

# SELECTED READINGS ON ENVIRONMENTAL ECONOMICS

---

Jarita Duasa



IIUM Press

# SELECTED READINGS ON ENVIRONMENTAL ECONOMICS

*Edited by  
Jarita Duasa*



IIUM Press

Published by:  
IIUM Press  
International Islamic University Malaysia

First Edition, 2011  
©IIUM Press, IIUM

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without any prior written permission of the publisher.

Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

Edited by Jarita Duasa

Selected Readings on Environmental Economics

Edited by Jarita Duasa.

ISBN

ISBN: 978-967-418-097-3

Member of Majlis Penerbitan Ilmiah Malaysia – MAPIM  
(Malaysian Scholarly Publishing Council)

Printed by :

**IIUM PRINTING SDN. BHD.**

No. 1, Jalan Industri Batu Caves 1/3

Taman Perindustrian Batu Caves

Batu Caves Centre Point

68100 Batu Caves

Selangor Darul Ehsan

## TABLE OF CONTENTS

	Page
<b>Introduction</b>	<b>6</b>
<b>CHAPTER 1</b> <b>Re-investigating the Tenability of Environmental Kuznets Curve for Carbon Dioxide Emission: An ARDL Cointegration Approach for Nigeria.</b> <i>Abdus Salam Usman, Rafia Afroz, Jarita Duasa and Turkhan Ali Manap</i>	<b>9</b>
<b>CHAPTER 2</b> <b>Household solid waste characteristics and management in Gombak, Malaysia.</b> <i>Muhammad Mehedi Masud and Rafia Afroz</i>	<b>33</b>
<b>CHAPTER 3</b> <b>Relationship between environmental performance and economic development</b> <i>Jarita Duasa</i>	<b>52</b>
<b>CHAPTER 4</b> <b>Sustainable development from Islamic perspective</b> <i>Izyani Zulkifli</i>	<b>71</b>
<b>Biography of Contributors</b>	<b>97</b>

## CHAPTER 1

### **Re-investigating the Tenability of Environmental Kuznets Curve for Carbon Dioxide Emission: An ARDL Cointegration Approach for Nigeria.**

*A. S. Usman, Rafia Afroz, Jarita Duasa, A. M. Turkhan*

#### ABSTRACT

*This study employs the Autoregressive Distributed Lag (ARDL) cointegration technique to investigate the tenability of Environmental Kuznets Curve (EKC) for CO<sub>2</sub> by employing different functional forms. The study uses annual time-series data for the period 1970-2005 to investigate the long-run relationship between CO<sub>2</sub> pollution and GDP per capita in Nigeria. The basic motivation for employing this method lies in the fact that, it is relatively more efficient for studies with small sample compared to the conventional procedure based on Johansen and Juselius (1990) method. The 'level' form specification reveals a monotonically positive relationship between CO<sub>2</sub> emission and GDP per capita, thereby, rejecting ECK-type relation. The semi log transformation establishes evidence for inverted-U shaped relation proposed under the EKC, yielding a turning point at N 4,934 (Nigerian Naira), even when theoretically advocated conditions are not met. Since EKC for growth in CO<sub>2</sub> emission is a rather uncommon way of assessing the EKC assertion, we relied on the 'level' form specification for policy purpose. Of importance is that the results show that even when EKC does not exist for CO<sub>2</sub> emission, such could be true for 'growth' in CO<sub>2</sub> emission.*

*Keywords:* EKC, Environment, ARDL Cointegration