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## **An Assessment of Environmental Cooperation in Southeast Asia: Trends & Challenges**

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# **AN ASSESSMENT OF ENVIRONMENTAL COOPERATION IN SOUTHEAST ASIA: TRENDS AND CHALLENGES**



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**June 2021**

**Manipal Academy of Higher Education**  
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**AN ASSESSMENT OF ENVIRONMENTAL  
COOPERATION IN SOUTHEAST ASIA:  
TRENDS AND CHALLENGES**

**A Dissertation Submitted to the Department of Geopolitics and  
International Relations in Partial Fulfilment for Master's Degree in  
Geopolitics and International Relations**

**Supervisor**

**DR. DHANASREE JAYARAM**

**By**

**NAYANIKA DUTTA**

**June 2021**



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Date: 29.06.2021

## DECLARATION

I declare that the dissertation entitled “**An Assessment of Environmental Cooperation in Southeast Asia: Trends and Challenges**” submitted by me for the award of the degree of Master of Arts in Geopolitics and International Relations of Manipal Academy of Higher Education is my own work. The dissertation has not been submitted for any other degree of this University or any other University.

(Nayanika Dutta)

## CERTIFICATE

I recommend that this dissertation be placed before the examiners for evaluation.

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## **ABBREVIATIONS**

AAGE	ASEAN Advisory Group on the Environment
AADMER	ASEAN Agreement on Disaster Management and Emergency Response
AATHP	ASEAN Agreement on Transboundary Haze Pollution
ACDM	ASEAN Committee on Disaster Management
AEC	ASEAN Economic Community
AEDM	ASEAN Efforts in Disaster Management
ASEP	ASEAN Environmental Programme
AEGE	ASEAN Experts Group on the Environment
AFSRB	ASEAN Food Security Reserve Board
AFTA	ASEAN Free Trade Agreement
AIFS	ASEAN Integrated Food Security
AMME	ASEAN Ministerial Meeting on the Environment
APAEC	ASEAN Plan of Action on Energy Cooperation
APTERR	ASEAN Plus Three Emergency Rice Reserve
APG	ASEAN Power Grid
ARF	ASEAN Regional Forum
ARPDM	ASEAN Regional Programme on Disaster Management
ASOEN	ASEAN Senior Officials on the Environment
ASC	ASEAN Standing Committee
AIC	ASEAN-India Centre
ASEM	Asia-Europe Meeting
ADB	Asian Development Bank
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
BDP	Basin Development Programme
BRI	Belt and Road Initiative
BCCI	Biodiversity Convention Corridors Initiative
CBM	Confidence Building Measures
DMHA	Disaster Mitigation and Humanitarian Assistance
DRR	Disaster Risk Reduction

EAS	East Asia Summit
EEPSEA	Economy and Environment Programme for Southeast Asia
EPG	Eminent Persons Group
EIA	Environmental Impact Assessment
FAO	Food and Agriculture Organization
FSNP	Food Security and Nutrition Policy
FDI	Foreign Direct Investment
GATT	General Agreement on Tariffs and Trade
GMS	Greater Mekong Subregion
GDP	Gross Domestic Product
HADR	Humanitarian Assistance and Disaster Relief
IWRM	Integrated Water Resource Management
IGO	Intergovernmental Organization
IPCC	Intergovernmental Panel on Climate Change
IMPECT	Intermountain People's Education and Culture in Thailand
IMO	International Maritime Organization
ISA	International Solar Alliance
IUCN	International Union for Conservation of Nature
IUCNNR	International Union for Conservation of Nature and Natural Resources
MRB	Mekong River Basin
MEA	Ministry of External Affairs
NMRI	National Maritime Research Institute
NTP-RCC	National Target Programme Respond to Climate Change
NPP	Net Primary Productivity
NGO	Non-Governmental Organization
OECD	Organization for Economic Cooperation and Development
PFEC	Philippine Federation for Environmental Concern
PSI	Pollutant Standards Index
RCEP	Regional Comprehensive Economic Partnership
RHAP	Regional Haze Action Plan
RSC	Regional Security Complex
RSCT	Regional Security Complex Theory
R&D	Research and Development

RIS	Research and Information System
RBO	River Basin Organization
STHPA	Singapore Transboundary Haze Pollution Act
SPA-FS	Strategic Plan of Action on Food Security
SDG	Sustainable Development Goals
THPA	Transboundary Haze Pollution Act
TAC	Treaty of Amity and Cooperation
UNCED	United Nations Conference on Environment and Development
UNESCAP	United Nations Economic and Social Commission on Asia and the Pacific
UNEP	United Nations Environmental Programme
UNFCCC	United Nations Framework Convention on Climate Change
UN-ROAP	United Nations Regional Office for Asia and the Pacific
UNDP	United Nations' Development Programme
USD	United States Dollar
WALHI	Wahana Lingkungan Hidup Indonesia
WUP	Water Utilization Programme
WWF	Worldwide Fund



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## **ABSTRACT**

Southeast Asia has seen remarkable economic growth since 1970s and 1980s. With increasing development in the region, environmental concerns began to multiply. Despite many challenges, the region has seen an increasing level of environmental cooperation. ASEAN as the most prominent transnational regional organization in Southeast Asia, acquired a key role in regional environmental cooperation. A decade after its establishment, the first ASEAN Environmental Programme in 1977, marked the beginning of environmental cooperation at the regional level. Even in the contemporary times, Southeast Asia continues to face a twin challenge of economic growth and environmental protection.

Although this region faces many different environmental vulnerabilities, this study has particularly identified four key issues: transboundary haze, disasters, food-water security nexus and climate change. The research uses ASEAN and Mekong River Commission to assess environmental cooperation at the regional and sub-regional level. The study has been divided into four major parts, precisely addressing the four objectives.

The study entails a conceptual and theoretical assessment of regional environmental cooperation in Southeast Asia. Although significant studies have been conducted to understand the region's environmental complexities, placing them in the context of regional environmental cooperation has been limited. This research uses the Regional Security Complex Theory to better understand the many dynamics of environmental cooperation, one of which is security perspectives related to the environment. The research extends beyond the state-centric regional initiatives to explore the role of non-state actors in fostering environmental cooperation, wherein the theory of New Regionalism has been applied.

The study looks at the various environmental vulnerabilities in Southeast Asia, with a focus on the four key issues: transboundary haze, disasters, food-water security nexus and climate change. In this, a thorough assessment of the vulnerabilities and its implications have shed light on the various sectors being affected, most prominently, public health, agriculture, critical infrastructure, economy, environment etc. The study builds on the reasons for ASEAN and MRC's establishment as important actors in tackling these issues and fostering cooperation at the regional and sub-regional levels, respectively.

The study includes a thorough analysis of the trends in regional environmental cooperation and an assessment of the various policies and programmes in place, with respect to the issues

identified. The role and responsibilities of non-state actors such as NGOs, indigenous people's group and other social groups in pursuing environmental cooperation, have also been analysed here. The study lays the foundational understanding of progression of ASEAN's Environmental Programmes to the Strategic Plan of Action on Environment which includes issue specific and sector specific policies and programmes targeted towards environmental cooperation and mitigation efforts of the chosen vulnerabilities. An analysis of the complexities in the Mekong region, throws light on the conflict-cooperation nexus related to environmental issues.

The study includes an assessment of the various challenges with respect to environmental cooperation in the region. The challenges are multi-dimensional, mostly pertaining to internal complexities within ASEAN and its organisational structure. Besides this, the trade- environment nexus, economic asymmetries and geopolitical issues further add to these challenges. The study also includes an extension on the location of India's role in environmental cooperation in Southeast Asia and the various prospects in tandem with ASEAN-India partnerships on environment-related initiatives.

Building on the literature available, this study assumes that regional and sub-regional institutions like ASEAN and Mekong River Commission play significant roles in the development of legal policy frameworks, that provide for formal, institutionalised mechanisms for states to cooperate. An assessment of regional security in Southeast Asia, shows that regional and sub-regional institutions like the ASEAN and MRC are more of a cooperative and deliberative body than a political authority. In the Mekong region, MRC's role has been significant in fostering greater regional security. With such institutional mechanisms in place, shared environmental concerns have pushed for more cooperation than conflict. Non-state actors play a supporting role in regional environmental cooperation, but so far, their involvement in decision-making processes have been minimal, thereby enabling a larger scope for their engagement in cooperative activities.

Further, ASEAN-India partnership on the new emerging sectors of Blue Economy, International Solar Alliance, ASEAN-India Energy Cooperation,

India's Act East Policy and ASEAN's Disaster Risk Reduction Plan further offers a myriad of opportunities for both parties to cooperate on preventive measures to tackle environmental degradation and mutually benefit from such cooperative mechanisms.