified into (1) Trainings, (2) Workshops, (3) Seminars/Conferences, (4) Formal Meetings, (5) Research, (6) Personnel Exchanges, (7) Scholarship.

The centres are located in Southeast Asian countries that undertake training and research programmes in various fields of education, science, and culture. Each Regional Centre has a Governing Board composed of senior education officials from each SEAMEO Member Country. The Governing Board reviews the Centres' operations and budget and sets their policies and programmes. Those classifications are based on the focuses and niches of the centres. They are

stated in the agreement of their establishments and under the supervision of the Governing Board Members comprising of high officials or representatives from the eleven SEAMEO member countries.

DISCUSSIONS

In order to play the roles of SEAMEO as the regional institution in improving human life through education development among Asian countries and support the sustainable development goals achievement, it runs management function planning, organizing, actuating, and controlling. It was established by member countries in Southeast Asia legalized by SEAMEO Charter.

Annually the SEAMEO Centres make plan in annual basis including the numbers of fund needed and the expected fund derived in the following years. In actual process they run the programmes and activities based on analysis and priority made. The sharp strategy made to maintain the sustainability of the programme that will bring more impact to the regional society.

SEAMEO Charter became rule of agreement that the organization will be fully supported by the respective countries. It runs relevantly with global goals so that other countries and organization with similar objectives work together with SEAMEO.

The collaboration made among them enable each party to minimize the obstacles faced such as the decreasing supporting fund received from the government. In fact, the SEAMEO Centres are able to add more frequent numbers of programmes and activities. The support may be in cash and in-kind benefited to all.

Network data listed are more and more in the incoming years. The other interested countries and organizations are welcome to join. The last additional member participation was on 2020.

CONCLUSION

Literacy and numeracy skills are important to shape the future workforce participation and productivity, and they can also impact on the long-term social and health outcomes. They trigger the increasing need for science, technology, engineering and mathematics (STEM) expertise in the workforce.

Education organizations such as SEAMEO emerge to give their best support on literacy and numeracy for the global sustainable development. Under the limitation of financial support, SEAMEO regional centres are challenged to find solution in order to give more benefits of their existence in the region. The right strategies are formulated to fulfil the needs. The network expansion is chosen to be one of the strategies applied to maximize their resources and widen the recipients of the programmes implemented in the region to support the literacy and numeracy for the improvement of life quality.

RECOMMENDATION

From the findings and discussion results above, it is found that there are correlation between the number of financial supports with the variety of programmes and activities of the centres. The more financial support, the more programmes and activities that can be conducted and implemented by the centres. However, there is also relation and effects of limitation of financial supports with the strategy that has to be resumed by the centres. The financial limitation motivate the centres to find solution by expanding networks and relation of partners with other relevant institution or organizations.

We have precious learning facts. It is learned that the collaboration and cooperation between two or more organizations may bring more benefits and give more chances to all related parties to achieve the goals and objectives.

Therefore, It is suggested to all centres and other organization to expand network to build cooperation in the implementation of programmes as the focus of organization. Moreover, the coordination and collaboration will bring more benefits to more targets with limited resources. It is learned from the empirical data shown that it is a kind of trend of organization to change and move forward to facing the global change and dependence.

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