



Ain Shams University
Faculty of Commerce
Economic Department

Water Governance in Achieving Green Sustainable Economic Growth

Comparative Study between Egypt and some selected Developed and Developing Countries

**A Thesis submitted in partial Fulfillment of the requirements for
Ph.D. Degree in Economics**

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2016



جامعة عين شمس
كلية التجارة
قسم الاقتصاد

رسالة دكتوراة

اسم الباحث: داليا السعيد عبد الباقي علي
عنوان الرسالة: حوكمة المياه ودورها في تحقيق النمو الاقتصادي الأخضر
المستدام "دراسة مقارنة بين مصر وبعض الدول المتقدمة والنامية"
الدرجة العلمية: دكتوراة الفلسفة في الاقتصاد

تاريخ الرسالة: 2016/ /

تكونت لجنة المناقشة والحكم من:

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شمس (عضواً)

تاريخ البحث: 2016 / /

الدراسات العليا

أجيزت الرسالة بتاريخ

2016/ /

موافقة مجلس الجامعة

2016 / /

ختم الاجازة

2016 / /

موافقة مجلس الكلية

2016 / /



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Faculty of Commerce
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Academic Degree: PhD of Economics

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Dedicated to

The sake of Allah, my Creator and my Master

My beloved homeland Egypt

The soul of my great father

the first to teach me the values and ethics

*his valuable wisdom is with me every day and has left a
lasting imprint in my mind.*

My dear mother

for her endless support, love and encouragement

My lovely twin, Youssef and Rana

*thank you both for giving me the strength to
achieve my goals and chase my dreams*

*My brother, Ahmed and My sister, Dina, your
continuous support is the secret of my success
particularly my dearest sister, who stands by me
when things look bleak*

ACKNOWLEDGMENTS

In the Name of Allah, the Most Merciful, the Most Compassionate all praise be to Allah, the Lord of the worlds; and prayers and peace be upon Mohamed His servant and messenger.

First and foremost, I must acknowledge my limitless thanks to Allah, the Ever-Magnificent; the Ever-Thankful, for His help and bless. I am totally sure that this work would have never become truth, without His guidance.

I would like to express my gratitude to my principal supervisor and mentor, **H.E. Prof. Ali Lotfi**, Former Prime Minister and Professor of Economics at the Faculty of Commerce, Ain Shams University, whose expertise, understanding, and patience, added considerably to my research experience. I appreciate his vast knowledge and skill in many areas. I attribute the level of my PhD degree to his encouragement and effort and without him this thesis would not have been completed or written. One simply could not wish for a better supervisor.

My deepest thanks and appreciation are also due to my proficient supervisor, **Prof. Ihab Ezz El-Din Nadiem**, Professor of Economics at the Faculty of Commerce, Ain Shams University, who spared no effort to teach me the knowhow and the essence of scientific research work and cognitive thinking. His kind encouragement, flexibility and professional counseling were a real push forward this work and made my steps more confident and self-assured.

I would also like to express my deep thanks and gratitude to **Prof. Amr El-Taki**, Professor of Economics and Vice President of Sadat Academy for Management Science, for accepting to be a member in my thesis examination committee in spite of his tight schedule and many responsibilities. His input, valuable discussions and comments enriched my research. Thank you for letting my defense be an enjoyable moment.

Special thanks to **Prof. Abeer Farahat**, Head of Economic Department at the Faculty of Commerce, Ain Shams University for giving me some of her

valuable time and accepting to be a member of my thesis examination committee. She was more than generous with her expertise and precious time. Thanks for her brilliant comments and suggestions.

Sincere appreciation and gratitude are due to as well my distinguished supervisor, **Dr. Iman Hashem**, Associate Professor of Economics at the Faculty of Commerce, Ain Shams University, from whom I learnt a lot and under whose patronage this research work has become to its realization. Her preciseness, hardworking and multi-talented personality was an asset in producing this work as best as it could be. To her I am indebted for making my dream come true.

With all due thanks and appreciation, I acknowledge the endless support and continuous encouragement and assistance of the great professor **H.E. Prof. Mahmoud Abu Zeid**, President of the AWC and former Minister of Water Resources and Irrigation. I learnt a lot from him and really enjoyed working with him for 10 years ago. Thanks extends also to **H.E. Dr. Hussien El-Atfy**, Secretary General of the AWC and former Minister of Water Resources and Irrigation, his academic and moral support is highly appreciated. Thanks for allowing me the time to proceed with my academic career in parallel with the obligations entailed by my work commitments at the AWC.

Finally, I would like to thank my family for all their love and encouragement. they have been extremely supportive of me throughout this entire process and has made countless sacrifices to help me get to this point. My Mother who deserve special thanks for her continued support and encouragement. My sister Dina and my brother Ahmed for supporting me all the time. My children, Rana and Youssif, have continually provided the motivation to finish my degree.

Thanks to everyone supported me and helped me to accomplish this research.

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List of Abbreviation

ADB	African Development Bank
AFED	The Arab Forum for Environment and Development
ARD	Agriculture and Rural Development
AUEAs	Agricultural Water User Associations
AWC	Arab Water Council
BCM	Billion Cubic Meters
BCWBs	Branch Canal Water Boards
BE	Brown Economy
BP _(fob)	Export Board Price
CEDARE	Center for Environment and Development for the Arab Region and Europe
CIHEAM	Centre International de Hautes Etudes Agronomiques Méditerranéennes (Mediterranean Agronomic Institute of Bari)
CPI	Consumer Price Index
CWP	Crop Water Productivity
DRC	Domestic Resource Cost Ratio
ECP	Egypt's Competitiveness Program
EEA	European Environment Agency
EEAA	The Egyptian Environmental Affairs Agency
EIs	Economic Instruments
EPC	Effective Protection Coefficient
EPP	Export Parity Price
ER	Exchange Rate
EU	European Union
EWRA	European Water Resources Association
EWUP	Egypt Water Use and Management project
FAO	United States Food and Agriculture Organization
FTAs	Farm Turnout Assemblies
GE	Green Economy
GG	Green Growth
GIZ	Deutsche Gesellschaft für Internationale (German Organization for International Cooperation)
GMP	The Green Moroccan Plan
GOFI	The General Organization for Industrialization

GW	Ground Water
GWH	Gigawatt Hour
GW	Global Water Intelligence
GWP	Global Water Partnership
Ha	hectare
HAD	High Aswan Dam
HCP	Handling Cost
HCWW	The Holding Company for Water and Waste Water
IC	Insurance Cost
ICARDA	International Center for Agricultural Research in the Dry Areas
ICBA	International Center for Biosaline Agriculture
ICID	International Commission on Irrigation and Drainage
IDB	Islamic Development Bank
IFAD	International Fund for Agricultural Development
IIED	International Institute for Environment and Development
IIP	Irrigation Improvement Projects
IMS	Irrigation Management Systems
INBO	The International Network of Basin Organizations
ISSP	Institutional Support and Strengthening Program
IWRM	Integrated Water Resources Management
IWTC	International Water Technology Conference
JCC	Jordan Cooperative Corporation
JD	Jordan Dirham
JVA	Jordan Valley Authority
M&E	Monitoring and Evaluation
MALR	Ministry of Agriculture and Land Reclamation
MCED	Ministerial Conference of Environment and Development
MCM	Million Cubic Meters
MDGs	Millennium Development Goals
MENA	Middle East and North Africa
MF	Million Feddans
MOAF	The Ministry of Agriculture and Fishery
MoI	Ministry of Industry
MSSD	Mediterranean Strategy for Sustainable Development

MWRI	Ministry of Water Resources and Irrigation
NEAP	The National Environmental National Plan
NGOs	Nongovernmental Organizations
NPCI	Nominal Protection Coefficient on Input
NPCO	Nominal Protection Coefficient on Output
NWRP	The National Water Resources Plan
O&M	Operation and Maintenance
OECD	Organization for Economic Co-operation and Development
ONEP	L'Office National de l'Eau potable (National Office for Drinking Water)
ORMVA	Office Régional de Mise en Valeur Agricole de Tadla (Regional Office of Agricultural Value in Tadla)
PAM	Policy Analysis Matrix
PCR	Private Cost Ratio
PNEEI	The National Irrigation Water Saving Program
PPP	Public Private Participation
RAADs	The nine Regional Authorities for Agricultural Development
ReWaB	Regional Water Governance Benchmarking in the Middle East and North Africa Region
SADC	The Southern African Development Community
SIWI	Stockholm International Water Institute
SONEDE	Société Nationale d'Exploitation et de Distribution des Eaux (National Water Distribution Utility)
SSEE	The Secretary of State of Water and Environment
SWIM	Sustainable Water Integrated Management Project
TCBM	Transportation Cost from Board to Market
TCFM	Transportation cost from Farm to Market
TPC	Packing Costs
UNDP	United Nations Development Programme
UNEP	United Nation Environmental Programme
UNESCAP	The Economic and Social Commission for Asia and the Pacific
UNESCO	The United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development
VW	Virtual Water

WAJ	Water Authority of Jordan
WB	World Bank
WBs	Water Boards
WCU	Water Communication Unit
WDM	Water Demand Management
WF	Water Footprint
WFD	Water Framework Directive
WFP	World Food Programme
WHO	World Health Organization
WP	Water Productivity
WRP	Water Resources Plan
WS&S	Water Supply and Sanitation
WSS	Water Supply and Sanitation
WTO	World Trade Organization
WUAs	Water Users' Associations
WWC	World Water Council
Yr	Year

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