

HUMAN RESOURCE DEVELOPMENT AND REGIONAL COOPERATION WITHIN BIMP-EAGA: ISSUES AND FUTURE DIRECTIONS

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BIMP-EAGA, which includes Brunei Darussalam, the provinces of Sulawesi and Kalimantan, Maluku and Irian Jaya in Indonesia, Sabah, Sarawak and Labuan in Malaysia and the islands of Mindanao and Palawan in the Philippines, was formed with the vision of accelerating economic cooperation for the greater prosperity of the member nations of the region. Since the human factor is critical for development it is pertinent to study and link it with the overall development policy framework. In this regard, it is essential that member nations examine possibilities of reducing the cost of producing highly and semi-skilled labour through measures including cooperation in joint human resources development programmes. The paper attempts to look at some of the issues underlying collaborative human resources development programmes within the BIMP-EAGA region, including the feasibility of a growth triangle structure for less developed regions.

Economic integration through either the concept of a 'growth triangle' or a 'growth area' is consistent with the worldwide trend towards more open trade via subregional integration. The emergence of global markets for new products and services, international competition, technological change and rapid globalization has dramatically increased the integration of economic activities in many parts of the world today. Past experience has shown that such a strategy can be a catalyst in enhancing regional economic growth benefiting the participating countries. However, successful implementation of such economic integration requires collaborative efforts as well as close cooperation among the participating countries. Collaboration and cooperation are required within the whole spectrum of economic development policies

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that cut across the region. Therefore, the success of economic integration hinges on the active participation of the partner countries towards providing a conducive economic environment through the implementation of appropriate policies, sufficient incentives and adequate infrastructure.

The Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area, or currently known as the BIMP-EAGA (established in March, 1994), is an emerging growth area with the vision of economic integration using the growth triangle strategy. The BIMP-EAGA, which covers a huge land area of over 1.5 million sq km and a population of 45.6 million, is consistent with the economic policies and specific agreements between the members of ASEAN in the implementation of its Free Trade Area (e.g. AFTA). The growth area includes the whole of Brunei Darussalam, 10 Indonesian provinces in the islands of Sulawesi and Kalimantan, Maluku and Irian Jaya, Sabah, Sarawak and Labuan in East Malaysia, and the islands of Mindanao and Palawan in the Philippines. It is envisaged to follow the success of similar subregional economic cooperation formerly established within the ASEAN economy such as the SIJORI-GT and IMT-GT.¹ Close cooperation within these subregional economic groupings is expected to lead to a higher rate of economic growth, greater export competitiveness and more balanced regional development. This is to be achieved by facilitating the free flow of people, goods and services, sharing common infrastructure and natural resources, and through economic complementarity (East Asian Business Council, 1994).

An investigative report by the Asian Development Bank (ADB, 1996) had issued a viability statement of BIMP-EAGA and formulated a development strategy that is based on economic complementarities; shared natural resources, information and technology; the specialization and regionalization of production, in which the private sector is to take a leading role in expanding economic cooperation. A working group composed of representatives from the participating states covers each area of cooperation. One of the four countries is designated as lead country in a particular working group, and thirteen areas have been identified for priority development as follows:

An area of concern that needs special attention from the participating countries is human resource development (HRD) where Malaysia plays a leading role in the working group. Literature and previous studies have shown that HRD, in particular education and training, contributes significantly to economic development in terms of increased worker productivity and income. The economy becomes more productive, innovative and competitive through the existence of more skilled human capability.

¹ *SIJORI-GT* – Singapore-Johore-Riau Growth Triangle *IMT-GT* – Indonesia-Malaysia-Thailand Growth Triangle (consists of Northern Sumatera and Aceh in Sumatera; Kedah, Perak, Penang and Perlis in Malaysia; and the southern provinces of Satun, Songkhla, Narathiwat and Pattani in Thailand).

<i>Areas of cooperation</i>	<i>Lead country</i>
Expansion of air linkages	Brunei Darussalam
Sea linkages, transportation and shipping services	Indonesia
Joint tourism development	Malaysia
Expansion of fisheries cooperation	Philippines
Construction and construction materials	Philippines
Telecommunications	Brunei Darussalam
Environmental protection and management	Brunei Darussalam
Forestry	Indonesia
People mobility	Indonesia
Human resource development	Malaysia
Capital formation and financial services	Malaysia
Energy	Malaysia
Agro-industry	Philippines

Thus, the quality of human resources will determine the success or failure of any development effort, especially concerning industrialization, adopting technical change and global market response. Viewed from this perspective, HRD therefore requires special attention to complement changes in the economic profile of the proposed growth regions. All issues related to HRD need to be properly addressed and appropriate policies, recommendations and programmes must be in place.

The purpose of this paper is twofold. Firstly, we wish to examine and assess the issues underlying the effort of collaborative human resource development programmes within the intended regions. As developing nations, governments in the BIMP-EAGA region need to make important decisions, which could involve trade-offs between the need to emphasise basic and vocational education or skills training. Also, the governments need to identify existing training institutional complementarities and ensure that the limited resources can be effectively utilised. We will therefore examine economic issues, government policies and regulations, and other related issues that may hinder efforts towards achieving an effective mechanism for regional economic integration. Secondly, we will identify and discuss several policy options and models for institutional network that may help to further develop and exploit complementarities in HRD efforts within the regions.

The paper is structured as follows. In the following section, we briefly discuss the concepts of 'growth triangle', 'growth area' and economic cooperation through the perspective of regional economic integration literature. The next sections examine the need for planned HRD programmes within the BIMP-EAGA states and review the state of existing economic cooperation in HRD. In another section we identify and discuss related issues towards promoting such cooperation and consider

some of the policy implications for HRD programmes. We conclude in the final section, by summarising our main points and discussing the future direction of HRD cooperation within the BIMP-EAGA framework.

I. THE THEORETICAL PERSPECTIVE

Concepts and definitions

The 'growth triangle' concept is based on the philosophy of regional economic integration. Myrdal (1956) and Balassa (1961) define the word 'integration' as "bringing or combining parts into a whole". Economic integration may occur at the national or international level. For the national level, Kim (1992) defines national economic integration as "the process in which various economic sectors in a country are organically and self-correctingly brought together into an independent national economy". Similar processes may occur internationally, which involve three or more countries. Such regional economic integration or combination is achievable through the concept of growth triangle. In relation to this, Kumar (1991) describes the growth triangle a framework to "link three areas with different factor endowments and different comparative advantages to form a larger region with greater potential for economic growth". He argues that the differences in comparative advantage would serve to complement one another rather than competing against each other.

Overall, the idea of BIMP-EAGA is to exploit each other's complementarities for the purpose of creating borderless economies and new regional growth centres to improve the people's standard of living. Such regional economic integration, based on differences in comparative advantages, has tremendous potential for sustaining competitiveness, speeding up development, creating jobs and improving technology. Through harnessing the region's respective strengths, economic cooperation can be more cost effective and thus benefit the participating countries.

The framework

Tang (1994) suggested that the structure underlying any growth triangle concept would have a group of investing countries and a group of receiving countries. The characteristics of the investing countries are rapid economic growth, high productivity, a high level of capital investment, higher living standards due to expensive labour and real estate and scarce natural resources (including land). On the other hand, the receiving countries are less developed, have low productivity, lack capital, have low wages and an abundant labour supply and land. Therefore, the mechanism of a growth triangle is to take advantage of the more efficient infrastructure and higher skilled workers in one location, and of the lower costs and ample supply of cheaper labour and land in other locations (see Kumar, 1991). Through this approach,

the more developed regions will be the investing group, providing capital, technology and management skills. In contrast, the less developed regions will be the receiving group, providing skilled and non-skilled labour, land and other natural resources.

Earlier efforts towards economic cooperation through the idea of growth triangle within ASEAN operated within this framework. This includes the SIJORI-GT and the IMT-GT. Within this framework, Singapore and the northern states of peninsular Malaysia, in particular Penang, act as the investors in the growth triangle. In contrast, Johore and Riau (the SIJORI-GT) as well as all regions in the southern provinces of Thailand and Indonesia (the IMT-GT) are considered as the receiving countries, providing skilled and non-skilled labour, land and other natural resources for the investing countries.

The issue is whether a similar framework can be applied to BIMP-EAGA since it is observed that most provinces or states, except for Brunei Darussalam, are still less developed relative to their respective national capital regions. In addition, these provinces or states also rely heavily on agricultural products and agro- or resource-based industries. Similarity in resource endowments and economic activities are likely to make these economies compete rather than complement each other. Notwithstanding this, notable economic complementarities do exist in human resource development matter and the tourism industry, which make economic cooperation between the states in the region significant.

II. THE NEED FOR PLANNED HRD WITHIN BIMP-EAGA

Rationale

Human resources, traditionally known as labour, are vital in order to support and ensure continuous economic growth. In meeting this objective, two important issues need to be addressed. First, an adequate supply of a work force required by the economy, and second, the quality of human resources available to ensure its efficient use. Both are interrelated issues that are likely to determine the success or failure of any development effort. Following the work of Schultz (1961, 1963), Becker (1962, 1975), and Mincer (1962, 1974) human capital theory focuses on the need to invest in people in order to achieve and sustain the competitive edge. Inefficient use of available human resources will increase the labour costs that will result in higher production costs. Therefore, in order to remain competitive in the market it is imperative for all participating countries in the BIMP-EAGA to provide special attention towards developing their human resources. Close cooperation is crucial in order to formulate and coordinate various joint human resource development programmes that may bring benefits to the participating countries.

The Governments of BIMP-EAGA member countries have recognized the importance of continued investment in formal education, acquisition of relevant technological knowledge and managerial skills in order to sustain rapid economic growth. It is agreed that human resource investments are essential if the economies within the growth area are to be transformed away from a heavy reliance on primary products to producing high value-added goods. Thus, the main aim of BIMP-EAGA is to increase trade, tourism, and investments in the region through the following mechanisms:

- by facilitating the free movement of people, goods, and services;
- by sharing common infrastructure and natural resources; and
- by implementing appropriate economic activities

In relation to this, human resource development is amongst the 13 areas identified for economic cooperation within the growth area regions. It has been recognized that the majority of the subregions in BIMP-EAGA are characterized by a relatively low skilled/productivity labour force and the entrepreneurial capability to develop many of the identified opportunities does not exist in EAGA. Thus, appropriate human resource development efforts are essential to increase the capacity and capability of EAGA economies.

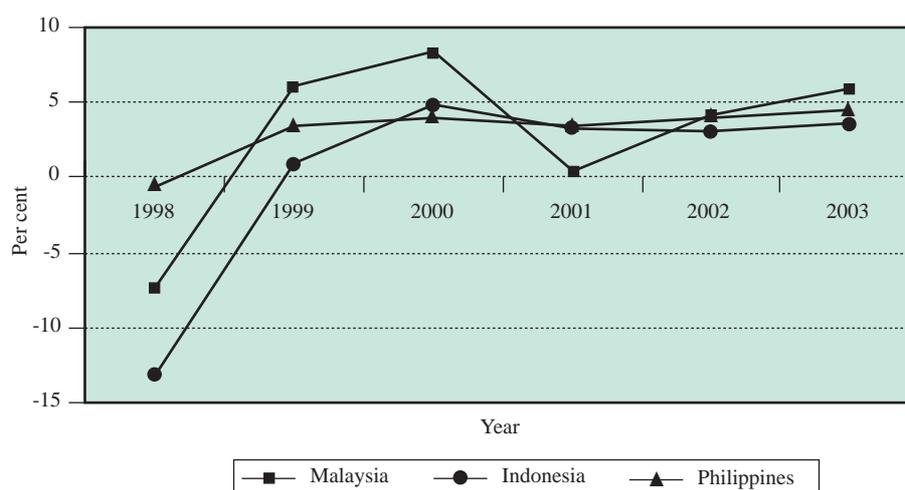
Economic achievements of the participating countries

Since its inception in 1994, BIMP-EAGA has developed rapidly. It has been recognized that strong support by the four participating governments and the active role of the private sector has contributed to this rapid development. Although the Asian financial crisis in 1997 reduced the capability of most of its member countries to sustain and promote further economic growth within the regions, recent economic indicators show that these economies are reviving. In terms of their national economy, GDP growth is picking up in most areas (see figure 1).

GDP for each country grew at 6.3 per cent in Malaysia, 4.1 per cent in Indonesia and 4.6 per cent in the Philippines during the year of 2003 and is expected to sustain this momentum in the coming years. Such a pace of growth is likely to have a significant impact on the structure of demand for labour and the types of skill required by the economies.

In terms of GDP, table 1 shows that at the national level, except Brunei Darussalam, the manufacturing and other sectors are the leading sectors in all participating economies of BIMP-EAGA. For the state of Brunei Darussalam, the oil sector contributes more than 36 per cent to its GDP, followed by government services (29 per cent) and private sector services (34 per cent).

Figure 1. Real GDP Growth, 1998-2003
(per cent per annum)



Source: Asian Development Bank.

Table 1. Gross domestic product (GDP) by sectors in BIMP-EAGA states

Country/sector	1996	1997	1998	1999	2000
Agriculture:					
Malaysia (at 1987 Prices)	9.6	8.9	9.1	6.9	6.5
Philippines (at 1985 Prices)	21.1	20.7	19.5	20.1	20.1
Indonesia (at 1993 Prices)	15.4	14.9	16.9	17.2	16.7
Mining:					
Malaysia (at 1987 Prices)	7.5	7.1	7.5	6.9	6.5
Philippines (at 1985 Prices)	1.2	1.2	1.2	1.1	1.1
Indonesia (at 1993 Prices)	9.1	8.9	10.0	9.6	9.4
Manufacturing:					
Malaysia (at 1987 Prices)	28.6	29.0	26.5	28.5	31.7
Philippines (at 1985 Prices)	25.3	25.0	24.9	24.5	24.8
Indonesia (at 1993 Prices)	24.7	24.8	25.3	26.1	26.4
Others ¹ :					
Malaysia (at 1987 Prices)	54.3	55.1	56.8	56.0	53.8
Philippines (at 1985 Prices)	52.4	53.1	54.4	54.4	54.1
Indonesia (at 1993 Prices)	50.7	51.4	47.8	47.1	47.5

Source: Asian Development Bank, 2001.

Note: Other sector includes construction, trade, government and private sector services.

However, the economic profiles of the BIMP-EAGA subregions do not seem to be reflected at the national level. Within these subregions, resource-based activities and the agricultural sector are still dominant. Although the EAGA nations had experienced dramatic industrialization for the last few decades, this has lightly touched the EAGA subregions. It is observed that each EAGA subregion is amongst the least industrialized part of its respective nation. There are a lot of similarities in terms of economic activities and human resource capabilities within these subregions. In terms of HRD, the majority of the working age population in most of the subregions has received only limited primary school education or no formal education at all. Thus, in order to improve the economic performance and the competitive position of these subregions, HRD should be given greater emphasis. Central government in all four sub-national regions should look into the possibility of developing complementarities in labour, education and the training systems through the spirit of economic cooperation.

Labour market and human resource issues within BIMP-EAGA

Table 2 shows that apart from the service sector, agriculture accommodates a significant quantity of labour in both the Philippines and Indonesia. This shows that the demand for labour in this sector is relatively high. However, labour productivity in this sector is still relatively low as reflected by its output (in terms of share of GDP), especially if compared with the manufacturing sector. For Malaysia,

Table 2. Percentage of employed persons by sector

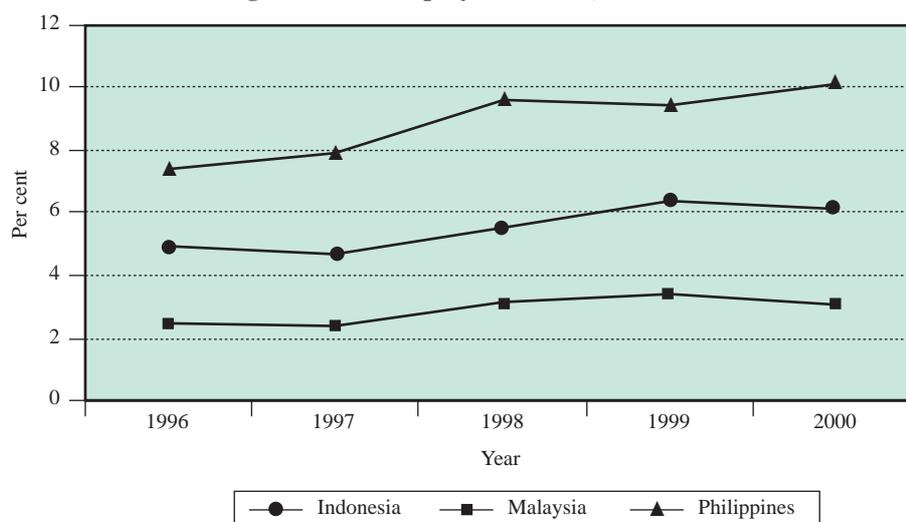
<i>Country/sector</i>	<i>1996</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>
Agriculture:					
Malaysia	19.4	17.3	18.8	18.4	18.4
Philippines	41.7	40.4	39.9	39.1	37.4
Indonesia	44.0	41.2	45.0	43.2	45.3
Mining:					
Malaysia	0.4	0.4	0.3	0.4	0.3
Philippines	0.4	0.4	0.4	0.3	0.4
Indonesia	0.9	1.0	0.8	0.8	0.6
Manufacturing:					
Malaysia	22.8	23.4	22.2	22.5	22.8
Philippines	10.0	9.9	9.5	9.6	10.1
Indonesia	12.6	12.9	11.3	13.0	13.0
Others:					
Malaysia	57.5	58.9	58.7	58.6	58.5
Philippines	47.8	49.3	50.2	51.0	52.1
Indonesia	42.5	44.9	42.9	43.0	41.2

Source: Asian Development Bank, 2001.

although at the national level labour in the agriculture sector is relatively small, within the subregion of Sabah and Sarawak, labour in agriculture is still considerable. For Sabah and Sarawak, it represents 37 per cent and 34 per cent respectively (based on 1998 figures). This, once again indicates some similarities in terms of demand for labour within the subregion states.

However, in terms of the level of unemployment, the Philippines and Indonesia have relatively higher unemployment compared to Malaysia as shown by figure 2. Nonetheless, the unemployment rate in Sabah and Sarawak may be slightly higher compared to the national figures, despite labour shortages in some sectors. In Malaysia, labour shortages occur not only in the manufacturing and the service sectors, but also in the plantation and construction industries. Thus, the Malaysian labour market has to rely heavily on the supply of foreign labour, especially for less skilled and unskilled workers. It was estimated that in Sabah alone, there are more than a million foreign workers in various economic sectors.

Figure 2. Unemployment rate, 1996-2000



Source: Asian Development Bank, 2001.

Although the importation of foreign labour has helped relieve the shortage, the heavy and increasing dependence on foreign labour supply may have undesirable social and political repercussions. It is therefore important for the Malaysian subregion nations to initiate a shift in the structure of production towards less labour-intensive through encouraging more capital-intensive means of production and higher value-added activities.

Even though comprehensive data on labour productivity is not available, it appears that labour productivity within the subregions of EAGA is generally low. For instance, labour productivity in Malaysia EAGA is lower than that of peninsular Malaysia, and it is reported to have fallen in the Philippines. The trend is also similar for all 10 provinces within the Indonesian subregions which rely heavily on agriculture products. The prevailing low productivity is highly correlated with the characteristics of indigenous subregion nations labour force, which are less educated and mostly unskilled.

In terms of labour costs, wages rates in most subregions of EAGA are generally low, particularly for Indonesia EAGA. However, wages are not the lowest in East Asia especially when compared to emerging transitional economies like China, Cambodia and Viet Nam. Table 3 shows that the average wages for unskilled, skilled labour and technical workers are relatively low compared to those at the national level, but much higher when compared to China and Viet Nam. Thus, it is unlikely that the subregion nations within BIMP-EAGA can successfully compete with these emerging economies solely on the cost of labour, especially in terms of attracting FDI (foreign direct investment) to the regions. Moreover, current investment trends within BIMP-EAGA are dominated by domestic sources and have been directed towards resource sectors of the economy.

Table 3. Comparisons of indicative wage levels, 1995

<i>Country/region</i>	<i>Average wage for unskilled labour (US\$/day)</i>	<i>Average wage for skilled labour (US\$/day)</i>	<i>Average wage for technical workers (US\$/month)</i>
Brunei Darussalam	19.5	32.5	780
I-EAGA	2.3 to 3.3	6.0 to 13.0	220
M-EAGA	5.3 to 7.3	10.8 to 13.0	320 to 400
P-EAGA	4.5 to 5.0	7.0 to 8.5	130 to 160
Indonesia	2.1 to 4.2	3.3 to 6.7	200 to 500
Malaysia	9.0 to 10.9	15.5 to 17.3	380 to 480
Philippines	4.8 to 6.2	6.4 to 6.8	150 to 223
Thailand	9.1	15.7	275 to 630
China	2.1 to 5.2	4.0 to 9.7	N/A
Taiwan	32.5	42.5	1,300
Viet Nam	1.2	1.8 to 1.9	55 to 150

Source: http://agrolink.moa.my/eaga/tab2_10.html

The current state of HRD cooperation

ADB (1996) has identified several human resource constraints in the subregions of BIMP-EAGA. It is observed that each subregion shares a common constraint that is related to the shortage of managerial, technical and skilled labour necessary for economic expansion and diversification.

Table 4. Human resource constraints within BIMP-EAGA subregion

<i>EAGA subregion</i>	<i>Human resource constraints</i>
Brunei-EAGA	<ul style="list-style-type: none"> <input type="checkbox"/> little managerial expertise <input type="checkbox"/> high unit labour costs
Indonesia-EAGA	<ul style="list-style-type: none"> <input type="checkbox"/> educational and skills deficiencies <input type="checkbox"/> high unit labour costs
Malaysia-EAGA	<ul style="list-style-type: none"> <input type="checkbox"/> lack of skilled staff vis-à-vis the development of IOFC Labuan <input type="checkbox"/> educational and skills deficiencies <input type="checkbox"/> inadequate education of migrant children
Philippines-EAGA	<ul style="list-style-type: none"> <input type="checkbox"/> education and skill deficiencies <input type="checkbox"/> high unit labour costs

ADB (1996) has proposed a strategic framework to overcome these constraints, which includes regularizing and improving the acceptability of people mobility, improving basic education, establishing high-demand training centres, promoting skill training for rural women, exploiting and developing complementarities in higher education and, encouraging research and development activities. In relation to this policy proposal, the working group for HRD under the chairmanship of the Malaysian Government has proposed several projects that could help facilitate people mobility and enhance skills training amongst workers, which includes:

- A training institute for the development of SMIs;
- A centre for technical and manufacturing training;
- A BIMP-EAGA studies centre – professorial chairs;
- Sharing of expertise in medicine and nursing; and
- An assessment of skills shortages and manpower needs up to 2005.

The aims of the proposed projects are twofold. First, to ensure an adequate supply of technically trained local personnel for resource based industries and, second, to anticipate the need for new skills and disciplines arising from the priority projects identified in the other sectors of economic cooperation within the framework of BIMP-EAGA. Thus, the creation and identification of appropriate skills training centres within the subregions of BIMP-EAGA is critical.

According to the working group, cooperation is established through identifying and linking a 'focal' institute in each subregion of the participating countries that has an interest in a particular subject, with one of those in the focal group acting either as a 'lead' or 'coordinating' institute. This is to take advantage of existing training institutional complementarities, developing new complementarities and promoting measures that could encourage economies of scale towards producing skilled workers. This could be achieved through special arrangements or MOUs to foster cooperation and collaboration on sharing expertise and training resources among member countries.

Issues and models for cooperation

The real measure of BIMP-EAGA's success may be judged through the extent of economic cooperation that is being established in the identified areas which could bring benefits to all participating states. Since its inception in 1994, little progress has been reported so far. With regard to the HRD working group, although numerous efforts and projects have been identified and planned with the spirit to promote cooperation, not many have been implemented successfully. So far, the working group has only managed to produce a Directory of Training Institutions in EAGA and is still working on the setting up of the Labour Market Information. Both projects are still way behind in terms of the main objective of this working group, which is to promote cooperation in HRD that would ensure an adequate supply of the required human resources and also to take advantage of scale economies in providing education and training to the nations.

Perhaps, the main impediment to success regarding this growth area relates to the conceptual framework of a growth triangle discussed earlier in this paper. It is observed that the economic structure of BIMP-EAGA subregions does not rest on the functional concept of a growth triangle. In order to fully functionalize the growth triangle strategy, the concept suggested that there must be at least one investing country on the one side, characterized by its relatively advanced and efficient economy to boost economic growth of the subregions of the participating states. On the other side, there may be several receiving subregions that are relatively less developed but have an abundance of cheap labour, raw materials and land. Thus, the growth triangle approach is to take advantage of both situations through appropriate economic cooperation that could generate a 'win-win situation' to all participating regions. However, in the case of BIMP-EAGA, all participating subregions seem to share similar characteristics of a less developed economy with the main economic activities relying heavily on agriculture and resource-based industries. Past experience shows that the SIJORI-GT and the IMT-GT have been relatively more successful because they embrace the necessary conditions of a growth triangle framework, through which Singapore and Penang in Malaysia act as the investing states.

Although several efforts and discussions have taken place, and it has also been recognized that the role of the government and the private sector of the participating countries are crucial towards realizing cooperation and the success of BIMP-EAGA, the implementation is still very slow. It is observed that commitment from the central governments of the participating subregions has not been encouraging. Possibly, the Asia financial crisis that cropped up a few years after the inception of BIMP-EAGA could have had negative repercussions on progress since the crisis by reducing the capacity of the member countries to maintain the necessary level of investment to support the growth of BIMP-EAGA. In addition, with regard to HRD, not many private sectors are willing to invest more in their training programmes. Apart from this, although training requirements are apparent, investing in human capital is still too costly to most governments of the participating states. Thus, without strong commitment and active support from the governments and the private sector of the participating nations, the future success of BIMP-EAGA is still uncertain.

A bigger challenge towards realizing cooperation and the success of a growth triangle strategy is partly related to its political character. The fact remains that not all participating countries are equally enthusiastic to pursue the idea of greater economic cooperation implicit in the growth triangle framework. One may raise the issue of who gains most from the whole exercise. The diverging perception of benefits to the countries involved may hinder cooperation among the participating countries and thus lead to the failure of the strategy. Furthermore, as the regions move towards greater economic integration, the frequency of disputes in the implementation of economic initiatives is likely to rise. For instance, differences in the labour mobility policy between the participating states may raise barriers in such cooperation. It is observed that high migration fees, procedural delays, difficulty in obtaining work permits and other bureaucratic barriers have restricted the flow of labour within the participating subregions. In some instances, labour brought in for training purposes is regarded as foreign and hence subject to either foreign worker levy or the foreign worker ceiling operation which may increase the cost for training.

Thus, to ensure success, it is essential for the governments of the participating states to address all issues hindering cooperation in the regions. It is important that the government and the private sector both renew their commitment towards making BIMP-EAGA a success. It is important to note that full commitment and active support from the governments of the participating countries is essential to facilitate the overall development of the growth triangle concept. Without such commitment and support, it may be difficult to omit barriers for effective cooperation. Since the private sector plays the leading role in the economies of the growth regions, it is necessary to set up appropriate mechanisms whereby consultation and coordination between the private sector and the governments of the participating states can take place. It is also necessary to encourage collaboration between private sector organizations of the participating regions regarding human capital investment.

Although there have been several suggestions put forward by ADB and also by the secretariat of BIMP-EAGA to ease labour movement and to upgrade labour skills and quality, those proposals may not be effective if appropriate mechanisms for implementation do not exist. Thus, it is essential to set up stronger mechanisms such as an institution that could plan, implement and coordinate and monitor appropriate human resource development programmes for BIMP-EAGA. Such an institution should also be responsible to initiate and enhance HRD cooperation between the subregions.

At a more advanced level, in particular higher education, the governments of the participating states may like to follow the model of the ASEAN University Network (AUN) that has been successfully implemented elsewhere. The general objective of the AUN is to strengthen the existing network of cooperation among universities in ASEAN by promoting collaborative studies and research programmes in priority areas identified by ASEAN countries. Apart from enhancing cooperation, such a network system would likely reduce the costs of conducting research and help to produce and transmit scientific and scholarly knowledge efficiently through the sharing of expertise between regions. A similar framework could be applied to promote cooperation in BIMP-EAGA since there are several higher education and research institutions established in the existing subregions (see table 5).

Table 5. Higher education and research institutions within BIMP-EAGA

<i>EAGA subregion</i>	<i>Higher education and research institutions</i>
Brunei-EAGA	<input type="checkbox"/> University Brunei Darussalam
Indonesia-EAGA	<input type="checkbox"/> Hasanuddin University <input type="checkbox"/> Samratulangi University <input type="checkbox"/> Mulawarman University
Malaysia-EAGA	<input type="checkbox"/> Universiti Malaysia Sarawak (UNIMAS) <input type="checkbox"/> Universiti Malaysia Sabah (UMS) <input type="checkbox"/> Institute for Development Studies, Sabah
Philippines-EAGA	<input type="checkbox"/> University of Philippines, Mindanao <input type="checkbox"/> Mindanao State University

There is also a need to review regulatory and administrative procedures at the national and BIMP-EAGA levels with a view to making them simpler and transparent and to ensure that new measures introduced have the effect of facilitating the progress of the growth area strategy. In addition, there must be greater understanding between government officials in the growth regions to reduce conflicts and problems that may arise. The formulation of an appropriate framework for dispute settlement should be in place so as to resolve disputes swiftly and effectively.

Regarding this, the governments of the participating countries may need to initiate a series of Memorandum of Understanding (MOU), specifically to resolve issues pertaining to HRD.

III. CONCLUSION

While subregionalism is vital for promoting growth and economic efficiency in the context of rapid globalization, the appropriate working framework is equally important in meeting the objectives of regional cooperation. This paper has argued that the progress of subregional cooperation and development in the BIMP-EAGA region has been quite slow due to many factors. These include similar economic characteristics of the participating countries, external factors such as global economic crisis and a lack of public and private initiatives. As discussed above, the role of HRD is crucial in promoting and sustaining growth. Thus, there is a need to plan, coordinate and implement HRD projects. This paper proposes several measures to solve HRD issues. Broadly, one tends to suggest that closer cooperation between public and private sectors as well as between academic and research institutions in the region is the route ahead.

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