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

By

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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

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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

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GW	Ground Water
GWH	Gigawatt Hour
GWI	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

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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

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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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