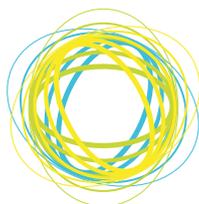


Jarkko Mutanen

**FINNISH SCIENCE, TECHNOLOGY
AND INNOVATION COOPERATION
WITH SOUTHEAST ASIA
– OPPORTUNITIES AND
CHALLENGES**



EXECUTIVE SUMMARY

This brief explores the current policy context and state of Finnish higher education, research and innovation cooperation with Southeast Asian countries. It aims to:

- 1) Identify the opportunities and challenges related to science, technology and innovation (STI) and research cooperation with Southeast Asian countries as described by government representatives, research and innovation funders, as well as the Finnish scientific community**
- 2) Define the important themes of collaboration for Finnish academia with the region**
- 3) Give recommendations for strengthening Finnish STI and research cooperation with Southeast Asian countries.**

Science, technology and innovation have become important features in policy-making in Southeast Asia, and the region is being recognized as a knowledge hub, with science and technology signifying its important role in innovation and economic advancements. The focus on STI in Southeast Asia is seen as very important for tackling future major societal challenges, for example those connected to climate and demographic changes and the consequences of environmental degradation.

Recently there has been a lot of changes in funding for STI, higher education institutions (HEI) and research in Finland. It has been difficult for HEIs in Finland to establish any significant long term STI and research collaborations, as the main focus in Southeast Asia has been in trade and business, which also includes education export. In addition, general funding for research and innovation on a national level have been cut, and there has been neither initial nor national focused research funding for Southeast Asia.

Some major challenges in STI and research cooperation in the region include lack of research funding from Finland and co-funding from Southeast Asian countries, and lack of budget and dedicated personnel to support Finnish STI and research cooperation. Some countries in Southeast Asia are also perceived as not having universities that are scientifically advanced enough for some Finnish partners; however, Singapore, whose best universities are among the top 20 in the world, requires its Finnish partners to be the best in their fields. In addition, a strong promotion of Finnish STI and research know-how and systematic dissemination of information on institutions and research cooperation possibilities are needed to lower the barriers for undertaking cooperation with partners in the region.

Taking into account the EU-ASEAN STI cooperation, the opportunities (and further challenges) related to Finnish STI cooperation with Southeast Asian countries are mirrored as above, as described by government representatives, research and innovation funders as well as Finnish academia, and map the main themes of collaboration by Finnish researchers to the region. This policy brief recommends the following actions:

- 1) Establish genuine bilateral and bi-regional funding opportunities and a national vision to support Finland-Southeast Asia STI and research cooperation**
- 2) Finnish embassies in Southeast Asia should increase their support for STI and research cooperation and knowledge of cooperation activities**
- 3) Team Finland member institutions, key STI actors and Finnish research funders should actively participate in the EU-ASEAN STI policy discussions for improved Finnish impact in the region**
- 4) The STI and research related agreements and memorandums of understanding (MoUs) in the region should be fully utilized.**

BACKGROUND

There are several policies affecting STI and research cooperation between Finland and Southeast Asian countries. In *foreign policy* and *development policy*, the activities of the Ministry for Foreign Affairs, including the Finnish embassies in the region, have mostly focused on promoting trade relations with the Southeast Asian region and supporting Finnish companies' market entry together with Business Finland representatives in the region. Southeast Asian countries have developed very rapidly in terms of research, education, technology development and innovation and are now seen as very potential economies by Finnish authorities when it comes to business. At the same time, the growing interest and need for cooperation at all levels of education is widely recognized among Finnish STI actors. The Ministry for Foreign Affairs Southeast Asia Action Plan defines future actions related to STI cooperation and education, such as strengthening the cooperation between authorities, businesses, universities and research institutes as well as civil society with Southeast Asian countries and developing higher education, research and innovation cooperation at a national and EU level with Southeast Asia countries. Unfortunately these goals have not yet been realized in practice for STI and research cooperation. In addition, general aims for development (Myanmar) and transition cooperation (a successful transition from bilateral, grant-based development cooperation to trade and economic cooperation in Vietnam) are defined in the Vietnam- and Myanmar-specific country strategies.

In the Ministry of Education and Culture's *international strategy for higher education and research 2017–2025* ("Better Together for a Better World"), education export is defined as one of seven strategic goals. The Southeast Asia countries were chosen as the priority focus areas for education export activities alongside China, Latin America and the Gulf region. Related to the strategy, a Team Finland Knowledge Network education and science advisor was placed at the Embassy of Finland in Singapore to further support HEIs and education, and STI and research cooperation with the region.

In *innovation and trade policy*, commercial interests are the main motor behind the involvement of the Ministry for Economic Affairs and Employment in Southeast Asia. Vietnam is one of their main focus countries, but other cooperation activities with the region are relatively few and scattered within the Ministry.

Scientific cooperation has been part of the partnership between the EU and the Association of Southeast Asian Nations (ASEAN) since the 16th ASEAN-EU Ministerial Meeting in Nuremberg, Germany, in 2007. Science and Technology (S&T) activities are developed through the ASEAN-EU Dialogue on Science and Technology, which takes place at regular intervals at the senior official (SOM) level between the ASEAN Committee of Science and Technology (COST) and the EU. In addition to participating in ASEAN-EU high level meetings, Finland has influenced STI policy making at the European level through the EU Strategic Forum for International Science and Technology Cooperation (SFIC). Another tool in supporting EU level research and innovation cooperation is the (Policy) Service Facility, that aims to support the Commission in reinforcing bilateral, multilateral and bi-regional policy dialogues with Third Countries and regions (including Southeast Asia) as well as identifying and addressing barriers to, and opportunities for, increased cooperation. Unfortunately Finland has not participated in the Facility. Related to this, the EU and ASEAN also operate the Joint Funding Scheme (JFS), a scheme for multilateral co-funding, but Finland does not participate in the programme.

APPROACH

The data for the policy brief was gathered through interviews with pre-defined questions between June and August 2018 with representatives from the Ministry of Education, Science and Culture; Ministry for Foreign Affairs; representatives from all Finnish embassies in the region¹; Business Finland; the Academy of Finland and the Finnish National Agency for Education. In addition, Finnish and EU policy documents related to STI and research cooperation with Southeast Asia were analysed.² An online survey that gathered input from the research community was open between June to August 2018, through which 31 responses were obtained from 14 HEIs and research organizations in Finland from the fields of social, natural, and health sciences, law, engineering and business and innovation. Key findings from the report are gathered in a SWOT table in Table 1, with the “Weaknesses” section used to describe “policy gaps” identified via a GAP analysis, and the results concluded in “Conclusions and recommendations”. This policy brief is based on a longer report that will be published in 2018, and also on focused messages from the FinCEAL Plus Indonesia-Finland Research Seminar: Opportunities and Challenges (at the Embassy of Indonesia in Helsinki on 4th April 2017) and the ASEAN-Finland Research Seminar (at the Ministry of Education and Culture in Helsinki on 25th September 2018).

Due to constant changes in the STI policy scene, the goal of this policy brief is to offer an overview specifically on research cooperation focusing on aspects not covered by the general regional policy documents.

Table 1. SWOT analysis of the research, higher education and innovation cooperation between Finland and Southeast Asia. (“Weaknesses” are used as a starting point for GAP analysis to turn them into “strengths” shown in “Conclusions and Recommendations”).

-
- 1 Finland has embassies in Indonesia (accredited to East Timor), Malaysia (accredited to Brunei [Brunei Darussalam] and Philippines), Myanmar, Singapore (with the Counsellor of Trade and Innovation Affairs and the Team Finland Knowledge Network Advisor at the Embassy), Thailand (accredited to Laos and Cambodia), and Vietnam. There is a Business Finland regional head (India and Asia-Pacific) at the Embassy of Finland in Malaysia and a Business Finland Counsellor of Science, Technology, and Innovation at the Embassy of Finland in Japan (one focus country being Indonesia) and an office in Indonesia.
 - 2 Some projects that support Finland-Southeast Asia collaboration include FinCEAL (Finnish Science, Technology and Innovation Cooperation with Europe, Africa, Asia and Latin America and Caribbean) (2013–2018) financed by the Ministry of Education and Culture to strengthen STI cooperation with the regions. The Academy of Finland has a programme on development research and the Finnish National Agency for Education (EDUFI) has the Higher Education Institution Cooperation Instrument (HEI-ICI). The Ministry for Foreign Affairs has co-financed the Business Finland’s Business with Impact (BEAM) instrument since 2015 that supports the access of Finnish companies to emerging markets. There is also the Vietnam-Finland Innovation Partnership Program (IPP, 2009–2018) contributing to the introduction of an innovation concept and policies, and focusing on the development of a Vietnamese innovation ecosystem by capacity and network building.
 - 3 As an example, FinCEAL+ Indonesia-Finland Research Seminar: Opportunities and Challenges, held at the Embassy of Indonesia in Helsinki in April 2017, also discussed the MoU between the Ministry for Research, Technology and Higher Education of the Republic of Indonesia and the Ministry for Education and Culture of Finland, and the fact its contents related to STI and research cooperation have not been fully utilized. Some key policy documents analysed are shown in the References.

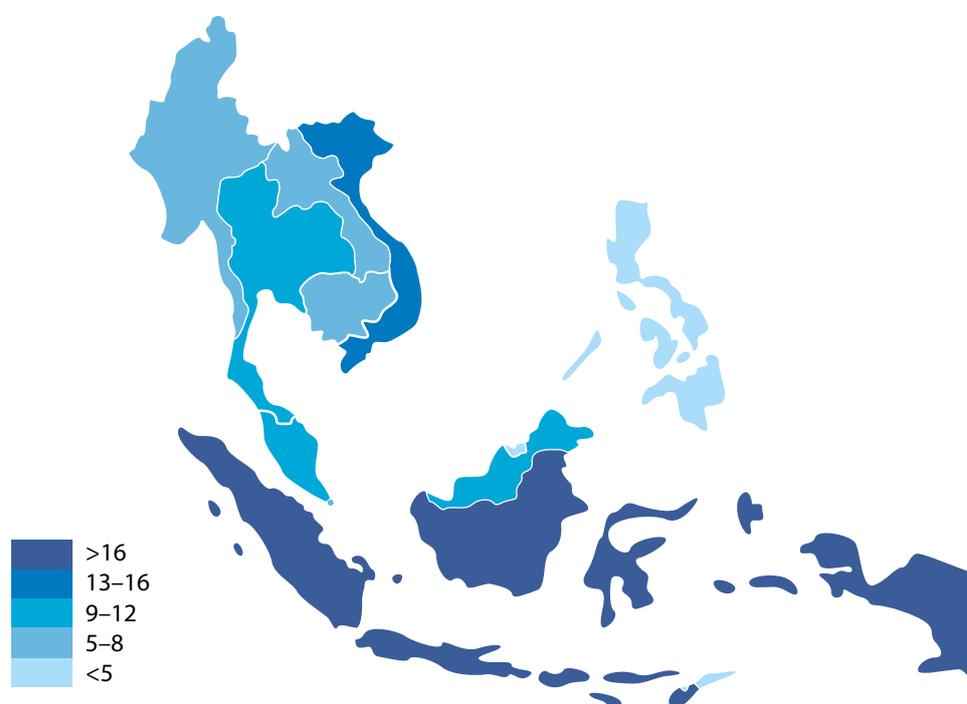
STRENGTHS	WEAKNESSES/GAPS
<ul style="list-style-type: none"> ● Existing cooperation, contacts and MoUs between Finnish actors and their Southeast Asian counterparts ● Finland has a very positive reputation in the region, and is known for e.g. education and for certain STI fields such as forestry and ICT ● The FinCEAL Initiative has strengthened researcher cooperation and mobility with Southeast Asian countries ● Finland is a “neutral country” and does not pose any “threat” for cooperation (compared to e.g. USA and China) ● Clear interest for collaboration from both sides ● Education export when supporting research cooperation 	<ul style="list-style-type: none"> ● Lack of resources: funding, human resources and time ● Pure business focus takes a lot of attention away from the support of STI and research cooperation (they should instead work hand-in-hand) ● Weak Finnish involvement in the EU-Southeast Asia STI policy dialogues ● Lack of utilizing existing MoUs with certain potentially important countries in the region.⁴ ● Limited Finnish presence and visibility in the region ● No knowledge, visibility and understanding of cooperation opportunities, needs, or policies, and a lack of national vision for Southeast Asia in Finland ● Low prioritization of Southeast Asia cooperation in Finnish organizations ● Bureaucracy related to joint projects slows down collaboration efforts
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> ● History of development cooperation with certain Southeast Asian Countries such as Vietnam ● Finland is known for its innovations in some countries in the region (Innovation Partnership Program [IPP] with Vietnam as an example) ● The Southeast Asian region is developing fast ● Finland sees the region as easy to cooperate with ● Existing STI networks and partnerships and experts in Finland to the region ● Several capacity building projects pave the road for STI cooperation ● Education export: improved synergies with higher education and research ● Recent systematic knowledge creation and dissemination about opportunities in the region ● Increased funding from international sources: Several international foundations, World Bank, Asia Development Bank, Food and Agriculture Organization of the United Nations, United Nations co-fund etc. ● Possibilities for other Southeast Asian co-funding mechanisms (e.g. with Singapore) ● Bilateral cooperation enables multi-stakeholder cooperation schemes 	<ul style="list-style-type: none"> ● Competition over cooperation partners with bigger players in the region: Finland is a small player in the vast sea of opportunities ● Lack of funding ● Corruption, poor human rights situation, political instability in some Southeast Asian countries ● Geographical distance ● Some countries do not think globally, but focus rather on national goals

RESULTS

STI AND RESEARCH COOPERATION

The research and capacity building cooperation partner countries of Finnish HEIs and research institutes are shown on the map in Figure 1. **The most common countries for cooperation mentioned by the academic respondents were Indonesia, Vietnam, Malaysia, Thailand and Singapore.** The STI and partner countries the academic respondents mention are the same as those with which Finland has the highest amount of export activities in the region⁴. The amount of Finnish export to Southeast Asia indicates also, to some extent, the STI activity level as Finland is mostly exporting electrical devices, IT devices, mechanical devices and high tech machines etc. to the countries of Southeast Asia. The region has very high competition over STI and research cooperation partners (involving those “big global players in the scene”). Thus it would make sense to focus STI and research cooperation on those countries to which “technological products” are exported. For a small country like Finland, there is a need to define regional priorities, and to establish this both Finnish business and academic actors should work together to maximize impact.

Figure 1. Southeast Asian countries mentioned on the FinCEAL Plus online questionnaire as Finland's partners on research and capacity building cooperation. The colour indicates the number of times mentioned by respondents. Not shown: Singapore was mentioned 8 times.



Respondents to the online questionnaire also listed a number of fields and themes they consider to be of special interest when cooperating with colleagues in Southeast Asian countries. The response themes are shown in a word cloud in Figure 2 and give some examples of the fields of cooperation. The size of the word correlates with the number of times it was mentioned by the respondents. The answers list food and food safety and security, health, ICT, and water or water management as the most frequently mentioned, with forestry, agriculture, education (and education export), and renewable energy also ranked quite high. Many highlighted themes listed by the researchers match well with the STI focus themes of Finland mentioned in the Southeast Asian Action Plan and country strategies⁵ and the European Commission's EU-ASEAN S&T Roadmap 2017 for STI cooperation priorities⁶.

4 Export varies depending on the country (2013 status): It is relatively large to Singapore (€293 million), Malaysia (€244 million), and Thailand (€193 million). The export to Indonesia (€139 million) and Vietnam (€89 million) is also important when the share of remaining countries is rather small.

5 Education – education export, water, health, ICT, forestry, water, agriculture, renewable energy etc.

6 Health, food, ICT, water, nanotechnology, researcher mobility, maritime transport

CHALLENGES:

All interviewees⁷ agreed that building cooperation with Southeast Asian partners on a short, and especially long term, basis is very important. It takes a while to make cooperation activities run smoothly, so long term commitment and especially funds for enabling this are needed. The existing cooperation support structures do not make it possible to establish long term partnerships: Lack of funds and lack of dedicated personnel to support STI and research cooperation in the region were mentioned as barriers by the "Team Finland interviewees" and especially those working at the Finnish embassies in the region. Some embassy representatives stated that they would be, in addition to business focus, interested in supporting STI and research cooperation in the region, but again they do not have any additional (financial and human) resources for this. Finnish universities should be active in promoting their best quality research and mapping suitable research cooperation possibilities in this region, which has a wide variety of collaboration possibilities and themes. When one is planning to establish partnerships in the region, heterogeneity and cultural differences between the countries in the region, and obtaining information about these obstacles beforehand should be also taken into an account. One important partner on regional information sharing will be the Team Finland Knowledge Network representative at the Embassy of Finland in Singapore, who will establish active cooperation within the Team Finland network and with its supporting initiatives such as FinCEAL. Unfortunately there have not been sustainable and efficient STI cooperation and research related policy discussions or communications between institutions and sectors for the region, so space and fora for these should first be established. **Below we highlight some challenges and barriers listed to STI and research cooperation with Southeast Asian partners:**



Figure 2. Word cloud. Themes and fields the online questionnaire respondents consider of special interest in cooperation with Southeast Asian countries.

1. LACK OF FINANCIAL AND HUMAN RESOURCES

The biggest barrier to cooperation identified by government and funding organization interviewees and the academic community was the lack of financial resources (funding) and human resources. There have not been any bilateral funding opportunities with Southeast Asia from the Academy of Finland, and thus there has also been no co-funding from Southeast Asian countries. Tekes' BEAM project has also been focusing mostly on supporting business initiatives in the region, for example in Vietnam and Myanmar. Finland has not joined the EU-ASEAN Joint Funding Scheme, even though there have been some discussions about this since the beginning of the funding instrument in 2016. In addition, there are some Southeast Asia-specific Horizon 2020 Research and Innovation Programme calls, but those have focused on specific, narrow fields e.g. within the fields of cybersecurity, health, and green and integrated transport (2018). Lack of budget and dedicated personnel at Finnish universities due to university budget cuts has also

7 From ministries, Finnish embassies, Business Finland, the Academy of Finland and the Finnish National Agency for Education

affected focused research cooperation towards the region. It should also be noted that several academic respondents mentioned that FinCEAL grants have provided support for establishing partnerships when other funding has not been available and FinCEAL was seen as an asset to overcome these barriers.

- **SOLUTIONS FOR CHALLENGE 1 TO LOWER THESE BARRIERS:** More national and EU level, Southeast Asia focused STI and research funding opportunities are required.

2. PERCEIVED IMBALANCE IN SCIENTIFIC LEVEL AND LACK OF COMPETENCE

Some countries in Southeast Asia are not perceived as being scientifically advanced enough for Finnish partners, which has led to STI and research cooperation being primarily focused in key countries in the region (see Figure 1). According to an interviewee, a similar situation exists in reverse for universities based in Singapore, which has some of the best universities in the world. STI and research cooperation partners from Finland wishing to work with them must be very good in their (research) fields to be able to establish long term collaborations. Finding a reliable partner, with a shared research focus, is critical for building long term research collaboration with a partner from the region. There are also challenges in establishing STI partnerships with actors from developing countries in the region (e.g. Myanmar) as their STI sector and university sector legislation is not yet complete, potentially slowing down cooperation. Partners from these countries also tend to have less experience in taking advantage of funding opportunities (particularly those such as Horizon 2020), but this can also be seen as an opportunity for Finnish STI actors e.g. in HEI-ICI funded capacity building projects to reach the “next level” in project cooperation.

3. DISSEMINATION OF INFORMATION AND COOPERATION POSSIBILITIES

According to the academic respondents, Finnish education, and especially Finnish research (and STI know-how level) are not particularly well known in Southeast Asia and vice versa. As Finland is located a long distance away from the region, Finnish partners do not have a strong tradition of academic cooperation with Southeast Asia, and even though Asia as a whole generally has quite a lot of academic cooperation with Finland, unfortunately a greater cooperation focus with countries such as China overshadows Southeast Asian cooperation opportunities. There is also a great need for dissemination of information on institutions and research cooperation opportunities in the region. In addition, the academic respondents have requested the organization of more seminars on Southeast Asian STI and research collaboration to learn about opportunities and enable networking. Efforts like those of the FinCEAL Initiative, which organized several country and theme specific seminars in both Finland and Southeast Asia, help researchers to connect and increase shared knowledge.

- **SOLUTIONS FOR CHALLENGES 2 AND 3 TO LOWER THESE BARRIERS:** Seminars and matchmaking events on STI and research cooperation possibilities should be organized both in Finland and in Southeast Asia. A genuinely strong ASEAN-wide Team Finland Knowledge Network (TFK) support and its seamless cooperation with other key actors (including the FinCEAL Initiative) in supporting the STI cooperation in the region is needed. The TFK advisor at the Embassy of Finland in Singapore has a key role in this.

CONCLUSIONS AND RECOMMENDATIONS

– GAPS AND POLICY IMPLEMENTATION STRATEGY

1. ESTABLISH GENUINE BILATERAL AND BI-REGIONAL FUNDING OPPORTUNITIES AND A NATIONAL VISION TO SUPPORT FINLAND-SOUTHEAST ASIA STI AND RESEARCH COOPERATION

● GAPS

- Currently there are no genuine bi-regional funding opportunities for Finland–Southeast Asia STI cooperation. As there is no funding available, over time it will reduce the credibility of Finland as being a leading nation in STI, interested in STI and research cooperation with the countries in the region. (Other Nordic and EU countries that have these research cooperation funding instruments available will be then chosen as partners instead of Finnish actors.)
- There is no shared national vision between Finnish policy and funding actors to support STI and research cooperation.

● RECOMMENDATIONS

- More flexible national funding instruments in Finland are needed for bilateral cooperation with Southeast Asia.
- More cooperation and discussions about funding possibilities between Finnish funding agencies (Academy of Finland and Business Finland).
- A strong national vision between Team Finland and all other key actors towards the region should also be created for STI and research cooperation.
- Grants to support partnership building in STI cooperation should be available, such as those the FinCEAL Initiative has offered.

2. FINNISH EMBASSIES IN SOUTHEAST ASIA SHOULD INCREASE THEIR SUPPORT FOR STI AND RESEARCH COOPERATION AND KNOWLEDGE OF COOPERATION ACTIVITIES

● GAPS

- Finnish embassies are focusing mainly on supporting business activities in the region.
- Some embassies are not aware of the STI and research cooperation activities in their countries.
- Government actors lack the human and financial resources to focus on research and STI cooperation.
- Many Finnish HEI actors do not inform the embassies about their research activities in the region.

● RECOMMENDATIONS

- There should be more promotion of Finnish STI and research quality and achievements towards the region to increase the demand for cooperation with Finnish experts with the region. This is already being done with education export, so the same can be done with STI and research, making it into a “concept to be exported”.
- More human and financial resources should be provided for the Finnish embassies in Southeast Asian countries to focus also on supporting STI and research cooperation in the region.
- Activate HEIs and their regional actors in Finland to give Finnish embassies more information on their activities in the region.
- A genuinely strong ASEAN-wide Team Finland Knowledge Network (TFK), and its seamless cooperation with other key actors (including the FinCEAL Initiative) in supporting the STI cooperation in the region should be established. The TFK advisor at the Embassy of Finland in Singapore has a key role in this.

3. TEAM FINLAND MEMBER INSTITUTIONS, KEY STI ACTORS AND FINNISH RESEARCH FUNDERS ACTIVELY PARTICIPATE IN THE EU-ASEAN STI POLICY DISCUSSIONS FOR IMPROVED FINNISH IMPACT IN THE REGION

● GAPS

- The EU Strategic Forum for International Science and Technology Cooperation (SFIC) has representatives from Finland and there is an EU level research and innovation cooperation support tool, Policy Service Facility for Third Countries, but for Finland, Southeast Asia has had much less focus compared to main focus countries in Asia such as China.
- Current Academy of Finland and Business Finland international strategies and funding do not support bi-regional and EU-ASEAN research and STI cooperation.
- The activities of other EU countries in the region in STI and research cooperation are not well known.

● RECOMMENDATIONS

- Activities for Team Finland to support EU-ASEAN STI policy discussions should be increased.
- Finland should join the EU-ASEAN Joint Funding Scheme research funding programme.

4. THE STI AND RESEARCH RELATED AGREEMENTS AND MEMORANDUMS OF UNDERSTANDING (MOUS) IN THE REGION SHOULD BE FULLY UTILIZED

● GAPS

- MoUs are important in Asian “cooperation culture” but research and STI related MoUs are not utilized to benefit STI and research cooperation.

● RECOMMENDATIONS

- The TFK Network advisor in Singapore should focus on fully utilizing the STI and research cooperation related agreements and MoUs in the region for improved STI cooperation possibilities (the MoU with Indonesia in education and STI cooperation is an example).

To conclude, we recommend that to improve national support for STI and research cooperation, Finland should focus on some region-specific, demand-driven research/STI collaboration fields; establish region-specific funding instruments, and agree on a national vision for Southeast Asia between Finnish ministries and funding organizations. To support this, the TFK Network advisor in Singapore is a good start, but in addition, all Finnish embassies in the region should also be harnessed to actively support STI and research cooperation in the region and to be aware of the cooperation activities and possibilities in their countries. For optimal results, Finnish business and academic actors should also consider working together, and Finnish policy actors should participate more actively in ASEAN-EU STI and research policy related activities to maximize their impact in the region.

REFERENCES

1. Mutanen J. (2018). Finnish Science, Technology and Innovation Cooperation with Southeast Asia – Opportunities and Challenges. FinCEAL Plus. Finnish University Partnership for International Development (UniPID). University of Eastern Finland. (To be published in 2018)
2. Ministry for Foreign Affairs. (2015) Suomen Kaakkois-Aasian toimintaohjelma. Available from: https://um.fi/julkaisut-aiheittain/-/asset_publisher/pNPEiXNbcwol/content/suomen-kaakkois-aasia-toimintaohjelma?curAsset=0&stId=47307 Accessed 27.9.2018.
3. Ministry for Foreign Affairs. (2016). Cooperation between Finland and Vietnam 2016-2020. Available from: https://um.fi/documents/35732/48132/cooperation_between_finland_and_vietnam_2016_2020 Accessed 27.9.2018.
4. Ministry for Foreign Affairs. (2016). Country Strategy for Development Cooperation Myanmar 2016-2019. Available from: https://um.fi/documents/35732/48132/country_strategy_for_development_cooperation_with_myanmar_2016_2019 Accessed 27.9.2018
5. European Commission: Roadmap for EU-ASEAN S&T cooperation 2017 (2016) Available from: https://ec.europa.eu/research/iscp/pdf/policy/asean_roadmap_2017.pdf Accessed 27.9.2018.
6. Ministry of Education and Culture. (2017). Better together for a better world. Strategy to promote Internationalisation in Finnish higher education and research 2017–2025. Available from: <https://minedu.fi/en/international-strategy-for-higher-education-and-research>. Accessed 27.9.2018

This policy brief is an output of the **Developing Finnish Science, Technology and Innovation Cooperation between Europe, Africa, Asia and the Latin America and Caribbean (LAC) region (FinCEAL)** initiative, funded by the Ministry of Education and Culture. The brief is a product of the author, and the responsibility for the accuracy of the data, findings, interpretations and conclusions rests with the author.

FURTHER INFORMATION

Jarkko Mutanen, Advisor, Finnish University Partnership for International Development (UniPID)

E-mail: Jarkko.Mutanen@uef.fi / Jarkko.Mutanen@gmail.com

