

Water, Food and Energy Nexus in Asia and the Pacific

Discussion Paper

The Status of the Water-Food-Energy Nexus in Asia and the Pacific

United Nations publication
Copyright United Nations 2013
All rights reserved
Manufactured in Thailand

For further information on this publication, please contact:

Mr Raekwon Chung
Director
Environment and Development Division
ESCAP
Rajadamnern Nok Avenue
Bangkok 10200, Thailand

Tell No: +66-2288 1234
Fax no: +66-2288 1048/1059
email: escap-esdd-ers@un.org

All material including information, data, figures and graphic presented do not imply the expressions of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or its authorities or concerning the delimitation of its frontiers.

References to dollars (\$) denote United States dollars unless otherwise noted.

Mention of firm names and commercial products does not imply the endorsement of the United Nations.

The opinions, figures, estimates set forth in this publication are the responsibility of the consultant who was responsible for the contents of the publication and, hence, should not necessarily be considered as reflecting the views or carrying the endorsement of the United Nations.

This publication may be reproduced in whole or in part for educational non-profit purposes without special permission from the copyright holder, provided that the source is acknowledged. The ESCAP publications office would appreciate receiving a copy of any publication that uses this publication as a source.

No use may be made of the publication for resale or any other commercial purpose whatsoever without prior permission. Application for such permission, with a statement of the purpose and extent of reproduction, should be addressed to the secretary of the Publication Board, United Nations, New York.

"This publication was prepared under the guidance of Hongpeng Liu, the Chief and Salmah Zakaria, Economic Affairs Officer, of Energy Security and Water Resources Section (ESWRS), Environment and Development Division (EDD) of ESCAP"

ESCAP is the regional development arm of the United Nations and serves as the main economic and social development centre for the United Nations in Asia and the Pacific. Its mandate is to foster cooperation between its 53 members and 9 associate members. ESCAP provides the strategic link between global and country-level programmes and issues. It supports Governments of the region in consolidating regional positions and advocates regional approaches to meeting the region's unique socio-economic challenges in a globalizing world. The ESCAP office is located in Bangkok, Thailand. Please visit our website at www.unescap.org for further information.



The shaded areas of the map are ESCAP Members and Associate members

ADB	Asian Development Bank
EU	European Union
FAO	Food and Agriculture Organisation
FELDA	Federal Land Development Authority
IWRM	Integrated Water Resource Management
ICWC	Interstate Commission for Water Coordination (ICWC) of Central Asia
IEA	International Energy Agency
IFAS	International Fund for Saving the Aral Sea (IFAS)
IPCC	Inter-Governmental Panel on Climate Change
MRC	Mekong River Commission
MENA	Middle East and North Africa
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
WFE	Water, food, and energy

Discussion Paper

WATER-FOOD-ENERGY NEXUS IN ASIA AND THE PACIFIC

A position paper commissioned by the United Nations
Economic and Social Commission for Asia and the Pacific

Acknowledgments

This paper was prepared by Hezri Adnan,
Institute of Strategic & International Studies (ISIS)
Malaysia, in consultation with ESWRS, ESCAP

Foreword

As the regional arm of the United Nations, ESCAP continues looking for better policy options and initiatives in the area of resources management. ESCAP, in its “Low Carbon Green Growth Roadmap for Asia Pacific” publication has articulated on “Turning resource constraints and the climate crisis into economic growth opportunities. ESCAP’s works on water and green growth identify the needs for preemptive development planning in managing climate change impacts, such as in improved governance.

This water-food-energy nexus looks at the debate on ‘resource scarcity’, with new scientific findings that suggested humanity has exceeded the planetary boundaries, threatening its own safety. Of all natural resources, energy, water and food are most needed to sustain life on earth. The three resources are tightly interconnected, forming a policy nexus. The increase in resource use in the region has been above the world average. The reliant on fossil fuel sources for their economic growth has resulted in the countries of Asia and the Pacific, accounting for almost half the world’s CO₂ emissions in 2008. The security of water, energy and food resources has been compromised in parallel with decades of economic development in Asia and the Pacific and hence the needs to study these three resources together in a nexus approach.

It is with great pleasure that ESCAP published this latest discussion paper, targeted for discussions at the 2APWS, in Chiang Mai, May 2013, to provide background materials for the discussions at both the Technical workshops and the Focus Area Sessions



Rae Kwon Chung
Director, Environment Development Division
ESCAP

Discussion Paper

Water-Food-Energy Nexus in Asia and the Pacific Region

Contents

Abbreviations	IV
Acknowledgments	VI
Foreword	VII
Executive summary	XIII
1 Background	1
1.1 The debate on resource scarcity	1
1.2 New resource realism.....	2
1.3 Rationale to integrate water, food and energy	3
1.4 Benefits of the nexus approach	5
1.5 Report overview	7
2 Nexus at the Forefront of Policy and Scientific Debate.....	8
2.1 Policy conferences.....	8
2.2 Academic conferences.....	9
2.3 Nexus elements in major documents and initiatives.....	11
3 Understanding of the Nexus	13
3.1. Input-output relationship accounting.....	13
3.2 Analysis of institutional and policy dimensions of resource coupling.....	14
3.3 Nexus policy options	15

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_6899

