



Environmental security, regional integration and the ASEAN Community: a potential challenge for closer co-operation¹

Christian Ploberger

Abstract

When considering Southeast Asia's various cross border pollution and environmental issues, a critical case is the extent they will either contribute to a closer or conflictual relationship within the region. As ASEAN aims to facilitate closer and deeper co-operation, the ASEAN Community concept, the challenge to reduce environmental degeneration and the impact of climate change is prominent, not least because of the inherent trans-national nature of those challenges. What increases the challenge further is that most environmental issues are related to economic modernisation and development as well as livelihood changes among parts of Southeast Asian's population necessitated due to recent economic development. Those changes increase the energy demand further and with it the greenhouse gas emissions thereby intensifying the pressure on resources. Among the specific issues identifiable are the Haze and the question of how to share trans-border water sources like those of the Mekong River. In addressing this challenge we should focus on how environmental degeneration and the impact of climate change become increasingly integrated with the focus on security.

Keywords: Environmental Security; ASEAN; development; regional integration;

¹ Paper presented by Dr. Christian Ploberger, at the conference 'ASEAN on the Path of Community' held at the Ramkhamhaeng University, 11. December 2018, Bangkok, Thailand. This paper is a draft version and no quotations to be made without prior agreement of the author.



INTRODUCTION

In November 2015, at the 27th ASEAN Summit in Kuala Lumpur, ASEAN adopted a new guideline ‘ASEAN 2025: Forging Ahead Together’ (Kuala Lumpur Declaration) as its strategy for deeper co-operation, which is based on four distinctive concepts: ASEAN Community Vision 2025; ASEAN Political-Security Community Blueprint 2025; ASEAN Economic Community Blueprint 2025; and ASEAN Socio-Cultural Community Blueprint 2025. Taken together those strategies could lead to significant changes within ASEAN, transforming it into a more cohesive regional organisation which in turn may also enhance its regional and international status. To be sure, external strength comes from internal coherence, hence enhancing internal co-operation will support the international standing of the grouping.

Without question, generating economic growth and supporting overall development will be a focal point for ‘ASEAN 2025: Forging Ahead Together’ (in future ASEAN 2025) after all regional organisations are supported by the people, when they contribute to positive development and in improving their livelihood. Even as economic growth is a pre-condition for development, it can also contribute to a deterioration of people’s personal circumstances by generating a negative impact on their living surroundings like through environmental degeneration. Examples could include water, soil or air pollution just to name a few. Climate change related impacts can amplify such harmful impacts and consequently expand the adverse effect on human livelihood and thus affect human health.

Southeast Asia is already confronted by critical environmental and climate change challenges with implications for the people living there. Even as environmental degeneration and climate change related impacts represent a regional level challenge for ASEAN, the specific impacts are always local specific, which includes increasing instances of drought and floods, extreme weather events and sea level rise. Collectively these threats represent critical security issues for the actual and future impact on people’s livelihood through the region. Yet with its justifiable focus on development, ASEAN will further intensify this negative impact on the livelihood of the population therefore Southeast Asia provides an example of the complexity of managing environmental security related issues in the context of demand for ongoing development. However, the impression is that latent or infrequent threats of



environmental degeneration and climate change related risk are not addressed adequately within the region, and ASEAN as an organisation has failed to attend to these concerns despite that their impact is recognised in ASEAN statements. A further complication is that with further development and economic modernisation the competition over local resources, like how to share the water of the Mekong River, will increase further.

Considering their potential in undermining national and regional development processes, as well as for social and political discontent, conceptualising such impacts and threat scenarios in a timely manner could offer another impetus for ASEAN's internal strength. Yet, ignoring threat scenarios may weaken the internal cohesion of the organisation and, with it, its international standing.

The environmental security issues selected in this article include sharing the resources of a trans-border river systems like the Mekong River; and the recurrent events of haze originating in parts of Indonesia, affecting Singapore and Malaysia, and the impact climate change has on the region. These are not only trans-border environmental issues, but also related to the wider aspect of development. Together they have the potential to generate a negative impact on the regional integration dynamic and development. Hence, climate change related risk can carry critical implications for stability of bilateral as well as multilateral relationships and thus can either support or undermined regional stability and integration.

Environmental Issues as a Security Topic

Since the consequence of climate change and environmental degeneration representing a comprehensive challenge for the livelihood of people, for societies and national development. Hence, together, the potential and already actual impact generated, stimulated a process of redefining the meaning of security and contributed to a transformation in the awareness of security threats, to include threats to human health and social welfare based on environmental and climate change related risks as potential sources of political instability. Yet the end of the Cold War period and with it the reduced threat of a full out nuclear war also allowed to re-evaluate the meaning and focus of security. In recognising and identifying this process of reconceptualising security, Buzan et al. argue that the security of states should be analysed within



different sectors: the military sector; the political sector; the economic sector; the social sector; and the environmental sector (1998, p. 7).

In the process, not only new topics of security, like underdevelopment and environmental degeneration, were identified but this process also generated another dynamic process in which former the strong state focus also underwent a considerable re-evaluation with more emphasis put on society and the individual as a reference of security. In this regard it is worth considering assertions made within the Critical Security Studies approach. Smith (2005) for example states that the point of departure for conceptualising security lies in the real conditions of insecurity suffered by people and collectivities. Terrify (1999, p. 178) identifying society as a particular reference for security and Shaw (2005, p. 84) stats that the missing dimension of security is society, as both the state and individuals have to be understood within a sociological context. Consequently, when conceptualising security, the reality of risk and insecurity faced by a particular society and within a specific locality, should be the point of departure. Yet, researcher who focused on developing countries, already argued for a considerable time for a different understanding and interpretation of security. Ayoob for example stats that the traditional, state centred, approach to security ‘is inadequate to explain the multifaceted and multidimensional nature of the problem of security as faced by the majority of members in the international system’ (1997, p. 121). Walker also supports these contentions, when he argues for ‘the need to break down the artificial distinction between security and development’ (1997, p. 65). Alike argues Alagappa (1998, p. 689) stating that security must be conceptualised with the survival and wellbeing of the political community. As such the interpreting security underwent another modification as its focus changed from its former strong state orientation towards the recognitions of the individual and of society as a focus of security consequently further widening its perspective in the process. Yet, such a process of re-interpreting the meaning of security is not a novel historical development as we already witnessed various processes of alterations over time, influenced by the security challenge at a specific moment in time, like the threat of a nuclear war during the Cold War period. After all, as pointed out by Katzenstein (1996, p. 10) it appears we are now returning to an 19th century understanding of security, which include economic and social dimension of political life as well.



The UN Human Security concept represents an additional effort of re-interpreting the meaning of security by focusing on development and the implication for society and individuals. The framework underlining the Human Security approach is people-centered, multi-sectoral and context-specific (Human Security in Theory and Practice 2009). Hence, the concept highlights the complexity, variability and interdependence of different aspects of human insecurity stressing that an inter-disciplinary strategy is required in addressing related security risks. After all, societal security, or better social insecurity, manifest itself in various forms like potential economic shocks (loss of income and employment) negative social impacts (deteriorating livelihood, degenerating environment, climate change related risks) which can threaten individuals and groups alike (Human Security in Theory and Practice 2009). Thus once again, the link between security and development became more pronounced and recognised. What's more, the prospect of development failure represents a serious security issues for many societies and individuals worldwide.

As for environmental degeneration, landmark reports like the Club of Rome and Brundland Commission Report, highlighted the negative and damaging impact on the environment and the related implications for human development, excessive economic growth and economic modernisation can generate. Over time, as the impact of climate change related risks became more recognisable and added as a potential threat to communities and society, the conceptual framework of environmental security was added as another security topic. With regard to climate change it is worth to remember that it has the potential of even reversing already made progress with regard to the UN development goals like progress made in human health provisions or poverty eradications in developing countries. With regard to environmental security, it is also worth to recognise that environmental degeneration and climate change related impacts can via a feedback process generate an escalating dynamic consequently increasing the magnitude of its effect. For example, storm surges could not only have a direct negative impact on urban areas but can lead to an intensifying risk scenario by inundating fresh water supply, damage drainage systems and disrupt the electricity supply, consequently generating a cumulating dynamic. As such especially extended urban areas are in danger of experiencing a dynamic of risk escalation described as ‘concatenated hazards’.¹

¹ See Cities and climate change: global report on human settlements, 2011. Chapter 4 – The impact of climate change upon Urban Areas pp. 65-90.



Another example for a potential cascading effect are the disruption of economic supply-chain networks through climate change related extreme weather events like flooding, storms, raising sea-levels.

It is also worth remembering that, as stated by Booth the conceptualization of security, the identification of a particular subject as a security topic, represents a political move, as different groups and political actor interpreting security challenges differently (Booth 2005, p. 21). Buzan at al. also points out that the process of securitization and de-securitization are political processes reflecting the formation of concern in the public sphere and involve the allocation of particular resources to address a specific security threat (Buzan at al 1998, pp. 75-6). Hence it is worth to remember that both, environmental degeneration and the impact of climate change are local specific and a particular impact will not only raise local awareness of environmental degeneration but may also has the potential for mobilising support and if this mobilisation process is successful it will make a successful securitization process more likely. It goes without question that the urgency of an environmental security problem will inform the securitization process, as responding to immediate threats provide powerful political incentives to act accordingly. Correspondingly, it is at the local and regional level experience which stimulated and facilitated a shift in attitudes and perceptions and subsequently generating the political pressure to address the negative impacts on people and society.

Southeast Asia’s Transnational Environmental Security Challenges

Environmental degeneration and the impact of climate change representing specific regional security concerns for Southeast Asian, even the impact is local specific as cities and rural communities are trying to cope with climate change related impacts, including extreme weather events and floods and droughts.

Within Southeast Asia an intertwined link between economic development and environmental degeneration exist, not least because of the particular development paradigm within the region, characterised by a ‘growth first and clean up later’ approach. Hence, as observable in other regions and historical periods, the close link between the level of industrial and economic development and environmental degeneration manifest itself. As for the development prospect, it is worth recalling an assessment, made within the Master Plan on ASEAN Connectivity 2025, that based on



the current urbanisation process it is predicted that by 2030 additional 90 million people will live in cities (ASEAN Connectivity 2025, 2016, p. 30). Yet, urbanisation and live-style changes contributing to an increase in energy demand and raising emission level, adding to this challenge is the prospect of a general population growth by increasing ASEAN’s population to 760 million. What’s more an increase in the population will also increase the pressure on resources, especially on fresh water resources, and how to share them among the countries and communities within Southeast Asia.

In the following sub-section specific cases of trans-border environmental security issues affecting Southeast Asia are outlined and include: climate change, how to share the Mekong’s water resources and the Haze issue. Those cases not only represent specific local environmental issues but also have the potential of negatively impacting on the wider region by generating potential serious and destabilizing regional effects undermining regional political cooperation and development.

Climate Change as a regional challenge

A number of assessments highlighting climate change related impacts are a serious challenge for Southeast Asia. The IPCC5th Assessment on Asia points out that an increasing frequency of extreme weather events has been already observed in parts of Southeast Asia, with further precipitation extremes, especially linked to the annual monsoon season, are expected (Hijioka et al. 2014, p. 1334). Countries like Cambodia, Myanmar, Thailand and Vietnam are among the world’s 15 most vulnerable countries (Greater Mekong Subregion Core Environmental Program 2018). While major cities like Manila, Ho Chi Min City, Bangkok and Jakarta are most in danger from sea level rise (World Bank 2013). Indeed, Southeast Asia’s population faced a widespread exposure to sea-level rise and flooding, since a huge part of it is concentrated in low-lying deltas.

With regard to the human dimension of climate change Southeast Asia is the region most affected not only by heat extremes, which will become a recurrent experience, but is also a region which is prone to experience further and repeated instances of heavy rainfall and consequently severe flood events (A Region At Risk 2017) There are also economic estimates that the climate change impact will cost region about 6,7% of the regional GDP in 2100 (Raitzer et al 2015, p. 3). Adding to this future climate change related costs and risks are those costs which are already occurring today because of climate change impacts. Examples includes the 2008 cyclone Nargis, causing



a catastrophic impact on Myanmar killing 84,500 people and impacting on the livelihood of up to 2.4 million people (International Federation of Red Cross and Red Crescent Societies 2011), or typhoon Haiyan, which hit the Philippines in November 2013 with the highest recorded wind speed of 270 – 310km/h resulting in the deaths of over 5,600 peoples, becoming the deadliest natural disaster of the Philippines to date (Typhoon Haiyan death toll rises over 5000, 2013). On other occasion, Thailand suffered large scale floods in 2011, affecting almost 14 million people and generating \$ 45,7 billion in damage (World Bank 2011). Another related example is the case of saltwater intrusion affecting paddy rice field in Cambodia’s Koh Kong coastal zone, generating a 90% loss on farmers household income (Financing for Rural Climate Resilience in the GMS 2017).

All of those events will cause not only a serious impact on human health but also on the development perspective of the population living within the region. It is worth remembering the earlier mentioned potential synergies between climate change impacts and the escalating dynamic of related effects to really appreciate the challenges and potential serious impacts related to environmental security issues.

Yet the inherent challenges Southeast Asia’s nations are facing is that they are following a rather traditional development trajectory in introducing adaptations strategies at a later stage in their economic development process, making it more complex to address climate change related risks and dynamics which are supporting the dynamic of climate change in the first place. After all, if persisting trends allowed to continue, Southeast Asia will become a significant contributor to global warming as the recent increase in its carbon dioxide emission increased faster than in any other region of the world (Raitzer et al 2015, p. 3). Cambodia, Lao PDR, and Myanmar are offering good examples as they are in the early stages of industrialization yet, the associated pollution with it already represents a growing problem for the health of their people and the environment (Greater Mekong Subregion Core Environmental Program). After all, an early shift towards a low carbon economy would be instrumental for developing countries to avoid, what Zhengzhong (2011) describes as ‘development emissions’, emissions which are generated during the process of industrialization, modernization and urbanisation. A standpoint also taken up in the IPCC report on Climate Change, by emphasising, that infrastructure development and urbanisation carries the potential to lock societies into a, difficult to change, emission intensive pathway, consequently timely action are required if ambitious mitigations goals are to be reached (Climate



Change 2014: Mitigation of Climate Change 2014, p. 20). However, an ADB report points out that economic transformation, from an agrarian to an industrial and service based economy, accompanying changes in living standards and an increasing urbanisation process rapidly increasing GHG emissions, consequently putting the region on a carbon-intensive pathway (Southeast Asia And The Economics Of Global Climate Stabilization 2015, p. 15). Once again we are reminded on the close relationship and indeed interlinkage between development and environmental impact and a failure to address this linkage.

However, Southeast Asia’s development trajectory and its associated negative impact on the environment reminds us on the critical significance in selection of a particular economic development model and the related implications this will generate on the environment, on its pollution trajectory path and the related social impact this will generate within a region. But it also sensitises us on the increasing demand for resource and its added pressure on the environment, which is another characteristic of economic development.

Shared Resources– Water, development and the Mekong River Basin Question

One of Southeast Asia’s critical environmental security issues is related to the question of how to share the resources within the Mekong river basin, between upstream and downstream countries. The Greater Mekong Subregion (GMS) includes various parts of different countries, including: China, especially Yunnan province; Myanmar; Laos, Thailand, Cambodia and Viet Nam. In all the GMS covers 2,6 million square kilometres with a combined population of around 326 million people. Yet, the Mekong River basin offers another good example to identify the complexity of addressing environmental and climate change related impacts and its link with development in a trans-national setting.

Any alteration of the river’s water flow, either through the building of hydropower plants, the overuse for agriculture irrigation, or during a process of economic modernisation and increasing urbanisation will generate negative impact on the hydrological flow regime of the Mekong river basin. Adding to the vulnerability of Mekong river basin is the impact of climate change, like a change in regional precipitation and the occurrence of drought periods, which contributes to the challenges the river basin is facing.



The significance of the Mekong and in protecting its environment for the development prospect and well-being of the people living along its banks thus a sustainable development path should be selected with a number of fields for cooperation identified, like irrigation, hydro-power development, navigation, flood control and fisheries to name some critical issues (Agreement on the Cooperation for the Sustainable Development of the Mekong river basin, Mekong River Commission, 1995, pp. 1-3). This importance in protecting the natural resources of the Mekong for the development prospect of its people was again emphasised at the 2nd Summit of the Mekong River Commissions by stating that the utilization of the Mekong River Basin’s water sources contributed largely to the socio-economic development of the region, yet, it also generated negative environmental and social impacts in the Basin which need to be fully and effectively addressed. Adding that since climate change has already a negative impact on the livelihoods of the people its impact needs to be addressed urgently (Ho Chi Min City Declaration, 2014).

One serious concern with regard to both, a negative environmental impact and on how to share the resources between up- and down-stream countries focuses on hydropower plants. Yet the concern with dam building along the Mekong is not only linked to the upstream development at the upper section of the Mekong River (Lancang River) within China but also with hydropower plants located in its middle and lower section, especially in Laos, which also includes the Mekong’s tributaries, like the Nam Ou river. It is worth recognizing that hydropower projects in Laos, are built to export electricity and to earn revenues and not because of domestic demands. Laos is the country which will profit most from it and will use these revenues for infrastructure projects, its national development and poverty reduction strategies. Overall, if neither Thailand nor Viet Nam would be prepared to purchase the power generated from the Lower Mekong River hydropower dams, these dams would very likely not be built at all (ICM, 2010, pp. 8-10). Regarding their potential impacts on the hydrological flow regime of the Mekong River, those hydropower projects are predicted as challenging as the proposed Chinese projects, with various impacts predicted including: water shortage, decrease in food security, negative impacts on income and thus undermining progress of poverty eradication already made. Yet, what complicates the challenges is that many of Laos hydropower and irrigation projects are part of national development strategies to reach the UN Millennium Development goals (November 2011, p. 8). In addition to



hydropower development, various extensive irrigation projects also exist, especially Thailand has plans to use the River’s water for national irrigation projects.

Yet, degrading the environmental quality of the Mekong River Basin, will lead to serious concern regarding the development prospect of millions of people, thus representing a serious development challenge. For example in the Lower Mekong Basin living about 60 million people of which 80 percent live in rural areas with one third of depending on water related activities as their main occupation (MRC Environmental Program 2011-2015, November 2011, p. 6). Additional serious implications are identified in the reduced transportation of sediments, with significant implications not only for the agricultural sector, but for the Mekong Delta region as a whole, as it would allow an increasing incursion of salt water into the delta region consequently reducing the delta’s function as an primary agricultural area. The predicted sea-level rise would further increase the damage by salt-water incursion within the Delta region (ICM 2010, p. 14). In addition the Mekong River Basin’s vulnerability to the climate change dynamic add another layer of fundamental concern to the well-being and the development prospects of the societies which live in the Basin.

The interlinkage between development and environmental impact also applies to the next case of trans-national environmental challenge Southeast Asia is facing: the haze.

The Haze Issue

Southeast Asia’s most prominent trans-border pollution problem, the haze, is another persisting and recurring environmental issue carrying severe health and economic implications especially for Singapore, but also for Malaysia. Indonesia itself, where the source of the haze can be identified, is also confronted with a negative environmental and health for the pollution living in the exposed areas, but the extent of it changes on occasion when wind is reducing the impact considerable through a wider regional disturbing of the smoke.

The haze originates in various parts of Indonesia and normally occurs during the dry periods February-March and August-October. The source are fires linked to the economic development in specific parts of Indonesia, with peat fires generating most of the emissions from a slash-and-burn practice by local farmers as well as the illegal burning practice of companies for clearing land for palm oil production. Although the



haze is a recurring event, the years 1997/98 and 2013 stand out with regard to the negative impact they had on Singapore and Malaysia, though significant pollution effects were also observed in 2002, 2005 and 2006.

Take for example the 2013 haze, when parts of Southeast Asia suffered another serious cross-border pollution event, once again particularly affecting Singapore and Malaysia with the source located primarily in Riau province, Indonesia. Indeed, the 2013 Haze event became notorious for the record level of pollution it generated as Singapore’s pollution standard index, reached a record reading of 401 on 21 June. This was the highest ever measured level to that date. In addition to closing schools and postponing outdoor activities, the Singaporean government also issues a specific health warning, as a level of 400, if sustained for 24 hours, could generate a life-threatening situation to the ill and the elderly. Children were also advised to stay indoors. To put the pollution exposure of the 2013 haze into context, in 1997, which recorded the worst year of haze related pollution until 2013, the PSI peaked at 226 in September 1997 (BBC News Singapore haze hits record high from Indonesia fires 2013).

Even though the health impact is central, the haze also carries potential economic implications for Singapore by negatively affecting tourism and retail sales, through the suspension of business operations, and the potential of generating a negative health impact on its work force.

In 2015 yet another strong Haze event occurred, with the strongest impact on Indonesia, Singapore, and Malaysia with the most serious conditions arising during September as a state of emergency was declared in three Indonesian provinces. In Singapore and Malaysia, school closures needed to be implemented again because of the health hazard the Haze generated. International sporting events had to be cancelled in Singapore as well. On Friday September 25, the pollution standards Index in Singapore reached 341, while a figure over 100 is clarified as unhealthy, a value over three 300 is considered hazardous.

As a consequence due to both the economic dimension and trans-national character of environmental and climate change related challenges these risks are viewed as concrete security challenges for the development prospect of countries. This in turn not only leads to a fundamental alteration of the development framework, but may



also instigate political conflict between the countries involved in a trans-border environmental issue.

The challenge of addressing the complexity of regional environmental issues

When considering the specific impact climate change and environmental degeneration has on Southeast Asia the domestic-international nexus needs to be considered since environmental issues are neither bound nor constrained by national borders, nor are regulation costs readily understood at the national level. Although impacts are experienced locally it can occur within a regional context as it is the case with the Mekong river basin, generating a basin wide impact with potential political implications. As Stoett (2005, p. 169) points out the Mekong is an inescapable feature in the foreign policy planning of most Southeast Asian countries.

ASEAN 2025 focuses, rightly, on supporting further economic co-operation in supporting further regional integration. As Pempel argued previously, an increasingly dense network of cross-border cooperation, collaboration and interdependence, based on geographical proximity is a vital factor in the integration of Southeast Asia (Pempel 2005, pp. 2-3). As proximity signifies an important aspect for integration processes, for both the regional and sub-regional level, trans-border pollution issues could generate a quite negative impact on interstate relations, especially in the case of disputes about the source and responsibility of a specific environmental issue. Thus, proximity, which is interpreted as a critical factor for sub- and regional integration, can translate into a rather different connotation with regard to trans-border environmental issues. The negative impacts associated with environmental degeneration, resource depletion and climate change could turn into serious topics of international political disputes, with varied implications for interstate and regional relations.

Certainly, ASEAN Connectivity 2025 recognises the challenge for regional development, generated from the negative impact of climate change related risks, from air pollution and from unsustainable groundwater depletion. Even so, there has been an earlier recognition within ASEAN of the challenge environmental and climate change related risks pose for the region. For example, the ASEAN Joint Statement on Climate Change (2014) recognises the evidence of climate change related impact on the region over the last four decades, in causing considerable damage and economic loss (ASEAN Joint Statement On Climate Change 2014, p. 3). The statement also acknowledges the



link between climate change and extreme weather events in pointing out that responding to climate change will reduce the risk of extreme weather events (ASEAN Joint Statement On Climate Change 2014, p. 3).

Yet, despite this recognition of the challenge environmental degeneration and the impact climate change poses in the region, for risks to regional development and the potential for political disunity among member states are not fully captured. After all additional economic development, a critical objective for ASEAN, will further enhance the negative impact on the regional environment. Yet, it is not only the complexity and challenges of how to use and share the resources of the Mekong River basin which offers an insightful example of the diverse challenges to manage related disputes, but the heated exchange of words and mutual accusations between Singaporean and Indonesian officials, during the 2013 Haze period, offers an insightful example for the conflict potential environmental and climate change related security issues carry. However, it is worth pointing out that so far, environmental related disputes and potential conflicts of interest has not degenerated into a serious challenges for ASEAN. However, if one considers the increasing demand on resources, based on regional development strategies, it cannot be ignored that environmental and climate change related risks harbour a source of conflict. Even so ASEAN does recognise the prospect for comprehensive development of alternative energy resources like hydropower, solar and geothermal (Master Plan on ASEAN Connectivity 2025, 2016, p. 33). Thus the focus on renewable energy resources is interpreted as a crucial step toward a low carbon development process (ASEAN Joint Statement On Climate Change 2014, pp. 4-5). ASEAN Connectivity 2025 further acknowledges that a revolution in use of resources is required, not only to increase efficiency but to respond to future demands (ASEAN Connectivity 2025, 2016, p. 33).

As for the regional situation in Southeast Asia, ASEAN recently celebrated its 50th year as a regional organisation and thus provides a stable regional setting with the prospect of further rounds of regional integration. Its strength and relevance as a regional organisation is underlined by its membership enlargement, with former antagonists, like Vietnam, becoming an established member of the organisation.

What's more with the ASEAN Community concept, ASEAN is in the process of implementing a further step towards a closer regional co-operation and integration with



a focus on building an inclusive, more capable and prepared community by adopting a comprehensive and more encompassing approach to development and security, which includes environmental and climate change related risks (ASEAN 2025, 2015, p. 14, 16). The underlining thrust is ‘to achieve a seamlessly and comprehensively connected and integrated ASEAN that will promote competitiveness, inclusiveness, and a greater sense of Community’ (ASEAN 2015, p. 7). By increasing its internal co-operation and ability to respond to internal challenges a more effective ASEAN may materialize which in turn also gains in its regional relevance and at the international level. After all, internal strength and cohesiveness will lead to additional international recognition and preserve its centrality as a regional organisation. As stated in the ASEAN 2025 strategy, its aim is to contribute to an elaborate vision for a regional architecture, to strengthen ASEAN in the context of a changing geopolitical landscape (ASEAN 2025, 2015, p. 50).

As a final consideration, it should not be ignored that environmental security issues need to be evaluated in the context of existing security dynamics within a region, as they cannot be isolated from the overall political-economic dynamics and relations between countries. Considering the trans-national character of environmental degeneration and the impact of climate change that increases development risks, the question arises to what extent they will contribute to either a more conflictual or co-operative relationship between countries. It should be noted that hitherto there has been no direct link between environmental insecurity and climate change related risks and the outbreak of military conflict, yet it is accepted that the potential of environmental risks as ‘threat-multipliers’, that intensify a conflict situation between countries. This highlights the relevance of the prevailing security situation within a particular regional setting.

Taken together, Southeast Asia is confronted by the complex challenge of the environmental-development nexus, that is, how to align environmental protection and responses to climate change related threats with the challenge of supporting economic and human development. How these challenges are managed will be a critical test case for ASEAN as a regional organization, as implications of undermined internal cohesion could also affect the organization’s international status.

Conclusion



When evaluating Southeast Asia’s trans-border environmental security issues and the impact climate change has in the region there are strong indications of a latent risk scenario, and in a range of aforementioned cases environmental degeneration and resource distribution is a reality. This in turn could generate a conflict situation among a number of countries within ASEAN depending on the specific issue.

Yet, when considering environmental and climate change related risks the regional development context needs to be assessed. After all, environmental degeneration is linked with specific economic development strategies, like generating rapid economic growth or what is described as the ‘growth first and clean up later’ approach. As Southeast Asia is becoming a notable contributor of global greenhouse gas emissions, this in turn affects the region’s economic development process and the specific strategy selected. When considering that major urban areas within Southeast Asia, like Bangkok, Ho Chi Min City or Manila, are under threat from rising sea-levels, the regions contribution to global greenhouse emission becomes a rather critical issue. Adding to climate change related challenges is the Mekong Delta in Southern Vietnam that is also confronted by sea-level rise with serious consequences for the people living there.

However, it would be misleading to state that there has not been a regional recognition of environmental and climate change related risks as various assessments from the ASEAN, the ADB or the IPCC framework highlight the regional challenges. Even so, it seems that the responses have been mostly inadequate. Of course the development-environmental nexus hinders efforts to manage environmental degeneration since many countries in the region are still underdeveloped. However, underestimating the environmental challenge could lead to potential serious consequences such as an undermining the internal cohesion of ASEAN as a regional organisation. Weakness of coordination and cohesion could also impact negatively on ASEAN’s international standing, consequently environmental degeneration and climate change related risk carries a serious challenge for regional development.



References

- A Region At Risk The Human Dimensions Of Climate Change In Asia And The Pacific. (2017). Asian Development Bank, Mandaluyong City, Philippines
- Agreement on the Cooperation for the Sustainable Development of the Mekong river basin, Mekong River Commission. (1995).
- Alagappa, M. (1998). Rethinking Security: A critical Review and Appraisal. In M. Alagappa (Ed.), *Asian Security Practice* (pp. 27-64). Stanford: Stanford University Press.
- ASEAN JOINT STATEMENT ON CLIMATE CHANGE. (2014). Delivered at the Joint High-Level Segment 20th session of the Conference of the Parties to UNFCCC and 10th session of the Conference of the Parties serving of the meeting of Parties to the Kyoto Protocol Lima, Peru, 1-12 December 2014.
- ASEAN 2025: Forging Ahead Together. (2015). Jakarta: ASEAN Secretariat, the ASEAN Secretariat Public Outreach and Civil Society Division 70A Jalan Sisingamangaraja, Jakarta, Indonesia
- ASEAN Connectivity: Master Plan on ASEAN Connectivity 2025 Jakarta, ASEAN Secretariat, August 2016 The ASEAN Secretariat Community Relations Division (CRD) Jalan Sisingamangaraja Jakarta, Indonesia
- Ayoob, M. (1997). Defining Security:A Subaltern Realist Perspective. In M. C. Williams & K. Krause (Eds.), *Critical Security Studies* (pp. 121-148). London: UCL Press.
- BBC News Singapore haze hits record high from Indonesia fires; 21 June 2013. Retrieved from: <http://www.bbc.com/news/world-asia-22998592>
- Booth, K. (2005). Introduction to Part I. In K. Booth (Ed.), *Critical Security Studies and World Politics* (pp. 1-23). Boulder: Lynne Rienner.
- Buzan B, Waever O, deWilde J. (1998). *Security: a new framework for analysis*. London: Lynne Rienner Pub.
- Cities and climate change: global report on human settlements. (2011). Chapter 4 – The impact of climate change upon Urban Areas, pp.65-90. Greater Mekong Subregion Core Environment Program 10 Years of Cooperation (October 2018). Asian Development Bank. Retrieved from: <https://www.adb.org/sites/default/files/publication/462951/gms-cep-10-years-cooperation.pdf>



- Hijioka, Y., E. Lin, J.J. Pereira, R.T. Corlett, X. Cui, G.E. Insarov, R.D. Lasco, E. Lindgren, and A. Surjan. (2014). Asia. In: *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Barros, V.R., C.B. Field, D.J. Dokken, M.D. Mastrandrea, K.J. Mach, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1327-1370. Retrieved from: https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5Chap24_FINAL.pdf
- Ho Chi Minh City Declaration (2014). Water, Energy and Food security in the context of climate change for the Mekong River Basin. Retrieved from: <http://mrcsummit.org/download/HCMC-Declaration-V5-4Apr2014.pdf>.
- Human Security Unit United Nation. (2009). Human Security in Theory and practice. United nation Trust Fund for Human Security, 2009, Human Security Unit Office for the Coordination of Humanitarian Affairs, United Nations, New York, USA. Retrieved from: http://www.tr.undp.org/content/dam/turkey/docs/news-from-new-horizons/issue-41/UNDP-TR-HSHandbook_2009.pdf
- International Federation of Red Cross and Red Crescent Societies. 2011. Myanmar: Cyclone Nargis 2008 Facts and Figures. 3 May. Retrieved from: <http://www.ifrc.org/en/news-and-media/news-stories/asia-pacific/myanmar/myanmar-cyclone-nargis-2008-facts-and-figures/>
- IPCC (2014): *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.) IPCC, Geneva, Switzerland. Retrieved from: https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf
- Katzenstein, P. J. (1996). Introduction: Alternative perspectives on National Security. In P. J. Katzenstein (Ed.), *The Culture of national security: norms and identity in world politics* (pp. 1-32). New York: Columbia University Press.
- Master Plan on ASEAN Connectivity 2025. (2016). ASEAN Secretariat, The ASEAN Secretariat Community Relations Division (CRD) 70A Jalan Sisingamangaraja Jakarta, Indonesia



- MRC Environmental Program 2011-2015. (2011). Mekong River Commission. Retrieved from: <http://www.mrcmekong.org/assets/Publications/Programme-Documents/Environment-Programme-2011-2015-1-November.pdf>
- Raitzer, D. A. Bosello F., Tavoni M., Orecchia C., Marangoni G., Samson J. N. G. (2015). *Southeast Asia And The Economics Of Global Climate Stabilization*. Asian Development Bank, Mandaluyong City, Philippines. Risk Financing for Rural Climate Resilience in the GMS (2017) Asian Development Bank p. 18 Retrieved from: <https://www.adb.org/sites/default/files/publication/306796/risk-financing-rural-climate-resilience-gms.pdf>
- Shaw cited in Smith S. (1999). The Increasing Insecurity of Security Studies: Conceptualizing Security in the Late Twenty Years. *Contemporary Security Policy*, 20, 3 (December 1999), 72-101.
- Smith, S. (2005). The Contested Concept of Security. In K. Booth (Ed.) *Critical Security Studies and World Politics* (pp. 27-62). Boulder: Lynne Rienner.
- Stoett P. (2005, p.169) ‘Mekong River Politics and Environmental Security’ in *Confronting Environmental Change in East and Southeast Asia: Ecopolitics, Foreign Policy, and Sustainable Development*, ed. P.G. Harris, 167-82 London: United Nation University Press.
- Terrif, T., Croft S., James L., Morgan P. M. (1999). *Security Studies Today*. Cambridge: Polity Press Cambridge.
- Typhoon Haiyan death toll rises over 5000 (2013) BBC News 22 November 2013. Retrieved from: <https://www.bbc.com/news/world-asia-25051606>
- Pempel, T.J. (2005). *Remapping East Asia: The Construction of a Region*. Ithaka: Cornell University Press.
- Walker R B J. (1997). The Subject of Security. In Williams M C, Krause K (Eds) *Critical Security Studies* (pp. 61-82). London: UCL Press.
- World Bank. 2011. The World Bank Supports Thailand’s Post-Floods Recovery Effort. 13 December. Retrieved from: <http://www.worldbank.org/en/news/feature/2011/12/13/world-bank-supports-thailands-post-floods-recovery-effort>



- World Bank. (2013). Turn Down the Heat: Climate Extremes, Regional Impacts, and the Case for Resilience. A report for the World Bank by the Potsdam Institute for Climate Impact Research and Climate Analytics. Washington, DC: World Bank. Retrieved from: <file:///C:/Dokumente%20und%20Einstellungen/ploberger/Eigene%20Dateien/Downloads/9781464800559s.pdf>
- Zhengzhong, X. (2011). Models and Policy System for Low-carbon Economic Development in China, online paper, Chinese Academy of Governance Secretary General. Retrieved from: http://www2.warwick.ac.uk/fac/soc/economics/research/centres/cage/events/conferences/climate11/xu_zhe