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ROLE OF TRADE, HEALTH COMMUNICATION AND OTHER COMMUNITY DEVELOPMENT INITIATIVES IN REGION-BUILDING IN THE GREATER MEKONG SUB-REGION

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ABSTRACT

We model nine enablers having geo-economic significance for the Greater Mekong Subregion (GMS) based on the GMS focus areas – all of which have immense significance for community and social development. The subregion has massive potential for development through bilateral or multilateral projects that can benefit the entire region as well as their partner countries. We have empirically validated the enablers using Fuzzy AHP modelling technique to decipher the priority weights for cooperation with India. The findings reveal that 'transport and trade facilitation' is the most significant enabler followed by 'environment', and 'energy'. The other enablers examined in this study include urban development, health and HRD, information and communications technology (ICT), agriculture, and transport. The findings of the study would be crucial for policy-making efforts in the area of community and social development as well as for firm-level analysis in terms of resource allocation.

Keywords: *Greater Mekong Subregion, India, ASEAN, Indochina, Health Communication*

Introduction

The Greater Mekong Subregion (GMS) was conceptualised as part of a development initiative of the Asian Development Bank (ADB) in 1992. It is characterised by the partnership towards economic development among the nations sharing the Mekong River namely Cambodia, Lao PDR, Myanmar, Vietnam, Thailand and China (represented only by its Yunnan province and Guangxi autonomous region). The development potential of the subregion and the scope for development led to the launch of Greater Mekong Subregion Economic Cooperation Program (GMS-ECP). The aims of this initiative is to provide a platform to facilitate subregional cooperation among nations on high-priority projects.

The GMS has massive potential for social and community development which requires regional harmony and cooperation at the grassroots level. The Asian Development Bank (ADB) provided a solution to this issue by presenting itself as a neutral third party that can broker dialogue in the region and assist in execution of projects that have the capacity to benefit more than one nation in the subregion. The political and economic interest of the GMS are also impacted by the complex nature of bilateral relationships in the subregion as well as the existence of several overlapping economic cooperation agreements. There is an additional degree of impact by how the big economies like the US, China, India, Japan, and Australia interact with the GMS countries and among themselves to compete or cooperate for resources or opportunities. GMS, however, has faced geopolitical, economic and social challenges. For instance, Charoensri (2021) argues that the geopolitics of GMS is shaped by a three-layered order formed by rivalry between the US, China, and Japan, as well as by a set of economic and political ideologies. Vu (2014) discusses the Chinese attempt to place itself as a leader in the GMS region. The US and Japanese initiative for establishing similar diplomatic position and alliances in the sub-region may directly lead to emergence of a greater geopolitical rivalry. According to Soong (2016), China emphasised the geographical

development of GMS for its economic expansion through the Belt and Road Initiative (BRI) and the establishment of the Asian Infrastructure Investment Bank (AIIB). Through the GMS economic corridor, China will have easy access to and integration with the Southeast Asian economy. Interestingly, the implications of BRI-backed Outward Foreign Direct Investment (OFDI) of China in GMS have also been discussed by Panthamit and Chaiboonsri (2020).

Through multiple policy initiatives, India has been able to establish bilateral ties with the countries present in the GMS. India recognised the potential of looking to its east through the "Look East" policy introduced in the early 1990s laid the foundation for the cooperation and relationships that exist today. The policy involved establishing close economic ties with countries of ASEAN, Japan, Korea and other nations lying east the Indian borders. MOC-India (2020) report, "Project Development and Facilitation Framework: Opportunities in Trade and Investment for India in CLMV Countries", Discusses India's relationship with the CLMV nations, including Cambodia, Lao PDR, Myanmar, and Vietnam, as well as potential for future collaboration. CLMV is a crucial component of the GMS subregion. CLMV countries are often regarded as the region's fastest-growing economies, predominantly agri-based economy with significant future development potential. Vietnam has the most trade volume in CLMV, followed by Myanmar, Cambodia, and Lao PDR. Aside from the wealth of natural resources and low-wage labour, CLMV has considerable potential to attract international investment. Although China, Japan, and South Korea have invested in and benefitted from CLMV, the paper indicates that India has yet to fully realise CLMV's potential. China, Japan, and South Korea have profited from low labour costs, wider market access due to several FTAs, and favourable industrial conditions.

According to MOC-India (2020) report, infrastructure investment may bolster India's connection with the CLMV enabling trade and investments, through areas such as ports, marine routes, warehouses, highways, EEZs, industrial clusters/corridors, and institutional capacity in the area. Even though India and CLMV have a tight connection, Chakrabarty (2019) found that their economic links are still shaky, owing to a lack of physical connectivity and the absence of India's Lines of Credit to CLMV. A line of credit is required to increase a country's economic reach. Since the commencement of the 'Look East Policy' in 1992, India has increased its economic ties with ASEAN, according to the author. The government of India, however, changed Look East into 'Act East' in 2014, significantly intensifying India's relationship with ASEAN nations by extensive involvement in economic, cultural, and strategic linkages. Chakrabarty (2019) suggested several measures for improving India's economic ties with the CLMV. These included clarifying Indian stance on its economic diplomacy through the issue of a white paper. This will provide the partner governments as well as private participants with certainty in policy directions to be taken by the Indian Government. Having said this, the paper also proposed greater involvement of private sector in cross-border developmental projects.

In fact, there is paucity of literature on India's relations with the GMS as a congregation. Ensuring India's participation at the platform of GMS would be the key to region-building efforts. Moreover, the 'The Greater Mekong Subregion (GMS) Economic Cooperation Program Strategic Framework 2030 (GMS-2030) provides a new direction for this region. GMS-2030 is focused on three pillars *vis.* community, connectivity, and competitiveness, while adhering to essential principles of environmental sustainability, resilience, and inclusiveness. This initiative aims to construct a strong GMS community. Given the above backdrop, it is imperative to outline the focus areas of GMS to enhance bilateral trade with the GMS countries and regional competitiveness therein.

Our study thus contributes to the discourse in the following ways:

- We examine the community, social and economic enablers (based on GMS focus areas) that can enhance geo-economic cooperation between GMS and India
- We model the enablers to find out their relative weightage so that decisions pertaining to resource allocation for community development can be suitably carried out.

Literature Review

The thematic discourse on Greater Mekong Subregion (GMS) may begin with understanding the economic significance of

subregional cooperation for the local economies, the importance of cooperative efforts for the member nations and the part that each member nation can hope to play in larger scheme of things for mutual economic growth and development. The role of external partnerships is also discussed by various authors due to the region's strong geo-economic linkages with other nations. These linkages have come in form of direct colonial influence before World War I followed by the three Indochina wars that saw major powers backing opposing sides in the region (Southgate, 2020). More recently, the economic significance of the region has been recognised globally and the efforts have been put in to establish comprehensive economic ties with member nations through an array of agreements promoting cross-border trade and investment. For instance, major economies pushed for Regional Comprehensive Economic Partnership (RCEP) for formation of an integrated market between 16 countries (before India chose to withdraw) that indicated the intention of major economies like China, Australia, India, Japan and South Korea to deepen the levels of economic integration with Southeast Asia.[1]

GMS consists of some of the fastest growing economies in the world that still carry immense potential for further growth. Late 20th century saw gradual withdrawal of conflict from the subregion and a change in stance of major regional powers like Vietnam and Thailand to that of economic value addition rather than just diplomatic superiority in the region. This also initiation of cooperative efforts in the region. Mephokee et al. (2015) objectively studied the development that took place in the trade and investment of the GMS region. The paper concluded that the developments in GMS has played a constructive role in strengthening global economic cooperation as well. This stems from the importance that the economies like Vietnam and Thailand have gained as the manufacturing hubs for electronic products.

GMS-ECP and China's Belt and Road Initiative, according to Soong (2016), set the ground for the country's economic transformation and social growth. Myanmar, Thailand, Laos, and Vietnam are all connected by the East-West Economic Corridor (EWEC). China-Vietnam, China-Laos-Thailand, and China-Myanmar are connected by three South-North Economic Transportation Corridors. The Southern Economic Corridor, which connects Cambodia, Thailand, and Vietnam, is now being built, with a focus on transportation and trade facilitation. All of these factors have accelerated the growth of the economic corridor. As a result, major powers like India, Japan, France, Russia, and Australia are growing their political and economic engagement in the GMS. "Whoever can manage the GMS economy will lead the Indochina peninsula market, henceforth will command the ASEAN market", the author concluded.

Transport, energy, telecommunications, environment, human resource development, tourism, trade, and agriculture have all received financial help from the ADB and other donors. A market-oriented model needs to be adopted as a central piece for the development initiatives valuing the existence and participation of the private sector in the subregion. For the short/medium term, according to Nam & Nam (2008), most GMS nations require a step-by-step economic development programme (focused on better agricultural and simple industrial performance). In the GMS area, the authors advocate for a public-private partnership strategy for completing energy and transportation projects. Additionally, according to the authors, political instability in nations like Myanmar tends to have an adversarial impact on the region's economic progress.

A report titled The Greater Mekong Subregion 2030 and Beyond Integration, Upgrading, Cities, and Connectivity was published by the Asian Development Bank (ADB) in March 2021. GMS-2030 is based on three fundamental principles that aim to encourage a stronger sense of "Community," to attain higher levels of "Connectivity," and to improve "Competitiveness".[2] GMS-2030 will advocate for establishment of GMS community which is health conscious and environmentally sustainable. The primary focus is on enhancing the overall well-being of its residents. Post Covid-19 there has been a significant attention on strengthening the coordination of national health system. Importantly, COVID-19 has drawn attention to the necessity of effectively addressing the growing complexities of human-

[1] https://rcepsec.org/about/

[2] https://www.adb.org/sites/default/files/institutional-document/678631/gms-economic-cooperation-strategic-framework-2030.pdf

wildlife interactions, and the repercussions of climate change.[3]

Environmental protection is another key area that has been actively discussed by the members of GMS-ECP. The five strategic pillars of GMS-10-year ECP's strategy (est. 2002) included "preserving the environment and encouraging the sustainable use of shared natural resources". Furthermore, in 2006, the ADB developed the Core Environment Program (CEP), which was monitored by the GMS Working Group on Environment (WGE). CEP, with ADB funding, promotes regional collaboration for better development planning, environmental protection, biodiversity conservation, and climate change resilience. According to ADB (2018), the GMS area is made up of abundant water resources, fertile soil, tropical forests, glacial mountains, and a wide river system that together form a diverse ecosystem that can benefit future generations if preserved. In addition, the paper stresses the GMS region's environmental deterioration and unsustainable use of natural wealth. Vu (2014) agrees that some development initiatives, such as dam construction, have negative environmental and agricultural consequences (as seen in Cambodia and Vietnam).

Table 1: GMS focus areas and thematic discourse

Enablers	Source	Technical Connotation
Agriculture	Mephokee et al. (2015); Khongkan et al. (2015); Le et al. (2020); Soong (2016); Park et al. (2003); Nam and Nam (2008); Kuroiwa (2021); ADB (2021);World Bank (2007); ADB (2014) MOC-India (2020); ADB (2018); Mathai et al, (2016); Das (2015); ADB (2010)	E1
Energy	Le et al. (2020); Soong (2016); Urban et al. (2013); Vu (2014); World Bank (2007); ADB (2014) MOC-India (2020); Chakrabarty (2019); ADB (2018); Mathai et al, (2016); Das (2015); ADB (2010)	E2
Environment	Soong (2016); Park et al. (2003); Charoensri (2021); World Bank (2007); ADB (2014) MOC-India (2020); ADB (2018); Das (2015); ADB (2010)	E3
Health and HRD	Le et al. (2020); Soong (2016); Park et al. (2003); Nam and Nam (2008) Charoensri (2021); ADB (2021);World Bank (2007); ADB (2014) MOC-India (2020); ADB (2018); Chakrabarty (2019); Mathai et al, (2016); Das (2015); ADB (2010)	E4
ICT	Soong (2016); Mathai et al, (2016); Das (2015); ADB (2010); ADB (2021);World Bank (2007); ADB (2014); MOC-India (2020); Chakrabarty (2019); Kaurav, Narula, Baber, & Tiwari, (2021).	E5
Tourism	Mephokee et al. (2015); Nonthapot (2020)Mathai et al, (2016); Das (2015); ADB (2010); Soong (2016); Nonthapot (2014); ADB (2021); MOC-India (2020)	E6
Transport	Mephokee et al. (2015); Khongkan et al. (2015); Tongurai and Fujioka (2017); Nonthapot (2020); Charoensri (2021); Mathai et al, (2016); Das (2015); ADB (2010); Soong (2016); Park et al. (2003); Masviriyakul (2004); Vu (2014); Panthamit and Chaiboonsri (2020); ADB (2021);World Bank (2007); ADB (2014) MOC-India (2020); Shahriar et al (2018)	E7
Trade facilitation	Mephokee et al. (2015); Le et al. (2020) Mathai et al, (2016); Das (2015); ADB (2010); Tongurai and Fujioka (2017); Poncet (2006); Nam and Nam (2008); Urban et al. (2013); Vu (2014); Kuroiwa (2021); Panthamit and Chaiboonsri (2020); ADB (2021);World Bank (2007); ADB (2014) MOC-India (2020); Shahriar et al, (2018)	E8
Urban Development	ADB (2021); ADB (2014) MOC-India (2020); Das (2015); ADB (2010)	E9

Source: Authors

[3] Ibid

Das (2015) went on to highlight other measures India might use to increase its economic integration with CLMV, with a particular focus on the "Regional Value Chain (RVC)." The study advocated that regional integration be deepened by increasing the flow of products, services trade, FDI, and favourable policies among the nations. Das (2015) went on to highlight other measures India might use to increase its economic integration with CLMV, with a particular focus on the "Regional Value Chain (RVC)." The study advocated that regional integration be deepened by increasing the flow of products, services trade, FDI, and favourable policies among the nations with the objectives of establing regional value chains across sectors that involves participation by government and private sector across borders.

For India, CLMV presents an opportunity for Indian firms to access the subregion rich in natural resources with the availability of cheap manpower. However, India-GMS cooperation per se has not found enough attention in academic discourse. Therefore, to understand the GMS mandate, it is imperative to map the literature with the work areas (enablers) of GMS.

Therefore, to understand the GMS mandate, it is imperative to map the literature with the work areas (enablers) of GMS. Table 1 presents the same.

Focus Areas (Enablers) and their description

The Greater Mekong Subregion Economic Cooperation Program Strategic Framework 2030 (GMS-2030) was adopted in the year 2021. GMS-2030 maintains its core principles of community, connectivity, and competitiveness. In order to foster a stronger sense of "Community," GMS-2030 will strive to encourage a healthy and environment friendly GMS community that prioritizes the well-being of all its residents. This will be achieved by focusing on two primary aspects: health and the environment. To enhance "Connectivity," GMS-2030 will actively promote transportation and energy connectivity. Moreover, to achieve "Competitiveness" in the post-COVID-19 era, GMS-2030 will work towards trade facilitation and investment, agriculture and tourism, and urban development. The focus areas (enablers) are discussed as follows.

Agriculture: GMS comprises of nations sharing the Mekong River. The river basin provided the environmental factors for sustenance of one of world's most valued biodiversity hotspots.[4] The river basin also provides ideal situations for agriculture which has traditionally formed the backbone of the regional economies. Agriculture has been defined as one of the most important enablers for the development of GMS countries primarily due to the region's historic reliance on agriculture which has continued till date for nations like Cambodia and Laos. Kuroiwa (2021) investigated the agricultural value chains in Thailand, Vietnam, and Cambodia of the GMS, and found that the greater regional cooperation and integration among ASEAN countries since the early 1990s has substantiated the agricultural value chains. Also, Le et al. (2020) examined the significance of Mekong River for Vietnamese agricultural market as half of Vietnam's agricultural products are produced in the Mekong River basin.

Energy: Energy security is representing one of the core needs for any modern economy. Le and Ngyuyen (2019) studied empirical evidence to determine that energy security indeed have a positive impact on economic growth while energy insecurity have the opposite impact. ADB (2014) forecasted regarding future trends and patterns of energy consumption in the region suggests that the electricity consumption alone can grow two and half times by 2030 compared to 2010 figures. By other estimates, some countries in the GMS would be seeing three times the demand for energy by 2025 itself compared to 2012 demand.[5] This is mainly due to the existence of fast-growing economies in the region. GMS aims to target the energy security needs though a regional approach by enhancing power trading as well as information exchange regarding energy projects to learn through collective experience. GMS-2030 also mentions about giving a greater role to the private players in the energy sector.

Environment: GMS is characterised by immense natural capital in form of extremely fertile soil and abundance of water which underpins the sustainability of a variety of ecosystems in the region. ADB (2018) maintains that the environmental wealth has also been the driver of economic growth in the region for the past

[4] https://www.mrcmekong.org/about/mekong-basin/#:~:text=The%20Mekong%20River%20is%20one,PDR%2C%20Cambodia%20and%20Viet%20Nam.

[5] https://greatermekong.org/energy

two decade but the same model can be seen as unsustainable in the long run as visible from the evidence of environmental degradation in the sub-region. Long term impact of environmental damage will be observed both socially and economically. The social impact would arise from the loss of resources to almost "200 million people in rural areas that depend upon their surrounding for food, water, energy and income".[6]

Health and HRD: The gains made through economic growth and development needs to be reflected through the betterment in quality of life of the people residing in a nation. Healthcare infrastructure forms one of the necessities for doing this. However, the condition of health care and human resource development facilities still pose a challenge to the governments in GMS. The strategy for the GMS Economic Cooperation program had been based on identification of operational priorities for health cooperation for 2019-2023. Moreover, human resource development also needs to be discussed extensively in terms of the challenges that the subregion face. Le et al. (2020) found that human capital enhancement and financial development can act as enablers to expedite, for instance, Vietnam's trade to minimize its regional trade deficit. Asian Development Bank and other external partners have financially supported the region in the areas of HRD with the objective to attain holistic development of the GMS (Nam and Nam, 2008).

Tourism: Southeast Asia is rich in culture and history along with being one of the most popular bio-diversity hotspots in the world. Southeast Asia also boasts of vibrant history which can form the cornerstone for heritage tourism development.[7] These advantages can be used as tools for economic development as tourism exports which can contribute to the country's economic and community development. Recognising this, ADB (2021) suggests that GMS members are highly developed and carry huge potential for travel and tourism exports. However, the GMS countries still face challenges undermining the developments in the sector. In addition to this, the governments still face the critical challenge of maintaining sectoral growth while also preserving the biodiversity of the region which recently has been observed to have diminished in face of economic growth.[8]

Transport: Development and maintenance of transport infrastructure is key to development of most sectors of the economy. In regional context, transport infrastructure is required to facilitate the movement of goods and human capital across borders. Easier and cheaper movement of goods and people promote trade and commerce between two economies. The availability of reliable transportation infrastructure and systems also allows for the establishment of cross-border value chains that benefits the country through economies of scale and synergy with the external trading partners in the regional or global markets.[9] The GMS Transport Sector Strategies (TSS)-2030 focuses on planning, evaluation and implementation of transportation projects.

Information and Communication Technology (ICT): "Information and Communication Technology (ICT)" has become increasingly important as a contributor to the global economy. Just increasing access to mobile broadband, computing and internet acts as an enabler for social and community development. According to ADB (2021), GVCs have increased remarkably in the GMS in the last 20-25 years. This can partially be attributed to the developments in information and communication technologies. However, there is still much scope for development in the field of AI.

Trade Facilitation: Trade facilitation is key to reducing trade cost by harmonising customs procedures. GMS 2023 also focuses on trade facilitation with the aims of modernising customs procedures and SPS measures. It also aims to facilitate the development of e-commerce platform in the GMS.

Urban Development: The Urban Development Working Group for GMS was formally constituted on 1 December 2016 by the 21st Ministerial Conference to manage urban development and economic zones as new areas of cooperation in the Greater Mekong Subregion. The framework will act as a forum

[6] https://greatermekong.org/environment

[7] http://www.diva-portal.org/smash/get/diva2:856223/FULLTEXT01.pdf

[8] https://unu.edu/publications/articles/unraveling-the-drivers-of-southeast-asia-biodiversity-loss.html#_

[9] https://www.oecd.org/dac/aft/AidforTrade_SectorStudy_Transport.pdf

and mechanism for the multisector interchange of national and regional policies and strategies in urban development, and GMS corridor development, among others.[10]

Methodology

Saaty (1980) developed the AHP technique to address complex decision-making issues utilising both mathematics and psychology. In the context of complex decision-making issues like supplier selection, risk prioritising, and factor importance, among others, various studies on AHP have been conducted. The AHP approach, however, has drawbacks. The precise scale of 1–9 employed for factor comparison in pairwise comparisons cannot account for ambiguity and uncertainty in human judgement (Yang and Chen, 2004; Bakhtari et al., 2021). AHP, combined with fuzzy set theory is used to eliminate this ambiguity. A fuzzy set coupled with AHP enhances the problem's precision (Bakhtari et al., 2021). A 9-point scale was used to rate the relative importance of the criteria, as given in Table 2. The following steps were involved while implementing FAHP in this study.

Step 1: To Outline the objective/goal of the study. The goal of this study is to identify the enablers.

Step 2: Developing a hierarchy. This study has single level of hierarchy i.e., the enablers.

Step 3: To generate a pairwise comparison matrix of the criteria and establish the weight of the criteria, triangular fuzzy numbers were used Figure 1. On a 9-point scale, the relative importance of the goal-related enablers, as shown in Table 1, was described. The fuzzy weights for the criteria have been determined using a geometric mean method (GM Method).

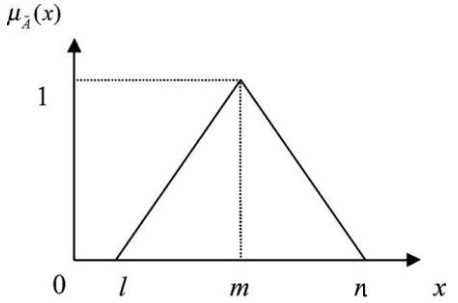

Figure 1: Membership Function for Triangular Fuzzy Number

Source: Authors

The membership function μ of a typical TFN can be defined as below:

$$\mu_{\tilde{A}(x)} = \begin{cases} 0, & x \le l \\ \frac{x-l}{m-l}, & l \le x \le m \\ \frac{n-x}{n-m}, & m \le x \le n \\ 0, & x \ge n \end{cases} \quad (1)$$

Step 4: It has been assumed that *l, m,* and *n* represent the lower, middle, and upper values, respectively, of the fuzzy evaluation for criterion *i.* Then, each criterion's fuzzy assessment is converted into a clear value using the centre of area method. Equation 2 depicts it, and the crisp value is represented in Table 5.

$$W_i = (l_i + m_i + n_i) / 3 \quad (2)$$

Table 2: Saaty's Crips Scale and Fuzzified Scale for Pairwise Comparison

Saaty's Crisp Scale	Abbreviation	Judgement Definition	Triangular Fuzzy Scale	Triangular Fuzzy Inverse Scale
1	EI	Equally Important	(1,1,1)	(1,1,1)
3	MI	Moderately Important	(2,3,4)	(1/4,1/3,1/2)
5	VI	Very Important	(4,5,6)	(1/6,1/5,1/4)
7	HI	Highly Important	(6,7,8)	(1/8,1/7,1/6)
9	SI	Strongly Important	(9,9,9)	(1/9,1/9,1/9)

The Delphi approach was employed as the data collection strategy. According to McMillan et al. (2016), the number of experts on a panel will vary depending on the purpose of the study and the resources that are available. While bringing in more participants may increase the diversity of experience, it may also have a negative impact on the results. Six professionals with expertise in international trade were chosen in the panel. Before collecting data via a questionnaire, all respondents were given a brief explanation of the study's setting, aim, and categories of impediments (Lam and Zhao, 1998).

Results

A pair-wise comparison matrix for the decision making was created through focus group decision-making, as given in Table 3.

[10] https://www.greatermekong.org/urban-development-working-group

Table 3: Initial Pairwise Comparison Matrix

	E1	E2	E3	E4	E5	E6	E7	E8	E9
E1	1	0.142857143	0.2	5	3	7	0.2	0.333333333	0.14285714
E2	7	1	5	0.142857143	3	5	7	0.333333333	0.2
E3	5	0.2	1	5	3	7	5	3	3
E4	0.2	7	0.2	1	5	3	7	0.142857143	0.33333333
E5	0.333333333	0.333333333	0.333333333	0.2	1	5	0.333333333	0.142857143	3
E6	0.142857143	0.2	0.142857143	0.333333333	0.2	1	0.2	0.111111111	0.33333333
E7	5	0.142857143	0.2	0.142857143	3	5	1	0.111111111	0.2
E8	3	3	0.333333333	7	7	9	9	1	7
E9	7	5	0.333333333	3	0.333333333	3	5	0.142857143	1

Following that, we determined the fuzzy geometric mean value *(l, m, n),* where *l* represents the lower value, *m* represents middle value, and *n* represents upper value.

For aggregating judgement of decision makers and establishing a group judgment matrix geometric mean method was utilised. The element in the final pairwise compassion matrix based on the group judgment is represented as equation 3:

$$a_{ij}^{gm} = \sqrt[K]{\prod_{K=1}^{K} a_{ij}^{k}} \quad (3)$$

where a_{ij}^{k} is an element of paqirwise comparison matrix using TFN of an individual expert k (k=1, 2, …., K) and $a_{ij}^{gm}$is the geometric mean of all experts a_{ij}^{k}. The fuzzy geometric mean in the fuzzy value is given in the Table 4, and the fuzzy weights of these challenges are presented in Table 5.

Table 4: Fuzzy Geometric Mean in Fuzzy Values (l, m, n)

0.557571	0.673654	0.819481
1.220285	1.484442	1.793495
2	2.560159	3.115431
0.857244	1.038093	1.259921
0.442544	0.558547	0.734867
0.199577	0.232893	0.284098
0.487083	0.574364	0.671549
2.960995	3.521816	4.106078
1.129831	1.429969	1.793495

In the next step we calculated the fuzzy weight using the following equation

$$(l, m, n)^{-1} = (1/n, 1/m, 1/l) \quad \text{--- (4)}$$

Table 5: Fuzzy Weight of the Challenges

0.038246	0.055794	0.083153
0.083705	0.122946	0.181986
0.137189	0.21204	0.316123
0.058802	0.085978	0.127844
0.030356	0.046261	0.074567
0.01369	0.019289	0.028827
0.033411	0.047571	0.068142
0.203108	0.291687	0.416644
0.0775	0.118434	0.181986

The following equation represented the weight of the challenges after defuzzification using the Centre of Area approach (Table 6)

Centre of Area = *(l+m+n/3)*

Table 6: Crisp Weights of the enablers

0.059064	E1	Rank6
0.129546	E2	Rank3
0.221784	E3	Rank2
0.090875	E4	Rank5
0.050395	E5	Rank7
0.020602	E6	Rank9
0.049708	E7	Rank8
0.303813	E8	Rank1
0.125974	E9	Rank4

Discussion and Conclusion

We discuss the nine focus areas of GMS considering them as enablers of community development in the subregion. Then, considering the ambiguity of the enablers and their significance in the development of GMS, the most crucial enablers were identified to solicit India-GMS cooperation, using the fuzzy AHP modelling technique. This is also

important since it aims to support policy-making efforts by identifying the primary areas of collaboration. The study further articulates that when all the nine enablers are compared, it is found that the top five enablers that can be the potential drivers of geo-economic cooperation between India and the GMS are: transport and trade facilitation, environment, energy, urban development, health and HRD. Therefore, it is clear that the important enablers are mainly concentrated in either trade issues, environmental aspects or energy aspects. So boosting sub-regional collaboration within GMS by empowering trade facilitation can be crucial in redefining and streamlining cooperation within the region and it would also strengthen India's participation with GMS.

The agenda of GMS-2030 aims to enhance the effectiveness of GMS healthcare systems in preventing, detecting, and responding to public health risks, including but not limited to COVID-19 and emerging diseases. It will also assist countries in adhering to the International Health Regulations set by the World Health Organization. This will involve adopting a unified approach that considers the interconnectedness of environmental, animal, and human health, often referred to as "One Health". Additionally, efforts will be made to bolster the protection of vulnerable communities and migrants, enhance capacity and cooperation across borders to address key health issues, and promote gender equality to establish leadership and decision-making in subregional health cooperation.[11]

The rise of East Asian nations demonstrates how trade can be viewed as a driver of economic progress. To achieve a competitive global edge, GMS nation must adopt free and fair-trade practices, one good example is AFTA wherein, by removing both tariff and non-tariff obstacles, AFTA has been able to stimulate both imports and exports among the member countries. The GMS Economic Cooperation Program acknowledges the value of protecting the environment. Environmental preservation and wise use of natural resources were two of the five strategic pillars of the first 10-year strategy framework, which was unveiled in 2002. Since then, the organization's efforts have increased in response to widespread environmental problems, many of which are brought on by the subregion's various ecosystems existing in different countries.

With a regional focus, GMS aspires to address the needs for energy security by promoting power trading and information sharing about energy projects so that everyone may benefit from shared experience. A bigger role for private companies in the energy industry is also discussed in the GMS Economic Cooperation Program Strategic Framework 2030 (GMS-2030). Urbanization is regarded as one of the most crucial variables to represent a number of essential features of a modern economy. The process of urbanization is linked to modifications in the country's economic structure, including a rise in involvement in secondary and tertiary industries as well as reduced reliance on basic industries and agriculture as sources of the GDP.
In order to achieve comprehensive urban development in the GMS, it is necessary to maintain a healthy rate of urbanization while resolving the administrative, social, environmental, and socioeconomic problems that exist in the urban centres.

With the goal of achieving holistic development of the GMS, the Asian Development Bank and other foreign partners have provided financial support to the region in the fields of human resource development. Other forms of external participation have also been introduced. Charoensri (2021), for instance, examines the issue of human trafficking, which required the US to develop and propose programs that placed a focus on human resources. ADB (2014) suggests that the ACI (ASEAN, China, India) economies should increase their educational attainment in order to enhance their human capital. In the period from 2023 to 2030, the growth of the GMS region will face challenges stemming from a decline in the productive capacity of economies due to various factors. Some of the capital assets will become obsolete as supply chains are disrupted, insolvencies will reduce the capital available for production, and there may be a lasting impact on productivity growth. The labor force's skills could deteriorate if unemployment persists. However, despite these unfavorable circumstances, there is potential for GMS economies to return to robust, sustained growth rates over the long term. This can be achieved by promoring the economic and development strategies towards strengthening

[11] ibid

human capital, adopting digital technologies, and enhancing overall productivity.[12]

It is also crucial to acknowledge that Chinese investments have improved connectivity in the region. It is anticipated that this will encourage economic growth and prosperity, particularly in Yunnan Province and the Guangxi Zhuang Autonomous Region. Three South-North Economic Transportation Corridors connecting China to Vietnam, Myanmar, and Thailand have already been constructed. The functions of China's outward foreign direct investment (OFDI) include plans for railroads, hydroelectric dams, motorways, ports, power plants, and industrial parks. Chinese economic expansion has also emphasized the need for sustainable agriculture and development programs in the GMS region. Soong (2016) discusses the potential for China to collaborate with other GMS nations. Vu (2014) outlines the negative repercussions of development projects like the construction of dams, such as the destruction of ecosystems or agricultural fields (as observed in Cambodia and Vietnam). Also, in an era of mega-regionalism, and the global trade architecture being redefined in terms of supply chain resilience, it is imperative that India need to engage more deeply with the GMS countries, and more so at the level of the congregation.

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[12] Ibid.

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