

THE NEW ASIA-AFRICA STRATEGIC PARTNERSHIP (NAASP): AN INFORMAL INTERGOVERNMENTAL ORGANISATION (IIGO) TO ADDRESS WILDLIFE TRAFFICKING AND BIOPRINTING

Marina Abdul Majid¹

¹ Strategic Analysis and Security Programme, Centre for Research in History, Politics and International Affairs, National University of Malaysia (UKM), 43600 Bangi, Selangor, Malaysia,
Email: marina76@ukm.edu.my / marinamajid76@gmail.com Telephone: +60 03-89215824

Accepted date: 04-08-2019

Published date: 05-12-2019

To cite this document: Abdul Majid, M. (2019). The New Asia-Africa Strategic Partnership (NAASP): An Informal Intergovernmental Organisation (IIGO) To Address Wildlife Trafficking and Bioprinting. *Journal of Islamic, Social, Economics and Development (JISED)*, 4(26), 1 - 23.

Abstract: *Although the New Asia-Africa Strategic Partnership (NAASP), an Informal Intergovernmental Organisation (IIGO), can address wildlife trafficking, this potential has remained unnoticed. Artificial rhino horns, ivory, and pangolin scales may become available in the future through bioprinting, which could complicate related law enforcement in Africa and Southeast Asia in terms of distinguishing genuine parts. Hence, the present study aims to explore whether the NAASP can be utilised to discuss wildlife trafficking problems among African and Southeast Asian countries and to deliberate on bioprinting as a technological solution. Thailand, through its 2015 declaration in the Asia-Africa Parliamentary Conference, emphasised that wildlife trafficking should be included within NAASP's scope. The transfer of technology mentioned in two declarations of the NAASP allows bioprinting to be discussed as well. The present study contributes to the sparse literature on wildlife trafficking and bioprinting elaborated in the context of the NAASP and the Asian-African Legal Consultative Organisation (AALCO), which have barely been explored by the existing literature.*

Keywords: *New Asia-Africa Strategic Partnership (NAASP), Informal Intergovernmental Organisation (IIGO), bioprinting, wildlife trafficking, Association of Southeast Asian Nations-Wildlife Enforcement Network (ASEAN-WEN)*

Introduction

Within Southeast Asia, the more well-known Association of Southeast Asian Nations Wildlife Enforcement Network (ASEAN-WEN) has already initiated a form of collaboration with African countries that are parties to the Lusaka Agreement, thus forming the Lusaka Agreement Task Force (LATF) (Asian Development Bank, 2014). However, only seven countries in Africa are parties to the aforementioned agreement. In dealing with wildlife trafficking, most

Southeast Asian countries have traced the origin of wildlife trafficking beyond the African countries which are parties to the Lusaka Agreement. The New Asian-African Strategic Partnership (NAASP), the brainchild of Indonesia and South Africa that has a wider membership of African countries, has been emphasised as an alternative forum to discuss wildlife trafficking and a technological solution, bioprinting. One of the controversial solutions for combatting wildlife trafficking is to utilise bioprinting to create replica elephant tusks, rhino horns, and pangolin scales. These artificial items can then be made available to poachers and buyers of wildlife products as a substitute for buying materials of wildlife origin.

Wildlife trafficking is defined as “the poaching or other[wise] taking of protected or managed species and the illegal trade in wildlife and their related parts and products” (US Fish and Wildlife Service, 2019). Wildlife itself means “all nonhuman animals and plants that are indigenous or exotic and also their derivatives” (Burger, Synman, & Hauck, 2001). Wildlife trafficking is a form of environmental crime which includes “illegal activities harming the environment and aimed at benefiting individuals or groups or companies from the exploitation of, damage to, trade in or theft of natural resources, including serious crimes and transnational organized crimes” (Luttenberger & Luttenberger 2017, p. 214).

In this regard, there is a problem in controlling wildlife trafficking between two continents, namely wildlife channelled from Africa being transported to Southeast Asian countries and subsequently their final destination in East Asia. Despite there being existing collaborative efforts between the ASEAN-WEN and the LATF to share intelligence and organise joint enforcement operations to counter wildlife trafficking, this illegal trade of wildlife parts consisting of elephant tusks, rhinoceros horns and pangolin scales still persists to this day. This problem has negatively impacted the wildlife population through the depletion of elephants, rhinos and pangolins in Africa killed by poachers for parts with which to supply the burgeoning economic demand in Southeast Asia and East Asia for traditional medicine, ornamentals and bush meat. Besides these issues, the wildlife trafficking problem between both continents has negatively affected law enforcement officers and policy makers, because they are assumed to be ineffective in controlling this illegal wildlife trade through existing law, policy and inter-regional collaborative arrangements. A possible cause of this problem is that the existing collaborative efforts to curb wildlife trafficking between ASEAN-WEN and the LATF merely targets seven wildlife source countries from Africa, while many more African countries are suppliers of elephant tusks, rhino horns and pangolin scales to Southeast Asian countries. Therefore, collaborate efforts between both continents need to be diversified much further and must identify other regional entities with a wider membership beyond the LATF as potential partners to Southeast Asian countries in dealing with wildlife trafficking. The Southeast Asian countries need to directly deal with their law enforcement, policy and law maker counterparts from African countries which are non-members to the LATF if they are to make strides in sharing information about wildlife trafficking networks and apprehend suspects operating between both continents to stop this transnational environmental crime from persisting. Therefore, a study that aims to explore whether the NAASP, as an Informal Intergovernmental Organisation (IIGO), can be utilised to discuss wildlife trafficking problems, which have grown into a global crime involving African, Southeast Asian, and East Asian countries, and to deliberate on bioprinting as a controversial technological solution is needed to access alternative inter-continental collaboration.

This study's focus is limited to rhino horns, elephant tusks (ivory), and pangolin scales, because they are the most commonly trafficked wildlife body parts. Inversely, this study will not cover other forms of wildlife that are being traded illegally between these two continents.

Literature Review

In Southeast Asia, scholars (Idris, 2019, p. 5; Raine & Pluchon, 2019, p. 124) have indicated there has been a high demand for wildlife products sourced all the way from Africa, such as African ivory, rhino horn, and pangolin scales meant for traditional medicine and ornamentals, that spurs the illegal wildlife trade between both continents. This has led to poaching and a thriving illegal wildlife trade between both continents. Wildlife trafficking involves organised criminal groups or loose networks normally operating across state borders in violation of those states' sovereignty. For this reason, intercontinental cooperation, especially among law enforcement agencies, is needed to combat wildlife trafficking, particularly when it spans broadly across Africa, Southeast Asia, and East Asia. Nevertheless, it has been highlighted there has been a lack of regional collaboration among enforcement agencies between Southeast Asia as transit countries and from the source countries in Africa where these wildlife products are found (OECD, 2019, p. 50, Raine & Pluchon, 2019, p. 124). Martin (2019, p. 277) has emphasised that Southeast Asia does have a form of cooperation with the L ATF. However, the ASEAN-WEN's collaboration is limited to seven members of the L ATF. Even if existing contacts among Southeast Asian and African enforcement are in place, this has been minimalised (OECD, 2019, p. 50). This has been attributed to the under-utilisation of existing communication between the police from both continents due to inefficiency, compatibility matters, long response time and corruption risks among officials (OECD, 2019, p. 50). Thus, it has been recommended to develop better cooperation and coordination among law enforcement officials on both continents, whether from source, transit or destination countries (OECD, 2019, p. 50). This raises the possibility of alternative regional organisations besides the ASEAN-WEN and L ATF cooperation efforts, which have a limited membership of the African countries where wildlife is being sourced. Therefore, it is very timely to refer to the NAASP, consisting of 54 Asian and 52 African countries whose diverse membership, especially from Africa, will provide wider contacts of source countries for wildlife. Hence, this calls for a need to research the NAASP initiatives for references within its existing documents to wildlife trafficking and the importance of technological progress to consider whether bioprinting is within its ambit.

Much of the existing literature that has focused on the NAASP thus far has been concentrated on its history and evolution, as well as on the difficulty of embedding this forum within the African Union (AU) (Kornegay & Landsberg, 2009; Shekar, 2016). Beyond its history, some scholars have briefly emphasised areas of cooperation within the NAASP, such as transnational organised crime, energy security, food security, higher education collaboration, and trade and investment (Assie-Lumumba, 2015; Rubiolo, 2016). Besides these, other areas of focus include industry, finance, tourism, information and communication technology, health, transportation, agriculture, water resources, and fisheries (Rubiolo, 2016). Only Kornegay (2015, p. 247) has briefly suggested that the NAASP would be a useful platform for highlighting Africa's problem "in terms of its ecosystemic viability and biodiversity from the predation of East-Asian criminal syndicate penetration". Building on Kornegay's assertion, this study sets out with the lofty task of investigating whether efforts have been made to bring wildlife trafficking as an issue to be discussed within the NAASP's ambit.

Within the NAASP too, it is crucial to detect whether technological progress and its transfer is given emphasis among the many initiatives if bioprinting is to be considered. Bioprinting has been defined as “the use of computer-aided transfer processes for patterning and assembling living and non-living materials with a prescribed 2D (two dimensional) or 3D (three dimensional) organisation in order to produce bio-engineered structures serving in regenerative medicine, pharmacokinetic and basic cell biology studies” (Guillemot, Mironov, & Nakamura, 2010). In this regard, a rhino’s genetic code is added to yeast in order to produce keratin, a protein normally found in the horn of a rhino, which is then combined with a rhino’s Deoxyribonucleic Acid (DNA) and other trace elements. This forms a mixture that is then cultivated in sufficient amounts to produce a bioink, which is then uploaded to a 3D printer to print out a synthetic keratin that makes up the crux of a rhino horn.

Some scholars have claimed that bioprinting may help improve conservation efforts in preserving rhinos, elephants, and pangolins from becoming extinct in Africa due to excessive poaching for the wildlife trafficking of animal parts (Ball, 2015; Berger-Tal and Lahoz-Montfort, 2018; Lenda et al., 2018; Kamminga et al., 2018; Pandika, 2017). Whether bioprinting will live up to its virtuous intent is something that African and Southeast Asian countries will have to deliberate on within the NAASP’s context. As far as policy and law enforcement are concerned, they will be the most affected parties if companies that produce these artificial animal parts manage to place their creations on the market. Therefore, it is timely to embark on this study to explore whether the NAASP has any avenues available to address wildlife trafficking and bioprinting, as these matters are currently of urgent concern.

Methodology

This study is qualitative. Primary resources consist mainly of documents such as declarations from the NAASP initiative, the Asia-Africa Conference (AAC), the Asia-Africa Parliamentary Conference, a joint communique issued by the Association of Southeast Asian Nations (ASEAN), the Chiang Mai Statement of ASEAN Ministers Responsible for CITES and Wildlife Enforcement on Illegal Wildlife Trade [thereafter Chiang Mai Statement], and a speech by Malaysia’s former Minister of Foreign Affairs with regard to its support for the NAASP. The declarations from the NAASP, the AAC, the Asia-Africa Parliamentary Conference, the joint communique and the Chiang Mai Statement issued by ASEAN are all regarded as soft law non-binding documents that may commit their state members to take certain actions as pledged. For the purpose of this study, interpretivism is being used to decipher the meaning of quoted paragraphs of these soft law documents.

In this sense, this study is not confined to the social sciences but is multidisciplinary, including the area of law. Therefore, this study adopts a socio-legal approach, defined as a “wide-ranging and varied area of research activity” that permits a diversity of methods and perspectives to be used (Cownie & Bradney, 2013). A socio-legal approach is used in this study because it transcends two disciplines, law and the social sciences, as well as the adoption of social science research methods such as content analysis to analyse secondary resources and textual analysis to interpret paragraphs from the soft law documents mentioned. This is in line with the theoretical framework of institutional liberalism, which on international organisations and the relevance of international law documents. In addition to these materials, a report by Thailand’s Department of National Parks, Wildlife and Plant Conservation to the Secretariat of the Convention on International Trade in Endangered Species (CITES) and the United Nations Office on Drugs and Crime (UNODC) document have also been consulted. Whenever relevant, this study quotes from these primary sources.

Many secondary resources have also been referred to, such as books, book chapters, journals, newspaper articles, conference and working papers, and magazines and internet materials, which have been examined through content analysis. This provided an overview on the bioprinting of artificial rhino horns, elephant tusks and pangolin scales, the formation of an IIGO, the history of the NAASP, and wildlife trafficking occurrences, especially between Africa and Southeast Asia.

The Theoretical Framework: Institutional Liberalism and Informal Intergovernmental Organisations (IIGOs)

Liberalism is an international relations (IR) theory that provides an optimistic view of state relations. This strain of IR theory purports that states may have common interests and values that might lead them to cooperate with one another rather than act as rivals in competition for power. Through cooperation it is envisaged that this would promote peace and minimise war.

One variant of liberalism known as institutional liberalism is of relevance to this study. Institutional liberalism traces its roots to regime theory, which not only focuses on formal international organisations (IOs) but also on international regimes (Heinze & Jolliff, 2011, p. 324). International regimes are sets of principles, norms, rules, and decision making procedures in a particular area (Heinze & Jolliff, 2011, p. 324). Institutional liberalism's coverage also includes informal organisations and non-binding agreements as evidenced by IIGOs. (Heinze & Jolliff, 2011, p. 324, Slaughter, 2019. p. 24). Both formal IO's and IIGO's may facilitate cooperation among states when states as rational actors perceive benefits from cooperation that outweigh potential risks. States which agree to be part of IOs and IIGO's agree to subjugate themselves to a set of rules governing their actions, a regime and international law, be it through binding treaties or non-binding documents known as soft law. Institutional liberalism claims it is not possible to guarantee that most states would abide by the rules of an international organisation or IIGO, as a defiant state could break the agreed rules despite its commitment.

For the purpose of this study, the NAASP is regarded as an IIGO. An IIGO refers to "an explicit group of associated states having explicitly shared expectations (rather than formalized treaties) that participate in regular meetings but have no independent secretariat headquarters, or permanent staff" (Vabulas, 2014, p. 1). An IIGO does not have a permanent formal governance structure in the form of a secretariat.

States form an informal alliance for the following reasons. States come together as an IIGO because they share an interest in discussing common issues affecting them, setting their agenda, and reaching a common consensus. IIGOs have exclusive and narrow membership, unlike the United Nations (UN). Through an IIGO, state representatives can socialise with one another within an informal setting without the rigid rules of formal IOs, such as a binding treaty or an agreement with legal force. An IIGO produces non-binding documents known as soft law in the form of declarations, guidelines, standards, and communiques. These documents are statements of best practices which set the future agenda for the issues that states will take measures to address within their domestic framework. Membership of IIGOs may be defined by a geographical region or area, as in the case of the NAASP bringing two relatively different continents together, Africa and Asia, which are comprised mostly of developing countries (Rubiolo, 2016).

Another feature of an IIGO are the regularised meetings among its members. “Regularised” connotes meetings that do not necessarily occur according to a fixed schedule but those that are held when states decide that there is a need for them. These meetings are not necessarily a one-off occurrence since future meetings can be organised. When these meetings do occur, states will discuss matters of common concern, share information, build consensus, and then agree on a form of joint action. Subsequently, this leads to a policy outcome whereby states agree to act collaboratively on a particular issue, agree on an informal rule to guide their conduct, or even decide not to act at all. The policy outcome could be in the form of soft law documents, as mentioned earlier.

IIGO meetings can be held at alternating locations by states willing to host them. IIGOs can organise summit meetings to be attended by heads of government or states (HOG/S), which could deepen and improve communication among member states. These summits will enable HOG/S to identify issues of concern informally and reach a compromise through cooperation. After these summits, public statements are typically made by the organiser of the meeting in the form of a communique of shared commitments and joint action. However, it is not necessary for documentation to be produced; a joint production of research or consolidated best practices will suffice.

Over time, an IIGO can evolve into a more formalised international organisation with a permanent secretariat. This may occur if the issues handled have become more complex, there are more challenges to cooperation, or there are more demands by member states that need to be managed systematically in an organised manner. A minimal secretariat could then be formed to facilitate communication among states, manage and produce the related documentation, and to call for meetings whenever permissible, based on a small budgetary allocation agreed to by the member states.

States have chosen to form IIGOs for the following reasons. First, IIGOs lower the costs of sovereignty as little autonomy is sacrificed. Second, IIGOs provide states with the flexibility to avoid binding commitments in view of any unanticipated outcome or situation that might evolve over time. IIGOs also permit states to have more control over information pertaining to their national interest and the distribution of it, as they can be transparent or withhold information. Moreover, IIGOs also lower the cost of negotiations by creating opportunities to reach agreements more readily, especially during an economic downturn or attack by terrorists. Quicker decisions are made in a unified manner, unlike formalised bureaucratic IOs, whose rules impose restrictions and delay decision making. Additionally, soft law documents emanating from IIGOs garner more domestic support in their implementation as compared to binding treaties and agreements that require debates in parliament and cabinet approval before a state can commit itself to such cumbersome documentation. This is because there can be less politicization on a controversial issue discussed at the domestic level. The NAASP has been labelled as an IIGO, and its characteristics are depicted in Figure 1, as mentioned previously.

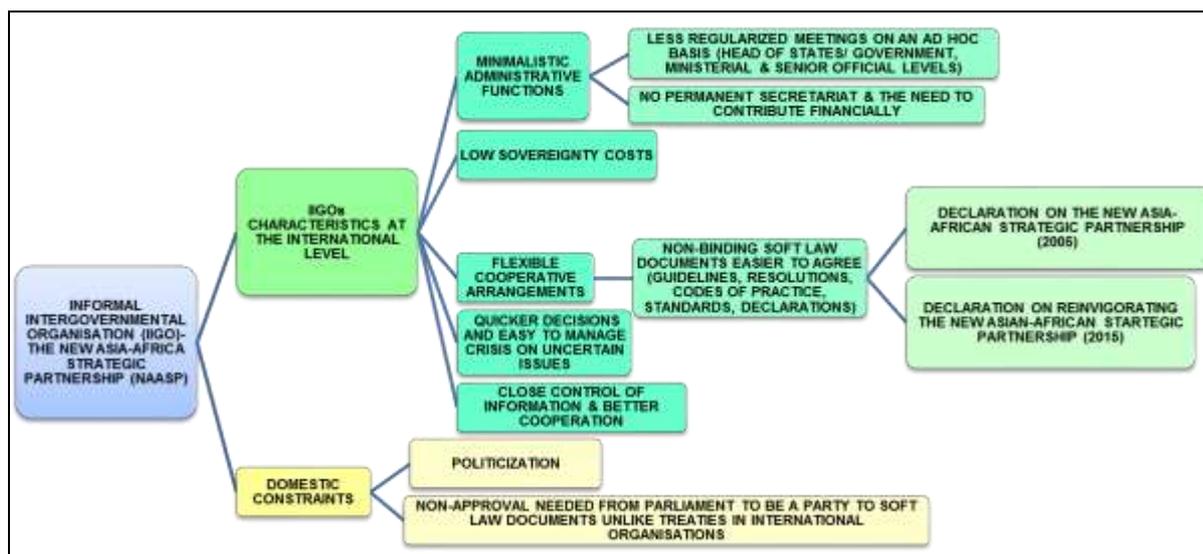


Figure 1: Theoretical framework explaining states cooperation through Institutional Liberalism

In fact, the likelihood of strong or weak states resorting to IIGOs is debatable. Creutz (2017, p. 5) argues that “weak states are more prone to create and use informal institutions than powerful states if their leverage in global politics is not neglected within existing formal institutional arrangements”. This is illustrated by the Group of 77 (G-77) comprising the least developed and developing countries, a form of IIGO that allows them to articulate their views on trade issues affecting them at the United Nations Conference on Trade and Development (UNCTAD) (Vabulas & Snidal, 2012). Developing countries that have since achieved their independence throughout the 1950s and 1960s and during the Cold War formed the Non-Aligned Movement (NAM) in 1961 without any permanent secretariat, but as a form of coalition to make their stance of impartiality clear regarding the politics of two competing superpowers at that time, the United States (US) and the former Soviet Union (Strydom, 2007). Thus, NAM is one of the oldest IIGOs to have been formed, and calls into question the recent attention paid to IIGOs as a new development brought about by developed states in the form of the Group of Seven (G7) and Group of Twenty (G20) countries. Developing states stand a better chance as a loose coalition in terms of coordinating their own efforts and speaking as one voice, as in the form of NAM. Thus, IIGOs are not a recent trend, but one that has been long practised by developing states.

Wildlife Smuggling between Africa, Southeast Asia, and East Asia

The loss of elephants for ivory

Ivory originating from Africa passes through Southeast Asian countries to its final destination in either China or Vietnam. In Malaysia, the Royal Malaysian Customs (RMCs) recorded two confiscated cases of ivory in 2012, three cases in 2013, two cases in 2014, six cases in 2015, nine cases in 2016, and four cases in 2017, originating from Africa (United Nations Office on Drugs and Crime 2017, p. 29). In 2011, 15 tons of ivory were seized at Malaysia’s Port Klang, which originated from Mombasa in Kenya (“S’gor customs”, 2011). Approximately 1,000 elephant tusks were again found in Port Klang in 2012, destined for China but originated from the West African port in Togo (Corben, 2012). In July 2016, a ton of ivory worth RM 1 million

(US\$ 244,480.00) was flown in from Turkey but had originated from the Democratic Republic of Congo (Choong, 2016). In July 2017, a Vietnamese national possessing 36 kilograms of ivory was arrested at the Kuala Lumpur International Airport (KLIA) after having travelled from Addis Ababa on Ethiopian airlines (“Malaysian Customs”, 2017). In March 2016, two Vietnamese were caught at the KLIA with 101 kilograms of ivory believed to be bound for Hanoi, Vietnam (“Malaysian Customs”, 2017). Authorities at Juba Airport, South Sudan, seized 1.2 tons of ivory in 25 crates on 17 June 2016 from an Ethiopian Airlines cargo from Entebbe, Uganda that would have been flown to Cairo, Egypt and then to Malaysia (Cakaj & Lezhnev, 2017, p. 7). In December 2017, a 200-kilogram consignment of ivory was stopped at the airport in Harare, Zimbabwe, whose final address was Kuala Lumpur, Malaysia (Thornycroft, 2018). In May 2015, 4.3 tons of ivory, originally from the Democratic Republic of Congo and destined for an address in Laos, was confiscated by the Thai authorities (Ghosh, 2015). Malaysia’s former Minister of Natural Resources and Environment, Wan Junaidi Tuanku Jaafar, once stated that results from the DNA analysis have indicated that ivory seized in Malaysia had come from Gabon, the Democratic Republic of Congo, Ghana, Tanzania, Mozambique, Zambia, Uganda, Kenya, South Sudan, and the Central African Republic (“Malaysia to join”, 2016). Quite recently in July 2019, Singapore seized 8.8 tonnes of ivory originating from Africa but bound for Vietnam (Baxter, 2019).

Sacrificing rhinos for their horns

Besides ivory, Malaysia is also a transit country for the smuggling of rhino horns. Rhino horns weighing 51.25 kilograms in total, which had been falsely declared as artwork, were seized on April 7, 2017 at the KLIA’s Free Trade Zone’s cargo warehouse by the RMC (Brown, 2017). These rhino horns that originated from Mozambique were flown by Qatar Airways to Malaysia (Brown, 2017). Prior to this, rhino horn seizures also occurred in Hong Kong, Thailand, and Vietnam (Brown, 2017). Mozambique’s immigration and custom officers have been questioned about how a large illicit shipment could be loaded onto a plane undetected, implying suspicious activities at its airport (“Mozambican police”, 2017). Malaysian and Mozambican authorities, as well as Interpol, have all collaborated to resolve this case (“Mozambican police”, 2017). In August 2018, the RMC seized 50 rhino horns worth US\$ 12 million at a postal aviation centre located at the KLIA’s Free Commercial Zone bound for Vietnam (“Malaysia seizes”, 2018).

Other cases of rhino horns smuggled into Southeast Asia between 2017 and 2018 also involved Vietnam and Laos. In March 2017, 46 horns originating from Kenya were seized at Hanoi’s Noi Bai International Airport (TRAFFIC, 2018). In February 2018, Singapore jailed a Vietnamese who smuggled eight pieces of cut horn and shavings in a flight from Dubai to Laos PDR, transiting through Singapore (TRAFFIC, 2018). In July 2018, a Vietnamese was stopped at Tan Son Nhat airport for smuggling 12 rhino horns from Angola (TRAFFIC, 2018). Thus, besides ivory, Malaysia and Singapore have been victim transit countries for the rhino horn trade that originates in Africa. Quite recently in July 2019, Vietnam also seized 125 kilograms of rhino horns from an Etihad flight coming from the United Arab Emirates (Baxter, 2019).

Reduction of pangolins

Pangolin scales are also part of the lucrative wildlife trade between Africa, Southeast Asia, and East Asia. In December 2016, about 670 kilograms of African pangolins were intercepted at Yaounde-Nsimalen Airport in Cameroon that would have transited through Malaysia on their way to China or Vietnam as their final destination (“Pangolins destined”, 2016). In July 2016 as well, Hong Kong authorities seized 4.4 tonnes of pangolin scales that also came from

Cameroon (“Pangolins destined”, 2016).

From May until August 2017, there were six seizures of African pangolin scales in Malaysia, weighing a total of 6,695 kilograms (Wong, 2017). Five seizures were at the KLIA and one was at the Sepanggar Port in Kota Kinabalu, Sabah (Wong, 2017). For the pangolin seizures in 2017, seven export and transit countries were involved, namely the Democratic Republic of Congo, Ethiopia, Ghana, Kenya, Nigeria, Turkey, and the United Arab Emirates (Wong, 2017). In May 2017, 407 kilograms of pangolin scales that originated in Ghana were seized at the KLIA (“Malaysian authorities”, 2017). Ghanaian authorities also arrested three members of the wildlife trafficking syndicate who admitted smuggling pangolin scales to Malaysia in July 2017 (Wong, 2017). Moreover, ten sacks of pangolin scales totalling 304 kilograms were also seized at the KLIA, believed to have originated from the Democratic Republic of Congo and then to have been flown to Kenya and then Dubai before arriving in Malaysia (“Malaysian authorities”, 2017). In September 2018, 2.1 tonnes of pangolin scales were seized at the West Port in Port Klang, Malaysia (Nor, 2018). Most of these pangolin scales had been brought from South Africa, Ghana, and Cameroon for the Vietnamese and Chinese markets, where these scales are used in traditional medicine (Nor, 2018). Singapore also seized 11.9 tonnes of pangolin scales originating from the Democratic Republic of Congo in July 2019 (“Singapore seizes”, 2019).

Bioprinting: The Contentious Solution for Curtailing Wildlife Trafficking

The bioprinting of a rhino horn starts with a rhino keratin gene being inserted into yeast (Paul, 2015). The yeast as the host organism excretes a considerable amount of rhino keratin, which is filtered and mixed with other components constituting the horn, such as sulphur, calcium, and potassium (Corbyn, 2015). Then, rhino DNA is added to the rhino keratin mixture and uploaded to a 3D printer to print out the horn. Having rhino DNA on hand makes it possible to check that the printed horn indeed originates from a rhinoceros.

Currently in the market, three companies are in the process of producing artificial rhino horns, namely Cerato Tech, Rhinoceros Horn LLC, and Pembient. Pembient uses bioprinting to print out rhino horns, which are expected to be on the market by the year 2022 (Peters, 2018). Pembient anticipates that its venture into rhino horn production will be successful and expects its business to expand to bioprinting pangolin scales, elephant tusks, and tiger bones (Trani, 2018).

The production of artificial rhino horns can be used for various purposes. Pembient intends to leave some rhino horns in the wild in Africa for poachers to find for export, produce a powdered form of horns, carvings, an essence of rhino horn for skin care products and medicine, and rhino beer (Trani, 2018; Miticus, 2018). The consumption of rhino horn is claimed to reduce hangovers from alcohol consumption, fever, impotence, and perhaps even cure cancer (Corbyn, 2015). For these reasons, the rhino horn is in high demand in China and Vietnam. Pembient hopes that by introducing artificial rhino horns into the market, it will drive down the prices of original horns (Actman, 2015).

The same can be said for the production of artificial ivory through bioprinting. It is hoped that “[m]ixing substantial volumes of bioprinted ivory into the supply chain would not only increase supply and reduce the price, but also create information uncertainty among investors as to whether they are buying genuine ivory” (Lenda et al., 2018, p. 277). Such a tactic has already succeeded in combatting the shark fin trade and should thus be tried with respect to rhinos and elephants (Lenda et al., 2018, p. 277). Sceptics, however, have argued that the introduction of

artificial rhino horns will only worsen the issue of poaching because it will create a higher demand in China and Vietnam for real rhino horns, thereby driving prices upwards (Miticus, 2018). It could also create a two-tier rhino horn market, one for artificial and another for genuine horns, both operating simultaneously.

The bioprinting of artificial rhino horns would certainly cause detection problems among law enforcement agencies, especially in transit and final destination countries in Southeast Asia and East Asia. Artificial rhino horns would make it tougher for law enforcement agencies, especially the departments of wildlife and customs placed at a country's borders, to detect them as such. Some of the developing countries in Southeast Asia and East Asia may not have the scientific knowledge to distinguish genuine rhino horns from artificial ones. Actman (2015) has reported that Vietnam might not have the enforcement capacity to regulate both a rhino horn black market and the legal one. Wildlife forensics perform a biological test to detect whether a rhino horn is genuine by tracing the rhino DNA. However, this can be time-consuming and expensive for enforcement agencies, unless they have trained personnel and nearby laboratories at the country's border that can instantaneously test rhino horns for authenticity.

In any case, Pembient conducted a survey to gauge whether the Vietnamese population are prepared to accept artificial rhino horns and obtained a positive 45% response (Corbyn, 2015). This being the case, enforcement agencies who deal with detecting the authenticity of rhino horns or elephant tusks in the future may end up with Pembient's artificial products. These enforcement agencies will have to deal with the difficult scientific challenge of identifying the products as either genuine or artificial. Therefore, transit and destination countries must acquire a knowledge of bioprinting and wildlife forensics if they are to determine whether any influx of rhino horns or elephant tusks in their countries has been produced through such a method. Pembient should also be willing to make available the rhino and elephant DNA used to produce bioprinted rhino horns and elephant tusks to enforcement agencies in Southeast Asia, East Asia, and Africa, thus allowing them to trace these artificial animal parts through scientific tests.

Leveraging on the New Asia-Africa Strategic Partnership (NAASP) to Complement the Association of Southeast Asian Nations' (ASEAN) Efforts to Combat Wildlife Trafficking

The NAASP can trace its roots to the Asia-Africa Conference (AAC) held in Bandung, Indonesia in 1955 (Timossi, 2015). A total of 29 newly independent countries under the leadership of Burma (Myanmar), Ceylon (Sri Lanka), India, Indonesia, and Pakistan attended this conference to discuss peace, security, and economic development matters. The theme of the AAC was "The Spirit of Bandung", which led to the formulation of the ten principles of Bandung (Timossi, 2015). These newly emancipated states were united in asserting their impartial ideological position towards the Western bloc led by the US and the Eastern bloc headed by the former Soviet Union, both of which were embroiled in a bitter Cold War (Ginting, 2015).

The Asian-African cooperation was revitalised after seeing no significant developments since 1955. Two preparatory meetings were held; the first, known as the Asian-African Sub-Regional Conference I (AASROC I), was held in July 2003 in Bandung, while the second, known as AASROC II, was convened in South Africa in March 2004 (Alatas, 2005). As part of the outcome of both these meetings, decisions and recommendations were contributed to the Asian-African Summit and the Commemoration of the Golden Jubilee of the 1955 Asian-

African Conference, which was held in Indonesia on 22-23 April 2005 (Rubiolo, 2016). The Declaration of the NAASP promoted multilateral cooperation in the areas of political solidarity, as well as economic and socio-cultural cooperation (Rubiolo, 2016).

The NAASP is a good example of an IIGO involving a group of Asian and African states having shared expectations though the relations are not cemented through a formalised treaty. Rather, the outcome is a soft law document like the Declaration of the NAASP, which outlines the aspirations that these states strive to achieve. Moreover, these Asian and African states can be regarded as like-minded countries that have come together to form their own exclusive club comprising the least developed and developing countries, whose primary interest is economic development and growth, so as to uplift themselves from the shackles of poverty wrought by the yoke of colonialism. As is typical of an IIGO, in the period 1955– 2005 or right up to the Asian-African Summit, this loose coalition of Asian-African states did not have an independent secretariat to manage their affairs. Two geographical continents had membership in this coalition, Africa and Asia. Moreover, this loose coalition of Asian-African partnering states also held regularised meetings, as needed, to discuss common issues of concern, thus ensuring collaboration as in the case of AASROC I and AASROC II.

Institutionalising the NAASP through regular and structured meetings as attempted by the Asia-African Summit held in Indonesia in 2005 by convening summits every four years and holding ministerial meetings every two years has not been effective (Ginting, 2015). This has been attributed to a lack of commitment and funding among participating countries. In the outcome document from the commemorative Asian-African Summit held on 19-24 April 2015 in Indonesia, paragraph 29 of the Declaration on Reinvigorating the New Asian-African Strategic Partnership similarly emphasises rotating its chair every four years, having a foreign minister's meeting every two years, and organising annual meetings by the co-chairs ("Declaration on Reinvigorating", 2015). Additionally, an Asian-African Centre will be established in Indonesia to boost South-South Cooperation (Timossi, 2015). While the 2015 pledges made in the said Declaration sound promising, it will likely suffer the same fate as the 1955 Bandung Conference and the 2005 Asian-African Summit if states do not commit finances and human resources to these initiatives. Thus, NAASP, as an IIGO, appears to be slowly gravitating towards institutionalism at least on paper; making it a reality is quite another matter.

Figure 2 shows the evolution of the NAASP. Before 2005, the NAASP still lacked a permanent secretariat, and formal meetings among heads of states or governments, ministers and senior officials were irregular. Immediately after the Asian-African Summit of April 2005, pledges were made to form a permanent Asian-African Centre in Indonesia and to have more frequent regularised meetings among officials from Southeast Asia and Africa to create closer and more effective relations. Figure 2 shows the signs of the NAASP moving from a loose IIGO to one which aspires to be a formal international organisation in line with institutional liberalism. The gradual shift from an IIGO to an international organisation cannot be predicted accurately, as it depends on the financial pledges and commitments made by members to facilitate this change.

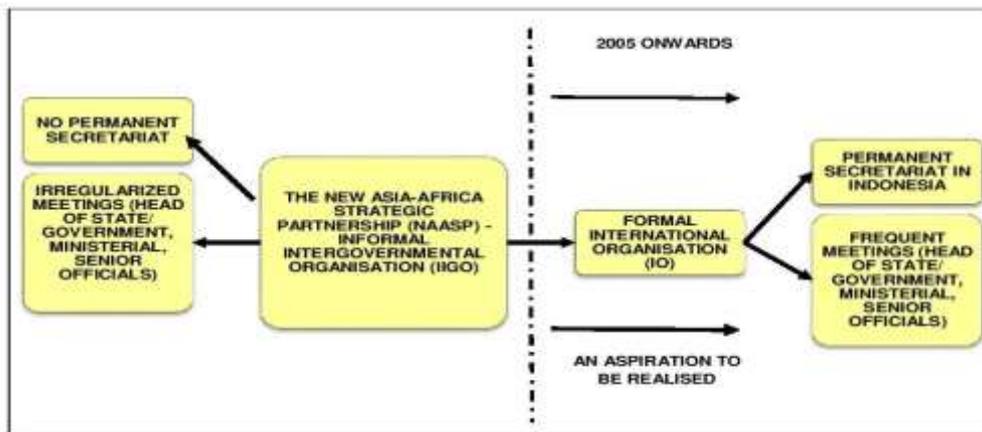


Figure 2: The eventual evolvement of the NAASP into an international organisation based on Institutional Liberalism

Attempts by South Africa in 2013 to bring the NAASP within the overall framework of the AU in terms of its structure and processes to give it more clout have not materialised (Kingah & Akong, 2015, p. 14). On Africa’s part, its AU Commissioner for Economic Affairs, Maxwell Mkwezalamba, met in 2012 with the ASEAN Secretariat in Jakarta and passed a Memorandum of Understanding (MoU) to ASEAN. However, ASEAN has been silent as far as a response to this MoU is concerned (Kingah & Akong, 2015, p. 14). Hence, strong political commitment by both parties is needed to ensure collaboration and solidification of the mechanisms which would provide structure to their operations so that institutionalism in terms of the NAASP may finally be realised.

Malaysia holds the view that the Asian-African Summit and the NAASP could “add value to [existing] initiatives [i.e., South-South Cooperation and ASEAN] by strengthening inter-regional cooperation among the countries of Asia and Africa” (Albar, 2005). It is because of this that there is a need to push for collaboration on wildlife trafficking between the two continents, which should be brought within the existing ambit of the NAASP.

Both the Declaration on the New Asian-African Strategic Partnership (“Declaration on the”, 2005, p. 4) and the Declaration on Reinvigorating the New Asian-African Partnership (“Declaration on Reinvigorating”, 2015, p. 3) have emphasised that transnational organised crime would be one of the eight areas of cooperation. The trafficking of wildlife, be it elephant tusks, rhino horns, or pangolin scales, from source countries in Africa to transit countries such as Thailand, Malaysia, and Singapore, transcends the borders of states and is thus transnational organised crime. African and Southeast Asian countries can both meet the call of NAASP declarations for close cooperation on transnational organised crime by collaborating to combat wildlife trafficking.

Whenever there is an organised inter-regional workshop concerning the environment between both continents, the event should be leveraged upon for collaboration. An example is the United Nations Environment Programme (UNEP) – NAASP Workshop on Environment Law and Policy that was held both in Jakarta and Bandung, Indonesia from 12-16 December 2006 (Sherman, 2008, p.15). The outcome document from this workshop was the Bandung Roadmap for Advancement of Environmental Law in Support of the NAASP (Sherman, 2008, p. 15). The Bandung Roadmap outlined the need for Asian and African countries to exchange expertise by conducting a forum and mainstreaming environment issues into law and policy

(Sherman, 2008, p. 15). Secondly, emphasis has been given to capacity building, especially in implementing Multilateral Environmental Agreements (MEAs). For instance, both African and Asian countries can discuss the extent to which they have implemented the provisions of the CITES and the impediments they face in doing so. At the same time, Asian and African countries should endeavour to harmonise their environmental laws, policies and standards with regard to the intersection of wildlife trade and the importance of the environment, as emphasised by the Bandung Roadmap (Sherman, 2008, p. 15). After all, Asian and African countries will face difficulties if their laws are not standardised, especially in cases of extradition and mutual legal assistance (MLS) in criminal matters involving apprehending wildlife traders with extensive networks across borders. Therefore, the harmonisation of laws should be considered by the NAASP countries as recommended by the Bandung Roadmap. Lastly, the Bandung Roadmap has also recommended the establishment of an informal network for environmental law and policy among experts, officials and other stakeholders through which to exchange information, best practices and educational materials utilising information technologies facilitated by UNEP (Sherman, 2008, p. 15). Taking a cue from the Bandung Roadmap, officials from both continents from wildlife departments, police forces, customs agencies, anti-corruption agencies, anti-money laundering units, militaries, state intelligence services, and other enforcement agencies should meet frequently to discuss the modus operandi of wildlife trafficking networks and to share intelligence. They should also organise joint training and exercises to share best practices; this type of activity can overcome cultural barriers and prejudices and familiarise and deepen relationships. Law enforcement agencies and the judiciary between the two continents should also gather at workshops and familiarise themselves with foreign laws with a view to bringing wildlife traffickers to justice.

In order not to duplicate existing efforts by the Asian-African Legal Consultative Organization (AALCO), which is also addressing wildlife trafficking within its ambit as a formal international organisation, the NAASP should invite the AALCO to be part of its initiative and to offer its recommendations. The AALCO's inception can be traced to the Asian Legal Consultative Committee (ALCC) formed in 1956, one year after the Bandung Conference (Bakshi & Pandiaraj, 2012, p. 5). The ALCC was an advisory body of legal experts that was meant to facilitate an exchange of ideas on legal matters of concern among Asian countries (Bakshi & Pandiaraj, 2012, p. 5). In encouraging the participation of African countries, the ALCC changed its name to the Asian-African Legal Consultative Committee (AALC) in 1958 (Bakshi & Pandiaraj, 2012, p. 6). As with the NAASP, the members of the ALCC, which would eventually be known as AALCO, by 2001 had a common history tracing back to the Bandung Conference of 1955. When it was decided in 2000 that the ALCC would become a permanent international organisation rather than functioning on an *ad hoc* basis with its term renewed every five years, India was chosen to house its secretariat (Bakshi & Pandiaraj, 2012, p. 7). Since then, the AALCO has secured a place among other IOs, unlike the NAASP, which is still a loose IIGO. The only drawback of the AALCO is that it consists of 47 members from Asia, the Middle East and Africa, unlike the NAASP's larger membership of 106 countries (Ministry of Foreign Affairs, Republic of Indonesia, 2015).

Simultaneously with the 56th session of AALCO held in May 2017 in Nairobi, Kenya, Kenyan and Chinese officials co-hosted a side event on combatting illegal wildlife trade (Muthethya, 2017, p. 1). At AALCO's ceremony of the said session, Kenya's Deputy President William Ruto encouraged AALCO members to collaborate with one another in containing illegal wildlife trade through information sharing capacities (Badmus, 2017). If wildlife trafficking is to be dealt with adequately, global and regional cooperation must be stepped up in terms of

capacity building and the sharing of experiences among AALCO members. AALCO's distinct advantage is that it can be a useful forum for the exchange of views and can deepen its members' understanding from the legal, technical and administrative perspectives in dealing with wildlife trafficking. Since AALCO is already addressing wildlife trafficking, it would be advantageous to the NAASP to incorporate AALCO's attendance in any of its events dealing with illegal wildlife trade to provide useful input on legal and enforcement issues when dealing with this transnational environmental crime. AALCO's attendance at any of the NAASP events covering wildlife trafficking can also avoid duplication efforts in addressing this scourge. With a larger membership than AALCO to address wildlife trafficking, the NAASP would target a larger audience. This being the case, it is fully encouraged that the NAASP establish a form of collaboration with AALCO to deal with wildlife trafficking through their complementary work.

In addition, the two declarations of the NAASP mentioned earlier also refer to the importance of the transfer of technology. The Declaration on the New Asian-African Strategic Partnership ("Declaration on the", 2005, p. 4) focused on "[b]uilding cooperation to improve environment protection, through inter-alia, responsible use of non-renewable natural resources, [and] transfer of environmentally sound technology".

Similarly, paragraph 22 of the Declaration on Reinvigorating the NAASP ("Declaration on Reinvigorating", 2015) emphasises the transfer of knowledge, science, technology, and innovation among Asia-African countries. This study asserts that Asian and African countries within the NAASP should be proactive in acquiring knowledge of bioprinting and wildlife forensics. This is to prepare enforcement agencies stationed at entry points from source countries in Africa, transit countries in Southeast Asia, and destination countries such as China and Vietnam to detect genuine animal parts from bioprinted ones. The more technology-savvy countries within the NAASP coalition could organise workshops and seminars to train enforcement officials from developing countries yet to acquire such knowledge of bioprinting and wildlife forensics. Asian and African countries should also use the NAASP as an international forum to weigh the pros and cons of bioprinting animal parts and to make their stance in favour of or against bioprinting clear to countries that are developing this technology.

The NAASP, with a broader participation of its 106-member countries in Asia and Africa, stands a better chance of combatting wildlife trafficking because elephant tusks, rhino horns, live pangolins, and their scales originate from Tanzania, Kenya, Uganda, Zambia, Lesotho, Liberia, and the Democratic Republic of Congo, all of which are party to the Lusaka Agreement on wildlife trafficking. The source of wildlife trafficking from Africa extends beyond the aforesaid seven countries, which have already started to collaborate with ASEAN countries affected by this scourge (Lusaka Agreement Task Force, 2018). For instance, sources of ivory and horns that end up in Malaysia also come from Ghana, Mozambique, and the Central African Republic, which are members of the NAASP (as indicated in Table 1) but are not parties to the Lusaka Agreement. Similarly, South Sudan and Gabon, from where the ivory seized in Malaysia also originates, are parties to the Lusaka Agreement. Apart from this, rhino horns transiting through Malaysia have also originated from Mozambique and Angola, as discussed earlier, both of which are non-parties to the NAASP, as indicated in Table 1. As for pangolins transiting through Malaysia, their origins can be traced back to Cameroon, Ethiopia, Ghana, and Nigeria, all non-parties to the Lusaka Agreement but parties to the NAASP, as shown in Table 1.

Table 1: Parties to the NAASP and Lusaka Agreement

NAASP countries in Africa	Lusaka Agreement countries
Algeria, Democratic People's Republic of	Tanzania
Angola, Republic of	Kenya
Benin, Republic of	Uganda
Botswana, Republic of	Zambia
Burkina Faso	Lesotho
Burundi, Republic of	Liberia
Cameroon, Republic of	Republic of Congo
Cape Verde, Republic of	
Central African Republic	
Chad, Republic of	
Comoros, Union of	
Congo, Democratic Republic of the	
Congo, Republic of the	
Côte d'Ivoire, Republic of	
Djibouti, Republic of	
Egypt, Arab Republic of	
Equatorial Guinea, Republic of	
Eritrea, State of	
Ethiopia, Federal Democratic Republic of	
Gabonese Republic	
Gambia, Republic of the	
Ghana, Republic of	
Guinea, Republic of	
Guinea-Bissau, Republic of	
Kenya, Republic of	
Lesotho, Kingdom of	
Liberia, Republic of	
Libyan Great Socialist People's Arab Jamahiriya	
Madagascar, Republic of	
Malawi, Republic of	
Mali, Republic of	
Mauritania, Islamic Republic of	
Mauritius, Republic of	
Morocco, Kingdom of	
Mozambique, Republic of	
Namibia, Republic of	
Niger, Republic of	
Nigeria, Federal Republic of	
Rwandese Republic	
Sao Tome and Principe, Democratic Republic of	
Senegal, Republic of	
Seychelles, Republic of	
Sierra Leone, Republic of	
Somalia	
South Africa, Republic of	
Sudan, Republic of the	
Swaziland, Kingdom of	
Tanzania, United Republic of	
Tunisian Republic	
Uganda, Republic of	
Zambia, Republic of	
Zimbabwe, Republic of	

Source: Ministry of Foreign Affairs, Republic of Indonesia (2015)

If Malaysian wildlife officials need a direct contact to deal with a pressing wildlife trafficking issue on hand, the NAASP, with its wider membership, can provide direct contact for wildlife enforcement agencies in countries that are non-parties to the Lusaka Agreement. When time is of essence to detect the origin of a wildlife consignment in Malaysia or in any Southeast Asian country needing to trace wildlife trafficking networks that are operating between two continents or to share intelligence, much time would be saved in dealing directly with the relevant authorities among NAASP countries than in using any LATF country as a middleman to gain access to non-member countries. For a comprehensive list of NAASP African countries and those that are signatories to the Lusaka Agreement, refer to Table 1 above.

As a member of ASEAN, Thailand has already proposed one initiative through the 2018 Bangkok Conference on Science, Technology and Innovation for Addressing Wildlife and Forest Crimes and Attaining Sustainable Development Goals (SDGs), which brought together the member states of the Lusaka Agreement and the ASEAN-WEN (formed in 2005) to share information, innovative technology, and other relevant resources (Wipatayotin, 2018). This “Bangkok Initiative”, as it came to be called, strives to incorporate new technology and innovation to combat wildlife trafficking. The initiative should perhaps embark on a study to evaluate bioprinting’s potential as a viable solution for reducing the demand for genuine animal parts in substitution for artificial ones.

At the Special ASEAN Ministerial Meeting on Illegal Wildlife Trade on 21-22 March 2019 in Chiang Mai, Thailand, the Chiang Mai Statement was issued (ASEAN, 2019). Paragraph 18 of the Chiang Mai Statement, which emphasises capacity building, promotes collaboration with other ASEAN partners needing to establish enforcement coordination mechanisms, providing equipment and training as well as joint international enforcement operations (ASEAN, 2019). Paragraph 6 of this Chiang Mai Statement also reiterated the need to cooperate with other IOs, the private sector, academia and civil society to combat wildlife trafficking (ASEAN, 2019). This opens avenues for collaborative efforts with the NAASP member countries besides those of the LATF. Most importantly, paragraph 19 and 20 of the Chiang Mai Statement emphasised the Information Communications Technology (ICT) dimension in addressing wildlife trafficking through the internet with the establishment of the ASEAN wildlife crime database as a point of reference to record criminal cases and the allocation of more enforcement resources to tackle wildlife cybercrime transactions. (ASEAN, 2019).

Furthermore, in 2015, Thailand asserted that existing international cooperation platforms ought to be used to tackle wildlife trafficking; this included the NAASP (Department of National Parks, Wildlife and Plant Conservation, 2015, p. 4). Ever since a MoU had been proposed in 2011 between parties to the Lusaka Agreement and ASEAN-WEN (Ghosh, 2011), joint exercises to combat wildlife crimes, such as operation COBRA II in 2014, have been conducted to broadly include China, the US, South Africa, and various IOs (Isiche, 2018). Additionally, the Asian-African Parliamentary Declaration “Towards Stronger Partnership for World Peace and Prosperity”, which was the result of the AAC in 2015, reiterated the following in paragraph 9:

We [African and Asian countries] are committed to aide our Governments in managing current challenges faced by Asian and African countries such as transnational organised crimes, traditional and non-traditional security matters including [...] wildlife trafficking, etc. through the development and strengthening of relevant national legislations (House of Representative Council, 2015).

It is also pertinent to reiterate that ASEAN fully supports the NAASP, as evident in a Joint Communique issued in 2005:

We support the commitment of Asian-African countries in working toward the realisation of the New Asian-African Strategic Partnership (NAASP) by implementing concrete actions for the benefit and prosperity of our peoples. [...] In this regard, we agreed to give a mandate to the ASEAN Secretariat to work with other regional/sub-regional organisations in Asia and Africa on issues of interest to ASEAN in supporting the NAASP (ASEAN, 2005, p. 2).

Given this case, the NAASP's pursuit of the issue of wildlife trafficking within the ambit of transnational organised crime is entirely appropriate given that it will only complement the ASEAN-WEN's existing initiative. If the menace of wildlife trafficking is to be dealt with adequately across Africa and Southeast Asia, all avenues must be pursued, be it through a more formalised organisation such as ASEAN or AALCO or an IIGO such as the NAASP. While it is conceded that the NAASP has yet to effect significant change and lacks a permanent institutional structure, it can be argued that by bringing wildlife trafficking to the fore as a stimulating and sustaining topic, it will in the long term bring African and Asian countries together and build trust between them. This, in turn, could revive the NAASP by means of the sustaining power of the issue of wildlife trafficking, helping it gain momentum and approach institutionalism through establishing the necessary structures to adequately handle wildlife trafficking. Therefore, the NAASP should be utilised for the said purpose to supplement ASEAN's effort in dealing with wildlife trafficking, provided there is a sufficient will to reinvigorate this coalition, as a simple lack of will power will lead to its collapse.

Conclusions

This study began with the objective of exploring whether the NAASP could be utilised to discuss wildlife trafficking problems affecting African and Southeast Asian countries and to deliberate on bioprinting as a controversial technological solution. As the NAASP gravitates from a loose coalition forum towards institutionalism, with the Indonesian government volunteering to set up a centre in Indonesia, bringing wildlife trafficking issues within the scope of this IIGO is timely and relevant. This will strengthen the bond between these African and Southeast Asian countries by allowing them to become acquainted and discuss issues of common concern. By strengthening bonds with one another, this increases the impetus for the NAASP to gravitate towards institutionalism, whereby the NAASP together with AALCO can act as mediators between Africa and Southeast Asia in resolving wildlife trafficking issues. With its larger membership of African countries, the NAASP provides more options for Southeast Asian countries in establishing contacts with African law enforcement agencies, especially when wildlife trafficking has origins well beyond those countries party to the Lusaka Agreement. Moreover, the role of the NAASP in addressing wildlife trafficking complements that of ASEAN-WEN. As the NAASP (through its declarations) has emphasised the transfer of technology, it is imperative for bioprinting to be discussed, acknowledging that law enforcement agencies in both Africa and Southeast Asia will face technological detection challenges which will make their task more difficult. African and Southeast Asian countries can also utilise the NAASP to project their position on bioprinting, either in favour of or against this new technology. In conclusion, all available avenues must therefore be utilised by these African and Southeast Asian countries to combat wildlife trafficking, be it through ASEAN-WEN and/or the NAASP, as these different initiatives offer unique strengths and solutions and complement each other.

Acknowledgements

The author would like to thank the anonymous reviewer for his/her helpful comments in improving this manuscript.

Funding

This work was supported by the National University of Malaysia (UKM) under Grant GGPM-2017-117.

Declaration of Interest

The author has no competing interests to declare.

References

- Actman, J. (2015, December 2). Can fake rhino horn stop the poaching of a species at risk? *National Geographic*, 1–7. Retrieved from <https://news.nationalgeographic.com/2015/12/151203-pembient-synthetic-rhino-horn-vietnam-poaching/>
- Alatas, A. (2005). *Towards a new strategic partnership between Asia and Africa* (No. CO05018) (pp. 1–4). Rajaratnam School of International Studies, Singapore. Retrieved from <https://www.rsis.edu.sg/wp-content/uploads/2014/07/CO05018.pdf>
- Albar, S.H. (2005). *Statement by the Honorable Dato Seri Syed Hamid Albar, Minister of Foreign Affairs, Malaysia*. Presented at the Asia-African Summit 2005, Jakarta. Retrieved from <https://www.kln.gov.my/archive/content.php?t=8&articleId=30898>
- Asian Development Bank. (2014). Cooperation in combating the illegal wildlife trade: Discussion No. 1. In *Symposium on combating wildlife crime securing enforcement, ensuring justice, and upholding the rule of law: The proceedings* (pp. 1–144). Manila: Asian Development Bank. Retrieved from <https://www.adb.org/sites/default/files/publication/149395/combating-wildlife-crime-proceedings.pdf>
- Assie-Lumumba, N. T. (2015). Behind and beyond Bandung: Historical and forward-looking reflections on south-south cooperation. *Bandung Journal of the Global South*, 2(11), 1–10. doi: 10.1186/s40728-014-0011-5
- Association of Southeast Asian Nations (ASEAN). (2019). Chiang Mai statement of ASEAN ministers responsible for CITES and wildlife enforcement on illegal wildlife trade. Retrieved November 9, 2019, from https://asean.org/storage/2019/03/Agd-6-SAMM-IWT_Statement-of-ASEAN-Ministers-in-IWT_Final-Adopted.pdf
- Association of the Southeast Asian Nations (ASEAN). (2005, July 26). Joint Communiqué of the 38th ASEAN Ministerial Meeting Vientiane. Working Group for an ASEAN Human Rights Mechanism. Retrieved from https://asean.org/?static_post=joint-communique-of-the-38th-asean-ministerial-meeting-vientiane-26-july-2005
- Badmus, D. (2017). African and Asian countries to work together in wildlife conservation. China: China Global Television Network. Retrieved from <https://africa.cgtn.com/2017/05/02/african-and-asian-countries-to-work-together-in-wildlife-conservation/>
- Bakshi, A., and Pandiaraj, S. (2012). The historical background to the establishment of AALCO and its functioning. In *Training Programme for the Diplomats and Officials from the Kingdom of Saudi Arabia “On the Working of AALCO”* (pp. 1–18). New Delhi: Asian-African Legal Consultative Organisation. Retrieved from <http://www.aalco.int/The Historical Background to the Establishment of AALCO and its functioning - Anuradha Baxi.pdf>

- Ball, P. (2015). The complex costs of faking it. *Nature Materials*, 14, 660. doi: 10.1038/nmat4330
- Baxter, J. (2019, July 29). Vietnam seizes 125 kg of rhino horns in crackdown on wildlife trafficking. *SA People News*, pp. 1–2. Retrieved from <https://www.sapeople.com/2019/07/29/vietnam-seize-125-kg-of-rhino-horns-in-crackdown-on-wildlife-trafficking/>
- Berger-Tal, O., & Lahoz-Montfort, J. J. (2018). Conservation technology: The next generation. *Conservation Letters*, 1–6. Retrieved from [https://doi.org/10.1111 /conl.12458](https://doi.org/10.1111/conl.12458)
- Brown, V. (2017, April 11). Traffic: Malaysia a key transit point for illegal wildlife trade. *The Star Online*, pp. 1–2. Retrieved from <https://www.thestar.com.my/news/nation/2017/04/11/malaysia-key-transit-point-for-wildlife-trade/>
- Burgener, M., Snyman, N., & Hauck, M. (2001). *Towards a sustainable wildlife trade: An analysis of nature conservation legislation in South Africa with particular reference to the wildlife trade*. Cape Town: University of Cape Town.
- Cakaj, L., & Lezhnev, S. (2017). *Deadly profits: Illegal wildlife trafficking through Uganda and South Sudan* (pp. 1–23). Washington: Enough Project. Retrieved from https://enoughproject.org/wp-content/uploads/2017/07/DeadlyProfits_July2017_Enough_final_web-1.pdf
- Choong, J. (2016, August 26). Malaysia steps up action against ivory smugglers. *The Malay Mail*, pp. 1–2. Retrieved from <https://www.malaymail.com/s/1191779/malaysia-steps-up-action-against-ivory-smugglers>
- Corben, R. (2012, December 12). Malaysian Customs officials seize 1,000 elephant tusks. *VOA News*, pp. 1–2. Retrieved from <https://www.voanews.com/a/malaysia-customs-officials-seize-elephant-tusks/1563708.html>
- Corbyn, Z. (2015, May 24). Can we save the rhino from poachers with 3D printer? *The Guardian*, pp. 1–6. Retrieved from <https://www.theguardian.com/environment/2015/may/24/artificial-3d-printed-fake-rhino-horn-poaching>
- Cownie, F., & Bradney, A. (2013). Socio-legal studies: A challenge to the doctrinal approach. In D. Watkins & M. Burton (Eds.), *Research methods in law* (pp. 34-54). New York: Routledge.
- Creutz, K. (2017). *Alternative ways of global governance: Informal institutions and the role of small states*. (FIIA Briefing Paper No. 215) (pp. 1–8). Helsinki: The Finnish Institute of International Affairs. Retrieved from https://www.fiaa.fi/wp-content/uploads/2017/091/bp215_alternative_ways_of_global_governance_pdf
- Declaration on Reinvigorating the New Asian-African Strategic Partnership. (2015). Ministry of Foreign Affairs, Republic of Indonesia. Retrieved from <https://en.minanews.net/declaration-reinvigorating-asianafican-strategic-partnership>
- Declaration on the New Asian-African Strategic Partnership. (2005). Bandung Spirit. Retrieved from http://www.bandungspirit.org/IMG/pdf/naaspcomplete-bandung_of_states_2005.pdf
- Department of National Parks, Wildlife and Plant Conservation, Thailand. (2015, September 15). Progress report on implementation of Thailand’s National Ivory Plan (NIAP) for submission to the 66th Standing Committee Meeting. Retrieved from <https://cites.org/sites/default/files/eng/com/sc/66/E-SC66-29-Annex8.pdf>
- Ghosh, N. (2011, April 16). Asean, Africa tie up to fight wildlife trafficking. *Straits Times*, pp. 1–2. Retrieved from <https://wildsingaporenews.blogspot.com/2011/04/asean-africa-tie-up-to-fight-wildlife.html>

- Ghosh, N. (2015, July 30). Tackling timber and wildlife trafficking. *The Straits Times*, pp. 1–4. Retrieved from <https://www.straitstimes.com/asia/se-asia/tackling-timber-and-wildlife-trafficking>
- Ginting, E. T. (2015, April 4). The NAASP needs a clasp: A decade of the New Asian-African Strategic Partnership. Retrieved 11 December 2018, from <https://etginting.wordpress.com/2015/04/04/the-naasp-needs-a-clasp-a-decade-of-the-new-asian-african-strategic-partnership/>
- Guillemot, F., Mironov, V., & Nakamura, M. (2010). Bioprinting is coming of age: Report from the International Conference on Bioprinting and Biofabrication in Bordeaux (3B'09). *Biofabrication*, 2, 1–7. doi: 10.1088/1758-5082/2/1/010201
- Heinze, E. A., and Jolliff, B. J. (2011). Idealism and liberalism. In Ishiyama, John T., and Breuning, M. (Eds.), *21st century political science: A reference handbook* (1st ed., pp. 319–326). Thousand Oakes, California: SAGE Publications Inc.
- House of Representative Council, Republic of Indonesia. (2015, April 23). Asian-African Parliamentary Declaration ‘Towards stronger partnership for world peace and prosperity’. Retrieved from <http://berkas.dpr.go.id/ksap/aacc2015/page/Declaration.pdf>
- Idris, I. (2019). *Drivers and enablers of serious organised crime in South-East Asia*. (K4D Helpdesk Report No. 655). Brighton, UK. Retrieved from https://gsdrc.org/wp-content/uploads/2019/10/655_Drivers_and_Enablers_of_Serious_Organised_Crime_in_Southeast_Asia.pdf
- Isiche, J. (2014, February 13). First ever transnational collaboration between Africa and China helps combat wildlife crime. Retrieved 7 December 2018, from <https://www.ifaw.org/united-states/news/first-ever-transnational-collaboration-between-africa-and-china-helps-combat-wildlife-crime>
- Kamminga, J., Ayele, E., Meratnia, N., & Havinga, P. (2018). Poaching detection technologies- A survey. *Sensors*, 18(1474), 1–27. doi: 10.3390/s18051474
- Kingah, S., & Akong, C. (2015). *Is interregional AU-ASEAN diffusion in the south barren?* (UNU-CRIS Working Paper No. W-2015/3) (pp. 1–26). Bruges. Retrieved from <http://cris.unu.edu/sites/cris.unu.edu/files/W-20153.pdf>
- Kornegay, F. (2015). South Africa and the global south in critical perspective. In *South African foreign policy review* (Vol. 2, pp. 231–251). Johannesburg: African Institute of South Africa.
- Kornegay, F. A., & Landsberg, C. (2009). Engaging emerging powers: Africa’s search for a ‘common position’. *Politikon: South African Journal of Political Studies*, 36(1), 171–191. doi: 10.1080/02589340903174717
- Lenda, M., Skorka, P., Mazur, B., Ward, A., & Wilson, K. (2018). Ivory crisis: Role of bioprinting technology. *Science*, 360(6386), 277. doi: 10.1126/science.aat0925
- Lusaka Agreement Task Force calls for enhanced cooperation and collaboration to suppress illegal wildlife and forest crime between Africa to Asia. (2018, August 3). Retrieved 7 December 2018, from <http://lusakaagreement.org/?p=1086>
- Luttenberger, A., & Luttenberger, L. R. (2017). Challenges in regulating environmental crimes (pp. 213–220). Presented at the 7th International Maritime Science Conference, Solin, Croatia. Retrieved from https://bib.irb.hr/datoteka/871672.IMSC2017_Luttenberger_and_Runko_Luttenberger.pdf
- Malaysia seizes rhino horns worth \$12 million in largest such haul. (2018, August 20). *Reuters*, pp. 1–3. Retrieved from <https://www.reuters.com/article/us-malaysia-wildlife/malaysia-seizes-rhino-horns-worth-12-million-in-largest-such-haul-idUSKCN1L511U>

- Malaysia to join forces with other nations to combat wildlife trade: Wan Junaidi. (2016, April 14). *The Sun Daily*, pp. 1–2. Retrieved from <https://www.thesundaily.my/archive/1762033-ESARCH361177>
- Malaysian authorities seize record haul of pangolin scales. (2017, May 8). Retrieved 24 February 2019, from <https://www.dw.com/malaysian-authorities-seize-record-haul-of-pangolin-scales/a-38751016>
- Malaysian Customs arrest Vietnamese national carrying two suitcases filled with ivory. (2017, July 17). *Traffic News*, pp. 1–2. Retrieved from <https://www.traffic.org/news/malaysian-customs-arrest-vietnamese-national-carrying-two-suitcases-filled-with-ivory/>
- Martin, B. (2019). *Survival or extinction? How to save elephants and rhinos*. New York: Springer.
- Ministry of Foreign Affairs, Indonesia. (2015). List of NAASP participating countries. Retrieved 3 January 2019, from <https://ex.kemlu.go.id/Documents/NAASP/Hyperlink%204.pdf>
- Miticus, A. (2015, August 30). Synthetic rhino horn hopla under scrutiny. Retrieved 7 December 2018, from <https://annamiticus.com/2015/08/30/synthetic-rhino-horn-hoopla-under-scrutiny/>
- Mozambican police investigating rhino horn trafficking. (2017, April 13). Retrieved 27 February 2019, from <https://clubofmozambique.com/news/mozambican-police-investigating-rhino-horn-trafficking/>
- Mutethya, E. (2017, May 14). New crackdown on illegal wildlife trade. *China Daily*, pp. 1–2. Retrieved from http://www.chinadaily.com.cn/kindle/201705/14/content_29338382.htm
- Nor, M. H.M. (2018, December 6). Pangolin scales worth RM36.62 mil incinerated. *New Straits Times*, pp. 1–2. Retrieved from <https://www.nst.com.my/news/nation/2018/12/437857/pangolin-scales-worth-rm3662mil-incinerated>
- Organisation of Economic Cooperation and Development (OECD). (2019). *The illegal wildlife trade in Southeast Asia*. Paris: Organisation of Economic Cooperation and Development. Retrieved from <https://www.oecd-ilibrary.org/sites/14fe3297-en/index.html?itemId=/content/publication/14fe3297-en&mimeType=text/html>
- Pandika, M. (2017). Taking aim at poaching with tissue engineering. *ACS Central Science*, 3(12), 1230–1233. doi:10.1021/acscentsci.7b00592
- Pangolins destined for Malaysia are seized in Cameroon. (2016, December 22). Retrieved 24 February 2019, from <https://cleanmalaysia.com/2016/12/22/pangolins-destined-malaysia-seized-cameroon/>
- Paul, K. (2015, July 7). 3D-printed rhino horns are not the solution to the poaching crisis, experts say. *Motherboard (Vice)*, pp. 1–8. Retrieved from https://motherboard.vice.com/en_us/article/xyw9ed/3d-printed-rhino-horns-are-not-the-solution-to-the-poaching-crisis-experts-say
- Peters, A. (2018, September 21). Synthetic rhino horn are supposed to disrupt poaching. Will they work? Retrieved 8 December 2018, from <https://www.fastcompany.com/90239612/the-fight-over-using-synthetic-horns-to-stop-poaching>
- Raine, A., and Pluchon, E. (2019). UN environment—Advancing the environmental rule of law in the Asia Pacific. *Chinese Journal of Environmental Law*, 3(1), 117–126. Retrieved from https://brill.com/view/journals/cjel/3/1/article-p117_5.xml?language=en
- Rubiolo, F. (2016). Emergents in the African scenario: A south-south approach to Southeast Asia diplomatic and trade initiatives in the continent. *Brazilian Journal of International Relations*, 5(1), 8–33. Retrieved from www2.marilia.unesp.br/revistas/index.php/bjir/article/view/5940/4001

- S'gor customs seize elephant tusks, ivory handicraft worth RM4mil. (2011, December 13). *The Star Online*, p. 1. Retrieved from <https://www.thestar.com.my/news/nation/2011/12/13/sgor-customs-seize-elephant-tusks-ivory-handicraft-worth-rm4mil/#3dmMlkTuxuESxU2J.99>
- Shekhar, V. (2016). Rising Indonesia's global diplomacy: Principled pragmatism and multilateral activism. In Kaul, M.M. and Chakraborty, A. (Eds.), *India's Look East to act east policy: Tracking the opportunities and challenges in the Indo-Pacific* (pp. 136–154). New Delhi: Pentagon Press.
- Sherman, R. (2008). *Environment and development decision making in Africa 2006-2008*. Winnipeg, Manitoba. Retrieved from https://www.iisd.org/pdf/2008/env_decision_africa.pdf
- Sherwell, P. (2016, April 30). Revealed: The Laos market selling ivory carvings and 'medical' rhino horn from slaughtered wildlife to Chinese buyers. *The Telegraph*, pp. 1–6. Retrieved from <https://www.telegraph.co.uk/news/2016/04/17/revealed-the-laos-market-selling-ivory-carvings--and-medicinal-rh/>
- Singapore seizes elephant ivory and pangolin scales in record \$48m haul. (2019, July 23). *BBC*, pp. 1–3. Retrieved from <https://www.bbc.com/news/world-asia-49079720>
- Slaughter, S. (2019). *The G20 and international relations theory perspectives on global summitry*. Northampton: Edward Elgar Publishing Inc.
- Strydom, H. (2007). The Non-Aligned Movement and the reform of international relations. In Bogdandy, A.V. and Wolfrum, R (Eds.), *Max Planck Yearbook of United Nations Law* (Vol. 11, pp. 1–46). Leiden: Koninklijke Brill NV. Retrieved from https://www.mpil.de/files/pdf1/mpunyb_01_strydom_11.pdf
- Thornycroft, P. (2018, March 25). Undercover footage reveals details of Grace Mugabe alleged smuggling. *Independent Online*. Retrieved from <https://www.iol.co.za/news/africa/undercover-footage-reveals-details-of-grace-mugabe-alleged-smuggling-14059964>
- Timossi, J. (2015, May 15). Asian-African Summit commemorates 60th anniversary of Bandung Conference. *South Bulletin*, 85, 1. Retrieved from <https://www.southcentre.int/question/asian-african-summit-commemorates-60th-anniversary-of-bandung-conference/>
- TRAFFIC. (2018, August 20). Malaysia makes massive Viet Nam-bound rhino horn seizure. Retrieved 6 May 2019, from <https://www.traffic.org/news/malaysia-makes-massive-vietnam-bound-rhino-horn-seizure/>
- Trani, O. (2017, August 4). Synthetic rhinoceros horns spark economic debate on conservation. Retrieved 8 December 2018, from <https://www.insidescience.org/news/synthetic-rhinoceros-horns-spark-economic-debate-conservation>
- United Nations Office on Drugs and Crime. (2017). *Criminal justice response to wildlife crime in Malaysia*. Vienna: United Nations Office on Drugs and Crime. Retrieved from https://www.unodc.org/documents/southeastasiaandpacific/Publications/2017/Malaysia_Assessment_-_09.pdf
- US Fish and Wildlife Service. (2018). Wildlife trafficking. Retrieved 13 February 2019, from <https://www.fws.gov/international/wildlife-trafficking/>
- Vabulas, F. (2014, February 5). The BRICS and the future of 'informal' IGOs. International Relations and Security Network (ISN), ETH Zurich. Retrieved from https://www.files.ethz.ch/isn/188223/ISN_176226_en.pdf

- Vabulas, F., & Snidal, D. (2012). Informal intergovernmental organisations (IIGOs). In *The 5th Annual Conference on the Political Economy of International Organisations* (pp. 1–47). Philadelphia: Villanova University. Retrieved from http://www.peio.me/wp-content/uploads/2014/04/Conf5_Vabulas-29.09.11.pdf
- Wipatayotin, A. (2018). Govt tems up to combat wildlife trafficking threat. *Bangkok Post*, p. 1. Retrieved from <https://www.bangkokpost.com/news/environment/1532374/govt-teams-up-to-combat-wildlife-trafficking-threat>
- Wong, L. (2017, November 18). Malaysia, an unfortunate transit point for illegal trade. *The Star Online*, pp. 1–6. Retrieved from <https://www.star2.com/living/2017/11/18/malaysia-an-unfortunate--transit-point-for-illegal-trade/>