

CURRICULUM VITAE

PERSONAL DETAILS

Name: Rashid Mekki Hassan
Date of Birth: February 22, 1953
Citizenship: Dual Sudanese and South African
Marital Status: Married (4 children)
Address: Emeritus Professor, University of Pretoria, South Africa
rashid.hassan@up.ac.za; rashid.hassan657@gmail.com

LANGUAGES

Fluency in Arabic and English (spoken and written)

EDUCATION

Ph.D. Economics, December 1989, IOWA STATE UNIVERSITY, USA.

M.Sc., Agricultural Economics, May 1988, IOWA STATE UNIVERSITY, USA

M.Sc., Agric. Economics, March 1983, UNIVERSITY OF KHARTOUM, Sudan

B.Sc., Honors (Division I), July 1977 UNIVERSITY OF KHARTOUM, Sudan (Major: Agricultural Economics)

PROFESSIONAL INTERESTS AND EXPERIENCES

The economics and policy of agriculture and natural resources, rural development; sustainable management and integrated modeling of natural and economic systems, environmental accounting and the economics and policy of climate change impacts, adaptation, and mitigation

Experience with developing countries, mainly eastern, central and southern Africa

SUPERVISION OF POST-GRADUATE THESES RESEARCH

Chair of Students' Advisory committee (since 2000): 16 MSc and 24 PhD Theses:

1. Four MSc (Three with distinction) and one PhD students graduated in 2002 and 2003
2. Four PhD and Three MSc (One with distinction) students graduated in 2004
3. Two MSc students graduated in 2005
4. Two PhD and one MSc students graduated in 2006
5. Two PhD students graduated in 2007
6. One PhD graduated in 2008
7. One PhD and one MSc students graduated in 2009
8. Two PhD students graduated in 2010
9. One PhD student graduated in 2011
10. One PhD student graduated in 2012
11. One PhD and one MSc students graduated in 2013
12. Two PhD and one MSc students graduated in 2014

13. One MSc (with distinction) and one PhD students graduated in 2015
14. One PhD graduated in 2016
15. One PhD graduated in 2017
16. One MSc graduated in 2019
17. One PhD graduating in 2019
18. Currently one PhD and two MSc students are enrolled under my supervision

Co-supervisor (since 1998): Five MSc and Six PhD Theses

External examiner (since 1993): Ten MSc theses (Universities of Pretoria, Natal, Cape Town, Nairobi and Khartoum) and ***Six PhD theses*** (University of Khartoum, Makerere University, University of Malwai, University of Delhi).

TEACHING

Taught core departmental courses in quantitative methods, research methodology, applied microeconomics, production economics and natural resources management and environmental economics and policy since 1997

Led the efforts to develop and introduce all the curricula on natural resource and environmental economics and policy currently taught on campus and at the regional collaborative master program specialization in this field in which 18 university departments from the eastern, central and southern Africa region currently participate and send students to.

RECENT LEADERSHIP ROLES

Designed and led the Sida funded program supporting individual and institutional capacity building in environmental economics and policy in the east, central and southern Africa region in which 18 economics and agricultural economics departments participated and received support through various faculty development and visiting fellowships, PhD scholarships, library support, research grants and other benefits (2005- 2016)

Established and directed the center for environmental economics and policy analysis in Africa (CEEPA) currently the only one of its kind in Africa and receives very high international recognition as a leading center of excellence in this field in the developing world (2000 – current)

Established and coordinated the resource accounting net work for eastern and southern Africa (RANESA) (1998-2010)

Designed and led the Africa-wide (11 countries) GEF-World Bank funded project on impacts of climate change on agriculture in Africa (2002-2006)

Designed and led the Sida-USAID funded environmental accounting in eastern and southern Africa project (1998-2010)

INTERNATIONAL INVOLVEMENTS AND ACHIEVEMENTS

MEMBER OF THE AFRICAN MINISTERIAL CONFERENCE OF THE ENVIRONMENT (AMCEN) (2020-2022)

INTERNATIONAL MEMBER OF THE NATIONAL ACADEMY OF SCIENCES OF THE USA (2019-)

FELLOW OF:
THE AFRICAN ACADEMY OF SCIENCES (2018-),

THE ECONOMIC RESEARCH FORUM (ERF), CAIRO (2016-),
THE WORLD ACADEMY OF SCIENCES (TWAS) (2009-),
THE AFRICAN ASSOCIATION OF AGRICULTURAL ECONOMICS (2008-),

SENIOR FELLOW OF ZEF (CENTRE FOR DEVELOPMENT RESEARCH), UNIVERSITY OF BONN (2013-2020)

MEMBER OF ACADEMY OF SCIENCES OF SA (2005-)

MEMBER, EXECUTIVE COMMITTEE, African Society of Ecological Economics - ASEE (2019-2022)

MEMBER OF THE COMMITTEE FOR DEVELOPMENT POLICY (CDP) OF THE UN DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS (DESA) – (2016 – 2018 and 2019 - 2021)

MEMBER OF THE SCIENCE ADVISORY COMMITTEE (SAC) OF THE STOCKHOLM ENVIRONMENT INSTITUTE – SEI (June 2014 - 2018)

MEMBER OF THE BOARD OF THE INTERNATIONAL SOCIETY FOR ECOLOGICAL ECONOMICS – ISEE (February 2014/15)

TWAS MEMBRSHIP ADVISORY COMMITTEE (MAC) FOR SOCIAL AND ECONOMIC SCIENCES (2013-2022)

MEMBER OF THE UNEP PROECOSERV (Project on Ecosystem Services and Natural Capital) Steering Committee (2012-2015)

MEMBER OF FAO HIGH LEVEL PANEL OF EXPERTS (HLPE) ON THE STUDY ON FOOD SECURITY AND CLIMATE CHANGE (FSCC), NOVEMBER 2011 – JUNE 2012

MEMBER OF THE INDEPENDENT SCIENCE AND PARTNERSHIP COUNCIL (ISPC) OF THE CGIAR, 2011-2014

CO-CHAIR OF THE EUROPEAN SCIENCE FOUNDATION (ESF) AFRICA CONFERENCE “DYNAMIC INTERLINKAGES BETWEEN SOCIAL AND ECOSYSTEM CHANGE: TOWARDS A EUROPE AFRICA PARTNERSHIP” – NOVEMBER 2010, NETHERLANDS

MEMEBR OF THE STEERING COMMITTEE OF THE “CLIMATE CHANGE AND FOOD SECURITY–CCAF” OF THE CGIAR AND THE EARTH SYSTEM SCIENCE PARTNERSHIP (ESSP) CHALLENGE PROGRAM– JANUARY 2009 – DECEMBER 2010

MEMBER OF THE INTERNATIONAL PROGRAM COMMITTEE OF ENVIRONMENT AND WATER RESOURCE MANAGEMENT (AFRICAERWM) OF IASTED, 2010-2014

MEMBER OF THE EXTERNAL ACADEMIC ADVISORY PANEL FOR THE WORLD DEVELOPMENT REPORT 2009 ON CLIMATE CHANGE, WORLD BANK (2008-09)

MEMBER OF THE BOARD OF THE STOCKHOLM RESILIENCE CENTRE (2007-2013)

MEMBER OF THE SCIENTIFIC AND TECHNICAL ADVISORY PANEL *PHASE 4* (STAP IV) OF THE GLOBAL ENVIRONMENT FACILITY (GEF) (2006-2009)

MEMBER OF THE EXECUTIVE COMMITTEE OF THE AFRICAN ASSOCIATION OF AGRIC ECONOMISTS (2006 – 2009)

MEMBER OF THE PANEL OF THE SECOND EXTERNAL PROGRAM AND MANAGEMENT REVIEW (EPMR) OF THE INTERNATIONAL CENTRE FOR FORESTRY RESEARCH - CIFOR (2005-06)

PROJECT LEADER, THE AFRICA-WIDE GEF/WORLD BANK FUNDED PROJECT ON: Impacts of climate change on agriculture, water and ecosystems (2002 – 2006)

MEMBER OF THE SCIENCE PANEL AND CO-CHAIR OF WORKING GROUP II (Condition and Trend) of the **Millennium Ecosystem Assessment** (2001-2005), An international process to bring scientific findings on ecosystem goods and services to bear on decision-makers' needs

ONE OF THE TWO MEMBERS EXTERNAL REVIEW TEAM evaluating the African Economic Research Consortium (AERC) activities and performance during PHASE V (2000-2004)

MEMBER OF DIVERSITAS CORE PROJECT 3 ADVISORY COMMITTEE (2003-2007)

MEMBER, ADVISORY COMMITTEE, African Society of Ecological Economics - ASEE (2004-2018)

MEMBER, INTERNATIONAL STEERING COMMITTEE of the "Poverty Reduction and Environmental Management (PREM)" global Initiative funded by the Netherlands Government 2005

MEMBER OF THE PEER REVIEW GROUP ON ECONOMICS AND TRADE ISSUES OF THE HIGH SEAS TASK FORCE (A Ministerial-Led OECD Task Force on Illegal, Unreported and Unregulated Fishing on the High Seas), September 2004-April 2005

SENIOR ASSOCIATE, PROGRAM ON ECOLOGICAL AND ENVIRONMENTAL ECONOMICS (EEE), *Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy* (2003-2005)

CO-LEADER, THE NATURAL RESOURCE ACCOUNTING IN EASTERN AND SOUTHERN AFRICA PROJECT funded by Sida Sweden (2003 – 2006)

COORDINATOR OF THE RESOURCE ACCOUNTING NETWORK FOR EASTERN AND SOUTHERN AFRICA (RANESA), Funded by SIDA Sweden and The Beijer Institute of the Royal Swedish Academy of Sciences (1999- 2010)

MEMBER OF THE HIGH-LEVEL EXPERT PANEL ADVISING AN AFRICA-WIDE PROJECT ON SUSTAINABLE DEVELOPMENT AND POLICY, Coordinated by the Scandinavian Seminar College in Copenhagen (1998-1999)

ASSOCIATE EDITOR of *Agricultural Economics* (AE) (2006-), journal of The International Association of Agricultural Economics (IAAE)

FOUNDING CHIEF-EDITOR of the *African Journal of Agricultural and Resource Economics (AfJARE)* (2006-2010), Journal of the African Association of Agricultural Economics (AAAE)

ASSOCIATE EDITOR of *Environment and Development Economics (EDE)* (1999- 2006), Cambridge University Press

ASSOCIATE EDITOR, *Agrekon*, Journal of the Agric Econ Association of SA (1998 - 2001)

EDITORIAL BOARDS

Annual Review of Resource Economics (Guest Member 2021- 2023)

Global Food Security (2012-2012), Sciencedirect

Climate Change Economics (2010-), Published by World Scientific

Strategic Behavior and the Environment (2009- 2016), Published by NOW Publishers

Ecological Economics (2002- present), journal of The International Society of Ecolog. Economics (ISEE)

Environment and Development Economics (EDE) (2007-2018)

Development Southern Africa, Development Bank of Southern Africa (DBSA) (2001-2008)

WATER SA Journal (February 2005 - 2016)

MEMBER of *selection committees* of contributed papers and best paper for various International Conferences including: European Association of Resource and Environmental Economics (2008, 2010); International Association of Agric Economists (1997, 2000, 2003, 2006, 2009); International Society of Ecological Economics (2003, 2008); Environment and Development Economics (2000); World Congress for Environmental Economists (1999, 2002, 2006), International Foundation for Science (IFS) (2002, 2005, 2006), Sida (2003, 2004, 2005), LEVSA (2000, 2001, 2002, 2006, 2015, 2017); .

REVIEWER OF MANUSCRIPTS SUBMISSIONS to the *following journals*: PANAS, Envir. & Develop. Econ., American Journal of Agric Economics, Journal of Agric. Economics, Ecological Economics, Southern African Journal of Science, Agricultural Economics, Journal of International Development, Agrekon, Develop. Southern Africa, Food Policy, Southern African Forestry Journal, Water South Africa, South Africa Journal of Economic Management, Soil Biology, Agricultural Systems, African Journal of Marine Science, Journal of African Studies, Global Food Security, Climate Change Economics, Water Policy, among others.

EMPLOYMENT RECORD

<i>May 2020 – November 2021</i>	SECRETARY GENERAL, Higher Council for Environment and Natural Resources, Government of Sudan
<i>Since November 2016 –</i>	EMERITUS PROFESSOR, CEEPA, Faculty of Natural and Agricultural Sciences, University of Pretoria
<i>April 2001 – October 2016</i>	PROFESSOR and DIRECTOR, Centre for Environmental Economics and Policy in Africa (CEEPA), Faculty of Natural and Agricultural Sciences, University of Pretoria
<i>January 1998 – April 2001</i>	PROFESSOR and CHAIR in environmental economics and policy, Department of Agricultural Economics. University of Pretoria, South Africa
<i>April 1997 - December 1997</i>	ASSOCIATE PROFESSOR of agricultural and resource economics, Department of Agricultural Economics, University of Pretoria, Pretoria 0002, RSA.
<i>May 1995 - March 1997</i>	ENVIRONMENTAL ECONOMIST. Principal Researcher and Leader of the Economic Analysis and Policy Support Group at the Division of Water, Environment, and Forest Technology, the CSIR, P. O. Box 395, Pretoria 0001, RSA.
<i>November 91-April 95</i>	REGIONAL ECONOMIST with the International Maize and Wheat Improvement Center (CIMMYT) in Nairobi, P. O. Box 25171, Kenya.
<i>Nov. 1989- Oct. 1991</i>	ROCKEFELLER POST-DOCTORAL FELLOW, CIMMYT, Nairobi, Kenya.
<i>August 1988-august 1989</i>	TEACHING ASSISTANT/PREDOCTORAL RESEARCH FELLOW, Department of Economics, Iowa State University, USA.
<i>January 1985-July 1988</i>	RESEARCH ASSISTANT, Dept. of Econ., ISU, USA.
<i>April 1984-August 1984</i>	HEAD, INFORMATION SECTION, Division of Economic Planning, National

Energy Admin., Ministry of Energy and Mining, Sudan.

January 1983-March 1984

LECTURER, College of Social and Economic Studies, University of Juba, Sudan.

January 81- December 82

RESEARCH ASSISTANT, Dept. of Rural Economy, University of Khartoum, Khartoum, Sudan.

OTHER RELEVANT PROFESSIONAL ACTIVITIES

MEMBER OF THE BOARD OF THE NATIONAL FOREST CORPORATION, SUDAN (2020-2022)

MEMBER OF THE BOARD OF NUCLEAR ENERGY INSTITUTE, SUDAN (2020-2022)

MEMBER OF THE BOARD OF THE NATIONAL RESEARCH CENTRE, SUDAN (2020-2022)

MEMBER of ASSESSMENT PANEL WRITING the 2ND Biennial Assessment Report (2018) on: State of climate change science and technology development in South Africa, for the Government of SA Cabinet

SABBATICAL at THE INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE (IFPRI) in Washington, DC (August 1 to October 31, 2015)

SABBATICAL at the RESILIENCE CENTRE, STOCKHOLM UNIVERSITY, Sweden (July 2012 – October 2012)

SABBATICAL at the CENTRE FOR WATER SCIENCE AND POLICY, UNIVERSITY OF CALIFORNIA, Riverside, USA (July 2011 – October 2011)

MEMBER OF THE ACADEMY OF SCIENCES FOR SOUTH AFRICA (ASSAF) STANDING COMMITTEE ON WATER (From January 2010)

MEMBER OF THE BOARD OF HUMAN SCIENCES RESEARCH COUNCIL (HSRC), SOUTH AFRICA (2009-2012)

MEMBER OF THE STEERING COMMITTEE OF THE AFRICAN CENTRE FOR CLIMATE AND EARTH STEWARDSHIP SCIENCE – ACCESS (2008-2012)

MEMBER OF THE SOUTH AFRICAN FORESTRY COMPANY (SAFCOL) BOARD (2006-2011)

SABBATICAL at Abdul Salam ICTP, Trieste, Italy (May 10 – June 20, 2003 and September 1 – October 17, 2003)

SABBATICAL (JULY 1 – SEPTEMBER 15, 2001) AT THE ENVIRONMENT DEPARTMENT, WORLD BANK, Washington DC

MEMBER of the Advisory Committee on Safety of Dams to the Minister of Water Affairs, RSA (1998-2001)

MEMBER of the Regional Technical Committee of the Water Demand Management in SA project, SIDA project coordinated by IUCN (1998-1999)

MEMBER of several Water Research Commission (WRC) Steering Committees advising commission funded research projects (1997-1999). Examples include: Value of Water in the Great Letaba Catchment; Hydrological Economic model for the Mvoti Catchment; Evaluating the environmental use of water in Eastern and Southern Cape; The economic value of water reserves for ecosystems maintenance.

MEMBER of South Africa's National Forestry Action Program Task Team (1997)

MEMBER of the Steering Executive of the National Advisory Committee for the WWF Project on Macroeconomics and the Environment in SA (1997)

MEMBER of the IUCN-ROSA Steering Committee for the NETCAP project in southern Africa (96-98).

MEMBER of the Water Resources stakeholders Forum, WRC, South Africa (96-97).

HONORS/AWARDS

Kenneth Boulding Award of the International Society for Ecological Economics (ISEE)

Selected International Member of the USA National Academy of Sciences (NAS) in 2019

Elected Fellow of the African Academy of Sciences (AAS) in November 2018

Fourth time University of Pretoria Exceptional Academic Achiever Award (2014-2016)

Third time University of Pretoria Exceptional Academic Achiever Award (2011-2013)

Elected Senior Fellow of the African Association of Agric Economists (2010)

Chancellor Medal-Research, University of Pretoria (2010)

The Agric. Econ. Association of South Africa Second Best Published International Journal Article Prize (2010)

Elected Fellow of the World Academy of Sciences (TWAS) in 2009

The Agric. Economics Association of South Africa Best Published International Journal Article Prize for 2008

Second time University of Pretoria Exceptional Academic Achiever Award (2008-2010)

University of Pretoria Exceptional Academic Achiever Award (2005-2007)

Member of the Academy of Sciences of South Africa (ASSAf) since 2005

The Agric. Econ. Association of South Africa Best Published International Journal Article Prize for 1997.

Nominated CSIR Divisional Fellow, November 1996, CSIR, Pretoria

Rockefeller Foundation Social Science Post-Doctoral Research Fellowship in Agriculture (1989-1992).

World Food Institute Scholarship, Iowa State University, 1988

Graduate College Scholarship, Iowa State University, 1985-1987

Nomination to the Honor Society of Gamma Sigma Delta, Iowa Chapter, 1986

Nomination to the Honor Society of Phi Kappa Phi, Iowa Chapter, 1986

Ford Foundation Scholarship, University of Khartoum, Sudan, 1981-1982

MEMBERSHIPS OF PROFESSIONAL SOCIETIES

The African Association of Agricultural Economists (AAAE), 2004--

The Africa Society of Ecological Economics, 2004--

The International Society of Ecological Economics, 1996--

The Agriculture Economics Society of South Africa, 1996--

The Honor Society of Phi Kappa Phi, 1987--

The American Agriculture Economics Association, 1985--

The International Association of Agric. Economists, 1988--

The Honor Society of Gamma Sigma Delta, 1986--

REFERENCES

Professor Partha Dasgupta, Cambridge University
Professor C. Perrings, Environment Department, University of York
Dr. Ariel Dinar, Rural Development Program, World Bank
Professor Arne Hallam, Dept. of Economics, Iowa State University, Ames, Iowa

REFEREED PUBLICATIONS (191)

JOURNAL ARTICLES [121]

[121] Abd Elbasit, Knight, Liu, Abu-Zreig, and Hasaan (2021). Valuation of ecosystem services in South Africa: climate change, land degradation and sustainable development, ***Sustainability* 2021, 13, 11262.**

<https://doi.org/10.3390/su132011262>

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[118] Davenport & Hassan (2020). Application of exploratory factor analysis to address the challenge of measuring social capital in a rural communal setting in South Africa, ***Agrekon, DOI: 10.1080/03031853.2020.1713829***

[117] Yami, Meyer, and Hassan. (2020). Should traders be blamed for soaring food prices in Ethiopia? Evidence from wholesale maize markets, ***International Food and Agribusiness Review (forthcoming)***

[116] Hassan, R. and Mahlathi, S. (2020), Evaluating the environmental and social net-worth of controlling alien plants' invasion in the Inkomati river catchment of South Africa, ***Water SA 46(1)/Jan 2020. <https://doi.org/10.17159/wsa.2020.v46i1>***

[115] Blore and Hassan (2020). Social capital and self-organised collective action: Lessons and insights from a South African community project, ***Development Southern Africa, 37:2, 232-246, DOI: 10.1080/0376835X.2019.1628708***

[114] Yami, M., Meyer, F., and Hassan, R. (2020). The impact of production shocks on maize markets in Ethiopia: Implications for regional trade and food security, ***Agricultural and Food Economics (2020) 8:8, <https://doi.org/10.1186/s40100-020-0153-5>***

[113] Hassan, R. (2019). The current state and challenges to advancing sustainability science and education, ***Ecology, Economy and Society, Volume 2(2): 41-44***

[112] Kyei and Hassan (2019). Managing the trade-off between economic growth and protection of environmental quality: The case of taxing water pollution in the Olifants river basin of South Africa, ***Water Policy (21): 277-290***

[111] Hassan, Mungatana, Akpalu (2019). Strategies for managing common pool natural resources in Sub-Saharan Africa: A Review of Past experience and future challenges, ***Review of Environmental Economics and Policy, 13 (2): 207-226***

- [110] Hassan, R. (2018). Addressing the challenges to raising productivity of smallholder farmers in Africa through regularization of rights to and efficient use of land resources: Successful model from Rwanda, *Agricultural Research & Technology Open Access J.*, Vol. 14, Issue 5: 001-005 (DOI:10.19080/ARTOAJ.2018.14.555934)
- [109] Yami, M., Meyer, F., and Hassan, R. (2017), Testing price leadership role in major regional maize markets in Ethiopia: implications for targeted market intervention, *Agrekon*, DOI:1080/03031853.2017.1297724
- [108] Magboul and Hassan (2017), Microcredit supply under Islamic banking in Khartoum State, Sudan, *Southern African Business Review*, Volume 21:407-428
- [107] Yami, M., Meyer, F., and Hassan, R. (2017), Modelling price formation and dynamics in the Ethiopian maize market, *Journal of Agric. Science & Technology*, Vol. 19: 1439-1452
- [106] Waha, Zipf, Kurukulasuriya, Hassan (2016), An agricultural survey for more than 9000 African households, *Nature Scientific Data* (www.nature.com/scientificdata - DOI:10.1038/data.2016.20)
- [105] Magboul and Hassan (2016), Determinants of small-scale business owners' participation in formal microcredit markets in Sudan, *The Journal of Developing Areas*, Vol. 50, No. 5: 229-240
- [104] Biraro, M., Khan, S., Ngabo, V., Tumusherure, W., Kanyiginya, V., Konguka, G., Jossam, P., & Hassan, R. (2015), Access to the land tenure administration system in Rwanda and the impacts of the system on ordinary citizens, *Journal of Land Administration in Eastern Africa*, Vol. 3, Issue 1 (January 2015): 346-352
- [103] Magboul and Hassan (2015). The gap between demand and supply and repayment performance of microcredit in Sudan, *Khartoum University Journal of Management Studies*, Volume 9, No. 1
- [102] Hassan and Crafford (2015), Measuring the contribution of ecological composition and functional services of estuaries ecosystems to the dynamics of Kwazulu-Natal coast fisheries, *Ecological Economics* 119 (2015): 306-313
- [101] Wilkinson, Magagula, and Hassan (2015), Piloting of method to evaluate the implementation of integrated water resource management experiences and performance in the Inkomati River Basin, *Water SA* Vol. 41 No. 5 (October 2015): 633-642 <http://dx.doi.org/10.4314/wsa.v41i5.06>, Available on website <http://www.wrc.org.za> (ISSN 1816-7950, On-line)
- [100] Hassan and Thiam (2015), Implications of water policy reforms for virtual water trade between South Africa and its trade partners: Economy-wide approach, *Water Policy* 17 (2015) 649–663
- [99] Nhemachena, Hassan. and Chakwizira. (2014). Analysis of determinants of farm-level adaptation measures to climate change in Southern Africa, *Journal of Development and Agricultural Economics*, Vol 6, No. 5: 232-241
- [98] Honlonku and Hassan (2015), Developing countries' response to the clean development mechanism under imperfect information and transaction costs, *Climate Change Economics*, Vol. 6 No. 1 (DOI: 10.1142/S2010007815500013)
- [97] Sekhweni and Hassan (2014), Determinants of herd size among small-scale cattle farmers: the case of selected villages at Mhinga Traditional Authority in Limpopo Province, South Africa, *Agrekon*, Vol. 53 (4): 106-122
- [96] Abusin and Hassan (2014), Legitimacy and ethics of deterrence factors more important for compliance with

regulations among artisanal fishers of Sudan, *African Journal of Agric. & resource Economics*, Volume 9 Number 3 (August 2014): 239-2020

[95] Hassan, R. (2014), Achievements and future challenges for environment and development economics, *Environment and Development Economics*, Volume 19 (June 2014): 290-292

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[93] Girma and Hassan (2014), Drivers of land use change in the Southern Nations and Nationalities People's Region of Ethiopia *African Journal of Agric. & resource Economics*, Volume 9 Number 2 pages 148-164

[92] Sekhweni and Hassan (2013), Opportunities and challenges facing small-scale cattle farmers living adjacent to Kruger National Park, Limpopo Province, *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)* 5(1):38-43

[91] Yerga and Hassan (2013). Determinants of inorganic fertilizer use in the mixed crop-livestock farming systems in central highlands of Ethiopia. *African Crop Science Journal*, Volume 22, Issue Supplement S3: 669-681

[90] Abusin, Hassan and Hertzler (2012), Natural resource modeling: Allowing for inconstant probability of detection and frequency measures of violation within dynamic deterrence fishery models, *Natural Resource Modeling*, Volume 25, Number 3 (August 2012): 511-52

[89] Girma, Hassan and Hertzler (2012), Forest conversion versus conservation under uncertain market and environmental forest benefits in Ethiopia: The case of Sheka forest, *Forest Policy and Economics* 21 (2012): 101-107.

[88] Nakhumwa and Hassan (2012), Optimal management of soil quality stocks and long-term consequences of land degradation for smallholder farmers in Malawi, *Environment and Resource Economics* (2012) 52:415-433.

[87] Akinola, Abiodun and Hassan (2011). Impact of climate change on rice agriculture in Nigeria, *Tropical & Subtropical Agro-ecosystems* 14 (2011): 613-622

[86] Akpalu, Hassan, and Ringler (2011). Climate Variability and Maize Yield in the Limpopo Region of South Africa: Results from GME and MELE Methods, *Climate and Development* 3(2011):114-122

[85] Hassan & Birungi (2011). Social capital and poverty in Uganda, *Development Southern Africa*, Vol. 28, No. 1 (2011): 19-37

[84] Banda & Hassan (2011). Inter-fuel substitution and dynamic adjustment in input demand: Implications for deforestation and carbon emission in Malawi, *African Journal of Agric. & resource Economics*, Vol. 6, No. 1:54-69

[83] Hassan and Thurlow (2011). Macro–micro feedback links of water management in South Africa: CGE analyses of selected policy regimes, *Agricultural Economics*, Vol. 42, No. 2 (2011): 235-247

[82] Deressa, Hassan, Ringler (2011). Perception of and adaptation to climate change by farmers in the Nile Basin of Ethiopia, *Journal of Agricultural Science*, Vol. 149: 23-31

[81] Nhemachena, Hassan and Kurukulasuriya (2010). Measuring the economic impact of climate change on African agricultural production systems, *Climate Change Economics*, Vol. 1, No. 1 (2010): 33-55

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- [79] Hassan, R. (2010). The double challenge of adapting to climate change while accelerating development in sub-Saharan Africa, *Environment & development Economics*, Vol. 15:661-685
- [78] Jogo and Hassan (2010). Balancing the use of wetlands for economic well-being and ecological security: the case of the Limpopo wetland in southern Africa, *Ecological Economics*, **60 (2010)**: 1569-1579
- [77] Hassan, R. (2010). Implications of Climate Change for Agricultural Sector Performance in Africa: Policy Challenges and Research Agenda, *Journal of African Economies*, Vol. 19, AERC Supplement 2
- [76] Gbetibouo, Hassan and Ringler (2010). South African farming sector vulnerability to climate change and variability: An indicator approach. *Natural Resources Forum* **34 (2010)**: 175-87.
- [75] Yerga and Hassan (2010). Social costs and incentives for optimal control of soil nutrient depletion in the central highlands of Ethiopia. *Agricultural Systems* **103 (2010)**: 153-160
- [74] Birungi and Hassan (2010), Influences of poverty, access to social capital and tenure security on land conservation and fertility management in Uganda, *African Journal of Agric. & Resource Economics*, Vol 4 No. 1 (March 2010): 48-69
- [73] Gbetibouo, Hassan and Ringler (2010). Modeling farmers' adaptation strategies to climate change: The case of the Limpopo basin in SA. *Agrekon* **49(2) 2010**: 217-234
- [72] Beyne and Hassan (2009). The role of learning in adoption of improved wheat varieties in Northern and Southern Shewa of Ethiopia, *Ethiopian Journal of Agric Economics*, Vol. VII, No.2 (May 2009): 35-54
- [71] Deressa and Hassan, (2009), Economic impact of climate change on crop production in Ethiopia: Evidence from cross-section measures, *Journal of African Economies*, Vol. 18, No. 4: 529-554
- [70] Hassan, Hertzler and Benhin. (2009), Depletion of forest resources in Sudan: Intervention options for optimal control. *Energy Policy* **37 (2009)**: 1195-1203
- [69] Mmopelwa, Blignaut and Hassan, (2009). Direct use values of selected vegetation resources in the Okavango delta wetland. *South African Journal of Economics and Management Sciences-SAJEMS*, Vol. 12 No. 2 (June 2009):
- [68] Deressa, Hassan, et al. (2009), Determinants of farmers' choice of adaptation methods to climate change in the Nile Basin of Ethiopia. *Global and Environmental Change* **19 (2009)**: 248-255
- [67] Seo, Mendelsohn, Dinar, Hassan, and Kurukulasuriya (2009). A Ricardian analysis of the distribution of climate change impacts on agriculture across agro-ecological zones in Africa, *Environment and Resource Economics*, No 43: 313-332
- [66] Yerga & Hassan (2008). Multinomial logit analysis of farmers' choice between short and long-term soil fertility management practices in the Central Highlands of Ethiopia, *Ethiopian Journal of Agricultural Economics*, Vol. VII, No 1 (June 2008):83-105
- [65] Hassan, R. and C. Nhemachena (2008). Determinants of climate adaptation strategies of African farmers: A multinomial choice analysis, *African Journal of Agric. & Resource Economics*, Vol. 2, No. 1: 83-104
- [64] Hassan, R (2008). The life and work of living legends: Prof. Sir Partha Dasgupta, *International Journal of*

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