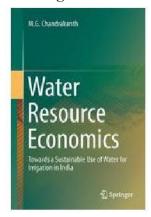


#### Dr. M.G. CHANDRAKANTH

Director (Retd.), Institute for Social and Economic Change, Nagarabhavi, Bangalore 560072, Former Dean, College of Agriculture, Leader of Team of Excellence in Natural Resource and Environmental Economics, Professor and University Head of Agricultural Economics, Ciriacy- Wantrup Fellow, DAAD visiting professor, Erasmus Mundus visiting scholar, Member of Academic Council, University of Agricultural Sciences, GKVK, Bangalore -560 065, Karnataka, India, Ph: 919449486018 <a href="mailto:mgchandrakanth@gmail.com">mgchandrakanth@gmail.com</a>: 30th January 1955

# **Book published**

MG Chandrakanth, Water Resource Economics: Towards a Sustainable Use of Water for Irrigation in India, 2015, Springer, New York.



## http://www.springer.com/in/book/9788132224785

#### Academic Qualifications

2		Academ	ic Quaiiii	cations	
Academic degree	Institution	Year of passing	% Marks	<b>CGPA Subjects</b>	Distinctions if
1. Post Doctoral studies	University of California, Berkeley	1988-90	Warks	Institutional Economics	any Ciriacy- Wantrup post doctoral
2. DAAD Visiting scholar	Humboldt Univ of Berlin, Germany	March to May 2010 & Oct 2013- Dec 2013		Institutional Economics, NRE	fellowship
3. Erasmus Mundus visiting scholar	Univ of Ghent and Humboldt Univ, Berlin	April 2008 to June 2008		Rural Development	

2. Ph.D	UAS Bangalore	1981	98	3.91/4	Agricultural Economics	UAS Gold medal for distinction
3. MSc(Ag)	UAS Bangalore	1976	90	3.61/4	Agricultural Economics	
4. BSc(Ag)	UAS Bangalore	1974	87	3.49/4	Agronomy, Agricultural Economics	

Employment Record (with post held, scale of pay, employer, year of joining, year of leaving, major responsibilities):

Position	Pay Scale	Employer	Joini 1g Year of		Responsibilities
			Year	leaving	
1. Professor	Rs. 68000	UAS	2006	2017	Teaching, research, extension of
and	Basic	Bangalore			Agricultural economics, natural
University					resource and environmental
Head					economics, rural development
2. Dean	Rs. 16400-	UAS	Feb 6	July 2	Technical administration of
	22400	Bangalore	2009	2009	College of Agriculture, UASB
3. Professor	16400-450	UAS	1994	2017	Teaching and / or Research at
	- 20900 -	Bangalore			UG / PG in rural development,
	500 -				agricultural economics, Natural
	22400 -				resource and environmental
	reached Rs				economics, Econometrics,
	23400 with				Production Economics,
	3 stagnation				Administration as HOD and
l .	increments				University Head
2. Associate		UAS	1983	1994	Teaching and /or research at UG
Professor		Bangalore			/ PG in agricultural economics,
					mathematical economics,
3. Assistant		ISEC,	1982	1983	Teaching and / or research in
Professor		Bangalore			agricultural / rural economics
4. Instructor		UAS	1980	1982	Assisting in teaching
		Bangalore			agricultural economics at UG level

# Former Member Editorial Committee of

1. Indian Journal of Agricultural Economics 2. Agricultural Economics Research Review

Coodinator: Student exchange program International Masters in Rural Development,
University of Ghent, at UAS Bangalore

#### **Fellowships**

**Post Doctoral Fellowship** from the Ford Foundation for training in forestry economics, 1987-88, deputed by University of Agricultural Sciences, Bangalore

**Ciriacy-Wantrup Post Doctoral Fellowship** in the institutional economics of natural resources at the **University of California**, **Berkeley** (1987 - 1990) for studies on natural resource economics, Institutional economics, forestry economics and policy.

Ph.D. in Agricultural Economics, University of Agricultural Sciences, Bangalore, 1977-1982; (Gold Medalist).

**World Bank Visiting Fellowship**, April - June 2001 in Environmental and Resource Economics at Florida International University, Miami, Florida, USA.

ICAR Junior Fellowship during M.Sc. (Agri.) in Agricultural Economics, University of Agricultural Sciences, Bangalore, 1974-1976.

General Merit Scholarship during B.Sc. (Agri.) in University of Agricultural Sciences, Bangalore, 1970-1974.

Core course on Integrated Water Resources Management (IWRM), World Bank Institute, Washington DC, July 8-12, 2002.

#### **Academic Administration and Experience**

- Dean, College of Agriculture, University of Agricultural Sciences, GKVK, Bangalore from Feb 6 2009 to July 2 2009
- University Professor and Head of Agricultural Economics, UAS, Bangalore from Dec 2006 till date
- Member, Management Board, IMRD, University of Ghent, Belgium
- Professor and Head of Agricultural Economics, UAS, Bangalore from 1996 to 2003
   Professor, Department of Agricultural Economics, UAS, Bangalore 2003 to 2006 3, 1994 till Oct 2003.

**Associate Professor**, Department of Agricultural Economics, University of Agricultural Sciences, Bangalore, since December 2, 1983 to February 2, 1994.

**Assistant Professor**, Institute for Social and Economic Change, Bangalore, February 2, 1982-December 1, 1983.

**Instructor**, Department of Agricultural Economics, University of Agricultural Sciences, Bangalore from August 1, 1980 - February 1, 1982.

#### **Project experience**

Economics of cultivation and processing of tree based bio-fuels *Simarouba glauca*, , *Pongamia pinnata*, *Azadirachta indica*, *Madhuca indica* 

Resource and Environmental economics of groundwater and watershed development and has been successful in fund raising for research from Ford Foundation and World Bank.

Experience in leading research team of diverse cultures and background fulfilling the objectives.

Experience in institution building activities and in human resource development.

Have been responsible in shaping the careers of several students to pursue their graduate program and post doctoral program in coveted Universities in US, Europe and Australia

Economics of rice cultivation under groundwater and surface water irrigation incorporating the cost(value) of surface water and groundwater in different agroclimatic zones of Karnataka

Economics of rice cultivation in groundwater areas, Economics of SRI (System of Rice Intensification),

Economics of water management in rice cultivation in command areas.

# **Teaching Experience: Courses offered:**

**Post graduate courses:** Econometrics, Mathematical Economics, Natural Resource Economics I, Research Methodology in social sciences, Agricultural Production Economics.

**Under graduate courses:** Introduction to Agricultural Economics, Forestry Economics, Economics of Sericulture, Recent Advances in Agricultural Economics, Agricultural Finance and Credit Institutions.

# **Special Honours**

DAAD visiting Professor at Humboldt University of Berlin, Germany to teach Institutional economics, March to May 2010.

Editorial committee member of AERA (Agricultural Economics Research Association Journal)

**Visiting Professor** at the University of Ghent, Belgium and at Humboldt University of Berlin for the EU's International Masters in Rural Development program to teach the graduate students under ERASMUS MUNDUS fellowship April to June 2008

Honoured as **Member** of The Water Policy Law Group of the University of South Australia, Adelaide, Australia.

Lectures in SANDEE program funded by Rockefeller Foundation.

**Nominated as Vice President** of the Indian Society of Agricultural Economics, a Professional body of Agricultural Economists in India) for two years from 2000.

Nominated as **Chairman / Rapporteaur** for the session on "Valuation of environmental and natural resources" for papers submitted during the 61st Annual Conference of the Indian Society of Agricultural Economics, Dec 27-29, 2001, at Gulbarga University, Gulbarga.

**Principal Investigator**, Team of Excellence in Natural Resource Economics, funded by NATP, World Bank, at UAS, Bangalore for 1999-2003.

Experience in handling two exclusive research projects relating to groundwater and watershed development funded by the **Ford Foundation**, New York

# **Projects handled**

Regional Crop Planning for Improving Resource Use Efficiency and Sustainability" funded by NIAP (formerly NCAP), ICAR (Rs. 35 lakhs) from 2013 to 2017.

- Sustainable economic empowerment of sc/st, women farmers, through cultivation, harvesting and processing of biofuel crops in Karnataka funded by DBT, Government of
- India, New Delhi

Sustainable development of watershed program, by Sujala, World Bank assisted project for Rs. 13 lakhs from Govt of Karnataka

Team of Excellence in Natural Resource Economics, grant of Rs. 1.10 crores from World Bank. Worked on Economics of groundwater and surface water irrigation

Ford Foundation, New York: grant of \$80,000 to research on "Dynamics of access to water resources - a resource economics study of the watershed development program in Karnataka, 1999-2005

The Ford Foundation, New York provided \$41,000 to research on "Equity issues in groundwater development - an institutional analysis of failed irrigation wells in Karnataka" 1994 to 1998

The Winrock International, Washington DC, provided \$ 1700 to research on the sustainability of management in rehabilitated irrigation tanks in Karnataka. This is a completed project.

#### **Awards**

**D. K. Desai award for the best article in Agricultural Economics by Indian Society of Agricultural Economics**, for the year 1995, entitled "Low yielding irrigation wells in peninsular India - An economic analysis" (shared with Dr N Nagaraj)

**Gold Medal of University of Agricultural Sciences, Bangalore** for best performance in Ph.D program, 1981

**Ford Foundation Post-Doctoral Fellowship** for studies in Agricultural and Natural Resource Economics at the University of California, Berkeley, USA, 1987-88

**Ciriacy-Wantrup Post-Doctoral Fellowship** offered by University of California, Berkeley in Agricultural and Natural Resource Economics, 1988-1990

**World Bank Visiting Fellowship**, April - June 2001 in Environmental and Resource Economics at Florida International University, Miami, Florida

#### Visits Abroad

DAAD scholar, Humboldt University of Berlin, Mar 2010 to May 2010 and October 2013 to Dec 2013 - Visiting Professor, Institutional Economics, NRE

University of Ghent, Belgium April to May 2008 - Erasmus Mundus IMRD visiting Professor in Rural development

Humboldt University of Berlin, July 2008 - Erasmus Mundus IMRD visiting scholar World Bank Visiting Fellowship from April-2001 to June 2001, World Bank Institute, **Washington DC, USA**.

Symposium on Indigenous knowledge systems for plant protection at the Thirteenth International Plant Protection Congress, 2-7th July, The Hague, **The Netherlands** (CIRAN, Amsterdam).

Research seminar on environmental economics organized by Royal Swedish Academy of Sciences, (Beijer Institute), Stockholm, Sweden during May 16-21, 1995 at **Kota Kinabalu, Malaysia.** 

Seminar on Methods for Social Science Research on Non-Timber Forest Products", organized by Harvard Institute for International Development, May 18-20, 1992 at Regional Community Forestry Training Center (RECOFTC), FAO, at **Kasetsart University**, **Bangkok**, **Thailand** 

Visiting fellow at ANU, Canberra, Australia, May 1992, Australian National University, **Australia**.

Second International Ethnobiology Congress, October 21-26, 1990, Kunming Institute of Botany, Kunming, **Republic of China.** 

Ninteenth (XIX) International Union of Forest Research Organizations World Congress (IUFRO), Division 4, August 5-11, 1990, **Montreal, Canada**.

Annual meeting of the American Agricultural Economics Association at University of Tennessee, Knoxville, July 1988, AAAE, **USA**.

Ford Foundation Post Doctoral Fellowship and Ciriacy-Wantrup Post-doctoral fellowship from August 1987 to September 1990, University of California, **Berkeley, USA**.

Second International Conference on Social Science Resource Management, June 1988, University of Illinois, Urbana? Champaign **USA**.

Eighteenth (XVIII) International conference of Agricultural Economics from August 24, 1982 to September 2, 1982, Jakartha, **Indonesia**.

## Services offered

# <u>1.IWMI - Karnataka S</u>tate Water Sector Reform: Current Status, Emerging Issues and Needed Strategies

- 2. IWMI Stabilization value of groundwater
- **3.Training of scientists** in the institutes run by Indian Council of Forestry Research and Education, Govt of India, with regard to setting research priority using economic surplus approach.
- 4. Former Member, Research Advisory committee, Central Sericultural Research and Training Institute, Govt of India, Mysore
- 5. **Review of research project proposals** submitted by scientists of Institute of Wood Science and Technology under ICFRE, Govt of India, Bangalore.
- 6. .**Review of research proposals** submitted to South Asian net work of Development and Environmental Economics (SANDEE), Kathmandu, Nepal.
- 7. Served as member to improve Karnataka Water sector, Water Resources Department, Government of Karnataka 2011.

# Referee for following journals

- 1. Ecological Economics
- 2. Agricultural Economics Research Association
- 3. Water Policy
- 4. Indian Journal of Agricultural Economics

#### **Other Activities**

Responsible for success of around 35 post graduate students in seeking graduate fellowships at Univ of Idaho, Cornell University, Univ of Gent, Belgium, Agricultural

University of Norway, South Australia University, Adelaide, in the field of Natural resource and environmental economics and management

Current interests are on water resource economics, economics of **medicinal plants** and their valuation, estimation of negative externalities in **groundwater** use and estimation of existence value of **sacred groves**.

Hobbies include **Karnatak classical vocal music and Gamaka.** Click here:

KARNATAKA SANGEETHA DHARPANA (English text of Karnatak Classical

Music)-Part I and Part II by Thirumalai Sisters Gaanakalaabhooshana Dr. T. Sachidevi & Karnataka Kalaashree, VIDHUSHI T. SHARADA (Retd. Professors of Music).

#### Invited

to present a paper on "*Existence value of sacred groves*", IUFRO, Montreal, 1990. to present a paper on "*Temple forests in India's forest development*" - International Ethnobiology Congress, Kunming, China, 1990.

to participate in a workshop on "Valuation of Non-Timber Forest Products" by Harvard Institute for International Development, Bangkok, 1992.

to be a visiting fellow at ANU, Canberra, 1992.

to present a paper on "Marketing of medicinal plants at Malaysia" by Royal Swedish Academy of Sciences.

to present a paper on "*Indigenous knowledge in plant protection*" at The Netherlands, 1995.

# ${\bf 40\; Publications\; with\; NAAS\; score\; with\; downloadable\; link}$

Sl No.	List of Publications	NAAS Journal ID
1	MS Suneetha and MG Chandrakanth, 2006, Establishing a Multi-stakeholder E Value Index in Medicinal Plants - An economic study on selected plants in Kerala and Tamilnadu States of India, <i>Ecological Economics</i> , Vol. 60, No.1, pp. 36-48. <a href="http://www.sciencedirect.com/science/article/pii/S0921800906000863">http://www.sciencedirect.com/science/article/pii/S0921800906000863</a>	(8.72)
2.	AV Manjunatha, S Speelman, MG Chandrakanth, G Van Huylenbroeck, 2011, Impact of groundwater markets in India on water use efficiency: A data envelopment analysis approach, <i>Journal of Environmental Management</i> , Vol. 30, pp. 1-6. <a href="http://www.ncbi.nlm.nih.gov/pubmed/21803479">http://www.ncbi.nlm.nih.gov/pubmed/21803479</a>	J165 (8.72)
3.	M.G. CHANDRAKANTH, J.K. GILLESS, V. GOWRAMMA and M.G. NAGARAJA, 1990, Temple forests in India's forest development, <i>Agroforestry Systems</i> , <b>11</b> ( <b>3</b> ): 199-21. <a href="http://link.springer.com/article/10.1007%2FBF00045899#page-1">http://link.springer.com/article/10.1007%2FBF00045899#page-1</a>	A085 (7.22)
4.	MG Chandrakanth, MG Bhat and MS Accavva, 2004, Socio-economic changes and sacred groves in South India: Protecting a community-based resource management institution, <i>Natural Resources Forum</i> , Vol. 28, No.2, pp. 102-111. http://onlinelibrary.wiley.com/doi/10.1111/j.1477-8947.2004.00077.x/abstract	N015 (7.15)
5.	MG Chandrakanth and MG Nagaraja, 2014, Payment for ecosystem services for water - case of Cauvery, CURRENT SCIENCE, VOL. 107, NO.9, 10 NOVEMBER 2014, pp. 1375-1376. <a href="http://www.currentscience.ac.in/Volumes/107/09/1375.pdf">http://www.currentscience.ac.in/Volumes/107/09/1375.pdf</a>	C155 (6.93)
6.	BS Chaitra and MG Chandrakanth, 2005, Optimal extraction of groundwater for irrigation: synergies from surface water bodies in tropical India. <i>Water Policy Journal</i> , 7: 597-611 (Elsevier) <a href="http://wp.iwaponline.com/content/7/6/597">http://wp.iwaponline.com/content/7/6/597</a>	W005 (6.83)
7.	Woldegebrial Zeweld, Guido Van Huylenbroeck, Assefa Hidgot, M. G. Chandrakanth, and Stijn Speelman, 2015, Adoption Of Small-Scale Irrigation And Its Livelihood Impacts In Northern Ethiopia, IRRIGATION AND DRAINAGE, DOI: 10.1002/ird.1938, http://www.toenre.com/downloads/2015-Wolde-etal-MGC-article-in-Irrg-and-Drainage.pdf	I264 (6.51)
8.	BK Rohith and MG Chandakanth, 2011, Institutional and economic dynamics of water users cooperative (WUC) societies in Cauvery Basin of	A066 (5.68)

		1
	Karnataka, Agricultural Economics Research Review, Vol 24, July-Dec	
	2011, pp. 235-242. http://ageconsearch.umn.edu/bitstream/118231/2/6-BK-Rohit.pdf	
	- Compat	
9	N Nagaraj, MG Chandrakanth, PG Chengappa, HS Roopa and Pramod M	A066
	Chandakavate, 2008, Contract Farming and its Implications for Input-	(5.68)
	supply, Linkages between Markets and Farmers in Karnataka, Agricultural	
	Economics Research Review, Vol. 21, pp. 307-316.	
	http://ageconsearch.umn.edu/bitstream/47880/2/1-N-Nagaraj.pdf	
10.	H Lokesha*, TN Prakash, MG Chandrakanth and Chandarshekar, 2008,	A066
10.	Economic Analysis of Transaction Cost on Kolaramma Tank Watershed in	(5.68)
	Eastern Dry Zone of Karnataka, Agricultural Economics Research Review,	
	Vol. 21, pp 293-296	
	http://ageconsearch.umn.edu/bitstream/47685/2/17-H-Lokesha.pdf	
11.	M.G. Chandrakanth, C.N. Priyanka, P. Mamatha and Kiran Kumar Patil,	1020
11.	2013, Economic Benefits from Micro Irrigation for Dry Land Crops in	(5.04)
	Karnataka, Indian Journal of Agricultural Economics, Vol. 68, No.3,	(5.01)
	July-Sept. 2013, pp. 326-338.	
	http://www.toenre.com/downloads/2013_IJAE_Econ_benefits_from_micro	
	%20irrigation_for_dryland_crops_of_Karnataka.pdf	
12	Kiran Kumar R. Patil, GR Manjunatha and MG Chandrakanth, 2013,	1020
	Economic Impact of Institutions on the Consumption of Forest Products in	(5.04)
	India, Indian Journal of Agricultural Economics, Vol. 68, No.2, April-	
	June 2013, pp. 155-168.	
	http://www.toenre.com/downloads/2013_IJAE_Kiranpatil_impact_of_institu	
	tions.pdf	
13.	Channaveer, MG Chandrakanth, PS Srikanthamurthy and N Nagaraj, 2012, IC	20
	Governance of Benefits from Developmental Programmes to Farmers in	(5.04)
	Karnataka, Indian Journal of Agricultural Economics, Vo1.67, No.3,	
	July-Sept. 2012, pp. 476-486.	
	http://www.toenre.com/downloads/2012_07_IJAE_paper_Governance_of_b	
	enefits_from_dev_programs_Channaveer_MGC.pdf	
14.	BK Rohith and MG Chandrakanth, 2011, Economic Scenario of Farmers in IO	20
	Water Users Co-operatives Across Levels of Water Governance in Cauvery (5	
	Basin of Karnataka, <i>Indian Journal of Agricultural Economics</i> , Vol.66,	
	No.4, Oct-Dec. 201 I, pp. 619-637.	
	http://www.toenre.com/downloads/2011_IJAE_WUCs_article_by_BK_Rohi	
	th_and_MG_Chandrakanth_Vol66_No4_OctDec2011_pp_617-637.pdf	
15.	N Nagaraj, MG Chandrakanth, David Acker, PG Chengappa, HR Shruthi,	
	CG Yadava, and Ramesh Kanwar, 2009, Economic Performance of Self	1020

	Help Groups in Karnataka with special reference to Venkatenahalli in South India, <i>Indian Journal of Agricultural Economics</i> , Vol. 64, No. 4, Oct-Dec 2009, pp. 604-617. <a href="http://www.toenre.com/downloads/2009-10">http://www.toenre.com/downloads/2009-10</a> paper on SHG NN MGC IJ <a href="http://www.toenre.com/downloads/2009-10">AE.pdf</a>	(5.04)
16.	M Gireesh, N Nagaraj and MG Chandrakanth, 1997, Rehabilitation of irrigation tanks in Eastren Dry Zone of Karanataka, <i>Indian Journal of Agricultural Economics</i> , Vol. 52, No.2, April-June 1997, pp. 231-243. <a href="http://www.toenre.com/downloads/1997_IJAE_paper_Economics_of_Tank_desiltation_Gireesh_NN_MGC.pdf">http://www.toenre.com/downloads/1997_IJAE_paper_Economics_of_Tank_desiltation_Gireesh_NN_MGC.pdf</a>	I020 (5.04)
17.	MG Chandrakanth and V Arun, 1997, Externalities in Groundwater Irrigation in Hard Rock Areas, <i>Indian Journal of Agricultural Economics</i> , Vol. 52, No.4, Oct-Dec 1997, pp. 761-771. <a href="http://www.toenre.com/downloads/1997_10_paper_negative_externalities_mgc_arun_IJAE.pdf">http://www.toenre.com/downloads/1997_10_paper_negative_externalities_mgc_arun_IJAE.pdf</a>	I020 (5.04)
18.	N Nagaraj and MG Chandrakanth, 1995, Low Yielding Irrigation Wells in Peninsular India - An Economic Analysis, <i>Indian Journal of Agricultural</i> (5. <i>Economics</i> , Vol. 50, No. I, Jan-March 1995, pp. 47-58. <a href="http://www.toenre.com/downloads/1995">http://www.toenre.com/downloads/1995</a> IJAE paper on low yilelding bor ewells NN MGC.pdf	I020 04)
19.	N Nagaraj, MG Chandrakanth and Gurumurthy, 1994, Borewell Failure in Drought-Prone Areas of Southern India: A Case Study, <i>Indian Journal of Agricultural Economics</i> , Vol. 49. No.1. Jan-March 1994. pp. 101-106. <a href="http://www.toenre.com/downloads/1994_IJAE_NBD_application_paper_on_borewell_failire_NN_MGC_Gurumurthy.pdf">http://www.toenre.com/downloads/1994_IJAE_NBD_application_paper_on_borewell_failire_NN_MGC_Gurumurthy.pdf</a>	I020 (5.04)
20.	GK Vani, PS Srikantha Murthy, MG Chandrakanth, GM Gaddi, H Chandrashekar, N Nagaraj and M Bhattarai, 2015, Employment Generation, Labour Migration and MGNREGP Intervention: Evidences from a Village Level Study, <i>Agricultural Economics Research Review</i> , Vol. Vol. 28 (Conference Number) 2015 pp 267-274 <a href="http://ageconsearch.umn.edu/bitstream/229328/2/26-GK-Vani.pdf">http://ageconsearch.umn.edu/bitstream/229328/2/26-GK-Vani.pdf</a>	A066 (5.68)

Sl. No.	List of Publications	NAAS Journal ID
21.	GB Lokesh, PP Muthappa, and MG Chandrakanth, 2004, Economics of	A066
	cultivation and marketing of passion fruit in Karnataka, Agricultural	(5.68)
	Economics Research Review. Vol.17 January-June 2004 pp 131-138.	
22.	MG Chandrakanth, JV Venkataram, KNR Sastry, R Ramanna, S Bisaliah,	1020
	and KSA Kumar, 1979, Consumption of Forest Products in India - A	(5.04)
	Quantitative analysis, <i>Indian Journal of Agricultural Economics</i> , Vol. 34, No. 3, Jul-Sep 1979, pp. 51-60	
	100.5, 3ul-Sep 1777, pp. 51-60	
23.	N Nagaraj and MG Chandrakanth, 1997, Intra and Inter-Generational equity E	024
	effects of irrigation well failures - Farmers in hard rock areas of India,	(4.66)
	Economic and Political Weekly, Vol. 32, No. 13, March 29, 1997 (Review	
	of Agriculture) pp. A 41-44	
	http://www.toenre.com/downloads/1997_03_EPW_NN_MGC_Intra_and_Int	
24	er_Generational_Equity_Effects_of_Irrigation_Well_Failures.pdf	
	MG Chandrakanth, Bisrat Alemu, Mahadev G Bhat, 2004, Combating	E024
	Negative Externalities of Drought Groundwater Recharge through Watershed (4)	
	Development Programme, <i>Economic and Political Weekly</i> , Vol. 39, No. 11,	,
	13 Mar 2004, pp. 1164-1170.	
	http://www.toenre.com/downloads/2004_03_combating_neg_externalities_M	
	GC_Bisrat_EPW.pdf	
25	MG Chandrakanth and Jeff Romm, Groundwater Depletion in India-	Thomson Reuter
	Institutional Management Regimes, <i>Natural Resources Journal</i> , Vol. 30,	Impact factor 0.21
	Summer 1990, pp.485-501.	Impact factor 0.21
	http://lawschool.unm.edu/nrj/volumes/30/3/03_chandrakanth_groundwater.p_	
26	df (Published by University of New Mexico school of law, USA)	
	MG Chandrakanth and Jeff Romm, Sacred forests, secular forest policies and	Th
	People's actions, <i>Natural Resources Journal</i> , Vol 31, No.4, pp. 741-756, Fall 1991	Thomson Reuter Impact factor 0.21
	http://lawschool.unm.edu/nrj/volumes/31/4/02_chandrakanth_sacred.pdf	Impact factor 0.21
27		
	H Diwakara and MG Chandrakanth, 2007, Beating negative externality	Thomson Reuter
	through groundwater recharge in India: a resource economic analysis,	Impact Factor 1.19
	Environment and Development Economics (Cambridge University Press),	
	Vol. 12, pp. 271-296.	
20	http://www.toenre.com/downloads/2007_EDE_article_MGC_Diwakara.pdf	
28.	NN TROLL INCOLUTE A DESCRIPTION OF THE	024
	N Nagaraj, K Shankar and MG Chandrakanth, Pricing of Irrigation Water in E Cauvery Basin Case of Kabini Command, <i>Economic and Political Weekly</i> ,	02 <del>4</del>
	Vol. 38, No. 43, 25 Oct 2003, pp.4518-4520	(4.66)
	http://www.toenre.com/downloads/2003_10_EPW_article_pricing_MGC_Sh	
	<u>anker.pdf</u>	8

29	U C Ramalinge gowda, M G Chandrakanth, P S Srikanthamurthy, C G Yadav, N Nagaraj, channaveer, 2012, Economics of Peri-Urban Agriculture (4 Case of Magadi Off Bangalore, <i>Economic and Political Weekly</i> , Vol. 47, No. 24, 16 Jun 2012, pp. 75-80. <a href="http://www.toenre.com/downloads/2012_Jun_EPW_article_on_periurban_agriculture_UAS_Bangalore.pdf">http://www.toenre.com/downloads/2012_Jun_EPW_article_on_periurban_agriculture_UAS_Bangalore.pdf</a>	E024 4.66)
30	VM Rao and MG Chandrakanth, 1984, Resources at the Margin: Tank irrigation program in Karnataka, <i>Economic and Political Weekly</i> , Vol.13, No. 26, June 1984, pp A54-57 <a href="http://www.toenre.com/downloads/1984_06_EPW_article_VMRao&amp;MGC.p">http://www.toenre.com/downloads/1984_06_EPW_article_VMRao&amp;MGC.p</a>	E024 (4.66)
31	Vikram Patil, MG Chandrakanth, NR Gangadharappa, AV Manjunatha and B Shivanagouda, 2014, Economic Impact of Forest Management Institutions on Groundwater Recharge in Karnataka, India, <i>Indian Forester</i> , Vol. 140, No. 11, pp.1095-1106 <a href="http://www.toenre.com/downloads/2014_Economic_Impact_Forest_Management_Institutions.pdf">http://www.toenre.com/downloads/2014_Economic_Impact_Forest_Management_Institutions.pdf</a>	T023 (4.27)
32	K Suresh and MG Chandrakanth, 2015, Total factor productivity and returns to investment in Ragi (finger millet) crop research in Karnataka state, India, <i>Indian Journal of Economics and Development</i> , Vol 3, No. 3, pp. 199-205, March 2015 <a href="http://www.toenre.com/downloads/2015-Total-factor-productivity-and-returns.pdf">http://www.toenre.com/downloads/2015-Total-factor-productivity-and-returns.pdf</a>	I044 (4.01)
33.	U Divyalekshmi, Gayathri Mohan, KR Hamsa, S Subramanya and MG Chandrakanth, 2015, Estimation of payment for ecosystem services of GKVK: A resource economics study, <i>Mysore Journal of Agricultural Sciences</i> , Vol. 49 No.4, pp. 738-743.	T041 (2.91)
34	Kolla Sravanthi and MG Chandrakanth, 2013, Transaction cost analysis of benefits received from Governmental programs by farmers in Krishna District of Andhra Pradesh, Mysore Journal of Agricultural Sciences, Vol. 47, No.2, pp. 368-373. http://www.toenre.com/downloads/2013_MJAS_Transaction_cost_analysis_benefits_received_in_AP.pdf	T041 (2.91)
35.	Kolla Sravanthi and MG Chandrakanth, 2013, Utilization of benefits from Government programs or schemes by farmers in Andhra Pradesh - An institutional economic analysis, Mysore Journal of Agricultural Sciences, Vol. 47, No.1, pp. 138-146.	T041 (2.91)
36.	KR Hamsa, GV Rohith, KS Rashmi, PS Srikanthamurthy and M G	T041

	Chandrakanth, 2015, Recreational use Value of Tourism Using Metadata, Mysore Journal of Agricultural Sciences, Vol. 49, No.3, pp. 548-552 <a href="http://www.toenre.com/downloads/2015">http://www.toenre.com/downloads/2015</a> Recreation %20use value of %20 <a href="mailto:tourism_in_%20Karnataka.pdf">tourism_in_%20Karnataka.pdf</a>	(2.91)
37.	GB Lokesh and MG Chandrakanth, 2004, Economics of production, marketing and processing of turmeric in Karnataka, <i>Indian Journal of Agricultural Marketing</i> Vol.18 No.2 pp.32-44.	I021 (2.89)
38.	MG Chandrakanth, 2012, Irrigation and Efficient Use of water, Letter to the E Editor, Economic and Political Weekly, Vol. 47, No.24, June 16, 2012, pp. 4- (5. <a href="http://www.toenre.com/downloads/2012_Jun_Letter_to_EPW_on_Groundwater_from_MGC.pdf">http://www.toenre.com/downloads/2012_Jun_Letter_to_EPW_on_Groundwater_from_MGC.pdf</a>	
39.	MG Chandrakanth, 2015, Role of Technology, Institutions and Irrigation in IO: Agricultural Development, <i>Indian Journal of Agricultural Economics</i> , Vol. (70, No.3, July-Sept. 2015, pp. 454-469. <a href="http://www.toenre.com/downloads/2015-MGChandrakanth-Chairman-report-of-SessionII-IJAE-Jul-Sep2015.pdf">http://www.toenre.com/downloads/2015-MGChandrakanth-Chairman-report-of-SessionII-IJAE-Jul-Sep2015.pdf</a>	I I
40.	MG Chandrakanth, 2002, Valuation of Natural and Environmental Resources: Methodology and Estimation, <i>Indian Journal of Agricultural Economics</i> , Vol. 57. No. I. Jan-Mar 2002, pp. 23-30.	I020 (5.04)

# **Other Significant Publications**

- MG Chandrakanth, Irrigation and Efficient use of Water, Letter to the Editor, **Economic** and Political Weekly, Vol XLVII, No. 24, June 16, 2012, pp. 4-5.
- MG Chandrakanth et al, Micro irrigation: Economics and outreach in Karnataka, in Palanisami (Edited), Micro Irrigation, Economics and Outreach, IWMI, AERA and Macmillan, 2012, pp. 27-54.
- MG Chandrakanth, Karnataka state water sector reform: Current status, emerging issues and needed strategies, , ITP RESEARCH SERIES - 2009 No.3, IWMI, Icrisat, Andhra Pradesh, pp. 1-47.

Organized Session by MG Chandrakanth at the 2008, European Association of Agricultural Economics Conference at Ghent, Belgium for the following paper Shalet K.Varghese, Manjunatha, A.V., Poornima, K.N., Akarsha, B.M., Rashmi, N., Tejaswi, P.B. Saikumar, B.C., Jeevarani, A.K., Accavva, M.S., Amjath Babu, T.S., Suneetha, M.S., Unnikrishnan, P.M., Deshpande, R.S., Nagaraj, N.,, Chandrashekar, H., Mahadev G Bhat, Chengappa, P.G., Mundinamani, S.M., Shanmugam, T.R., and Chandrakanth, M.G, (2008), organized session Valuation of externalities in water, forests and Environment for sustainable development, Organized Session, *Proceedings of the 12<sup>th</sup> Congress of the European Association of Agricultural Economists*, pp.131-138.

Seema, H.M, **Chandrakanth, M.G.**, and Nagaraj, N., (2008), Equity in distribution of benefits from water harvesting and groundwater recharge - An economic study in Sujala

watershed project in Karnataka, *Proceedings of the 7th Annual Partners' Meet of IWMI-TATA Water policy program*, Vol 2., pp. 720-746, April 2-4, 2008.

Varuni, C.N., Chandrakanth, M.G., Nagaraj, N. and Srikanthmurthy, P.S., (2006), Externalities of groundwater contamination due to pollution and effects on agriculture and health in Karnataka, 5th IWMI-TATA Annual partners' meet, March 2006

Deepak, S.C., **Chandrakanth, M.G.** and Nagaraj, N, (2005), Groundwater Markets and Water Use Efficiency: The Case of Karnataka, *Water Policy Research* **Highlight No. 12**, IWMI-TATA Water Policy Program, 5th Annual IWMI-TATA partnerships meet, Feb 2005

Nagraj, N., Suvarna Kumar, A.H. and **Chandrakanth, M.G.,** (2005) Economic Analysis of Groundwater Markets in Central Dry Zone of Karnataka, **Water Policy Research Highlight** No. 13, IWMI-TATA Water Policy Program, 5th Annual IWMI-TATA partnerships meet, Feb 2005.

Chandrakanth, M.G. India hit by domestic water disputes, *Water 21*(*Magazine of the International Water Association*), Aug 2004, p. 4.

- Lokesh G.B. and **Chandrakanth M.G.**, (2003). Cultivation of Sweet flag (*Acorus calamus*): Economic Study of an Endangered Medicinal Plant, *Journal of Medicinal and Aromatic Plant Sciences*, **25** (2002).
- Chandrakanth M.G. (2002), Valuation of Natural and Environmental Resources: Methodology and estimation, Summaries of Group Discussion, *Indian Journal of Agricultural Economics*, 57(1): 23-30.
- Chandrakanth M.G. and Mahadev G. Bhat (2002), Institutions, Markets and the Management of Common Property Sacred Groves in India, Paper presented at World Congress of Environmental and Resource Economists, Monterey, California, June 24 27.
- Suneetha M.S. and **Chandrakanth M.G.** (2002), Trade in medicinal plants in Kerala Issues, problems and prospects. *Journal of Medicinal and Aromatic Plant Sciences*, **24** (2002): 756-761
- Chandrakanth M.G., Shivakumaraswamy, B., Sathisha K.M., Basavaraj, G., Sushma Adya, Shyamasundar M.S. and Ananda K.K., (2002), Negative Externality Due to Cumulative Interference of Irrigation Wells in Groundwater Irrigation in Hard Rock Areas of Peninsular India, Paper presented at World Congress of Environmental and Resource Economists, Monterey, California, June 24 27.
- Chandrakanth, M.G., Ravishankar A, Rangesh Paramesh and Suneetha M.S. (2002), Medicinal plants A Resource economics study, in DK Marothia (Ed) Institutionalizing Common Property Resources, Concept Publishing House, New Delhi.
- Bisrat Alemu, Chandrakanth, M.G. and Mahadev G. Bhat, (2002), Impact of watershed development program in augmenting groundwater resource in drought situation. in K Palanisami, D Suresh kumar and B Chandrashekaran (Ed), Watershed Management, Associated Publishing Company, New Delhi, pp. 192-210.
- Chandrakanth M.G., (2001). Valuation of Natural and Environmental Resources, Methodology and estimation, Rapporteurs Report, Indian Journal of Agricultural Economics, **56** (3): 564-579.

- Chandrakanth, M.G., Shivakumaraswamy, B and Ananda, K.K., (1998), *Economic implications of unsustainable use of groundwater in hard rock areas of Karnataka*, Report submitted to The Ford Foundation, New Delhi, Dept of Agri Economics, UAS, Bangalore, March 1998, pp. 1-30.
- Chandrakanth, M.G., Shyamasundar, M.S. and Ananda, K.K., (1998), *Interplay of markets, externalities, institutions and equity in groundwater development An economic study in the hard rock areas of Karnataka*, Report submitted to The Ford Foundation, New Delhi, Dept of Agri Economics UAS, Bangalore, March 1998, pp. 1-45.
- Chandrakanth, M.G., Sathisha, K.M. and Ananda, K.K., (1998), Resource economics study of valuation of well interference externalities in Central dry zone of Karnataka, Report submitted to The Ford Foundation, New Delhi, Dept of Agri Economics UAS, Bangalore, March 1998, pp. 1-30.
- Chandrakanth, M.G., Sushma Adya and Ananda, K.K. (1998), *Scarcity of groundwater for irrigation : Economics of coping mechanisms in hard rock areas*. Report submitted to The Ford Foundation, New Delhi, Dept of Agri Economics UAS, Bangalore, March 1998, pp. 1-40.
- Chandrakanth, M.G. and Nagaraja, M.G. (1997), Existence value of Kodagu sacred groves: Implications for policy, in Anil Agarwal (Ed), The challenge of the Balance: Environmental Economics in India. Center for Science and Environment, New Delhi, 1997, pp. 217-224.
- Nagaraja, M.G. and Chandrakanth, M.G. (1997), Karnataka: Culture of Keres and Kattes, in Anil Agarwal and Sunita Narain (Ed) *Dying Wisdom-State of India's Environment - A Citizen's Report 4*, Center for Science and Environment, New Delhi, pp. 204-205.
- John M. Kerr, Chandrakanth, M.G. and Deshpande, R.S. (1997), Managing Groundwater Development in Karnataka, in J.M. Kerr, D.K. Marothia, Katar Singh, C. Ramasamy and W.R. Bentley (Ed) *Natural Resource Economics Theory and Application in India*, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi, 1997, pp. 421-443.
- Chengappa, N. Nagaraj, **Chandrakanth, M.G.**, H. Chandrashekar, D.S. Gundurao, B. Shivakumaraswamy, V.K. Arunakumar, K.S. Nagaprasad, M. Girish and TJ Lakshminarayana, (1996), *Economic viability of small farmers in Karnataka*. Karnataka State Planning Board, Government of Karnataka, Bangalore, Jan 1996.
- Chandrakanth, M.G., H. Ramachandra Reddy, A.L. Siddaramaiah, B. Padmodaya, S. Jagirdar and N. Basavaradhya, (1995), *Plant protection practices in India based on Indigenous knowledge*, invited paper presented to the symposium on 'Indigenous knowledge systems' at the 13th International Plant protection Congress, 2-7 July 1995, The Hague, The Netherlands.
- Chandrakanth, M.G., (1995), Market imperfections, transaction costs and economic scarcity of forest based medicinal plants and plant products in Karnataka, India, invited paper presented at the research seminar on environmental economics, organized by Beijer Institute, The Royal Swedish Academy of Sciences, at Kota Kinabalu, Malaysia, May 16-May 19, 1995.
- Nagaraj, N and **Chandrakanth, M.G.,** (1995), Low yielding irrigation wells in peninsular India An economic analysis, 1995, *Indian Journal of Agricultural Economics*, Vol. 50, No. 1, Jan-Mar 1995, pp. 48-58. (Won the Best Full Length Paper

- award for 1995, from Indian Society of Agricultural Economics, awarded at the Annual Conference of Indian society of Agricultural Economics, Peechi, Jan 1997).
- Chandrakanth, M.G. and Nagaraja, M.G. (1994), Sacred groves of Coorg, *Forest, Trees and People*, Newsletter No. 23, Feb 1994, pp.57-59.
- Arun, V. and Chandrakanth, M.G. (1993), Valuation of Externalities in Borewell irrigation in Hard Rock Areas of Karnataka An empirical study, Water Management: India's groundwater challenge, VIKSAT/Pacific Institute Collaborative Groundwater Project, Ahmedabad, Dec 14-16, 1993.
- Nagaraj, N. and Chandrakanth, M.G., (1993), Electricity pricing for groundwater irrigation in hard rock areas of the Deccan Plateau: Estimation of Willingness to Pay, Water Management: India's groundwater challenge, VIKSAT/Pacific Institute Collaborative Groundwater Project, Ahmedabad, Dec 14-16, 1993.
- Prakash, T.N. and Chandrakanth, M.G., (1993), Sustainability in Groundwater resource development policy implications on the subsidy foro promoting positive externalities, Water Management: India's groundwater challenge, VIKSAT/Pacific Institute Collaborative Groundwater Project, Ahmedabad, Dec 14-16, 1993.
- Chandrakanth, M.G. and Nagaraja, M.G., (1993), Green Deities, *The Times of India* Vol. 8, No.90, Jan 16, 1993, p. 15.
- Chandrakanth, M.G., (1993), Ground rules for water, *The Times of India*. Vol 8, No. 79, Jan 2, 1993, p. 15.
- Narasimha, N, **Chandrakanth, M.G.** and Jayaramaiah, K.M. (1994), Gathering and processing activity analysis in forest based edible oil seed tree A case study of *Garcinia cambogia, Journal of Non Timber Forest Products*, Vol 1 Nos 1 and 2, pp. 56-59.
- Chandrakanth, M.G. and Lokamanya, D.S. (1994), Market imperfections in forest based medicinal tree parts A case study, *Journal of Non Timber Forest Products*, Vol 1 Nos 1 and 2, pp. 6-14.

<u>Departmental publications from TEAM OF EXCELLENCE IN NRE, World Bank</u> Chinnappa, B., Nagaraj, N. and **Chandrakanth, M.G.** (2004), Valuation of irrigation induced soil degradation in Tungabhadra Project area of Karnataka - An economic analysis.

Varuni, C.N., **Chandrakanth, M.G.**, and Nagaraj, N. (2003), Estimation of externalities due to use of polluted groundwater for irrigation in Kabini Command, Karnataka. Hemalatha, A.C., and **Chandrakanth, M.G.**(2003), Estimation of externalities due to sand mining in water streams in affected riparian areas of Karnataka.

Shankar, K., Nagaraj, N., and **Chandrakanth, M.G.,** (2003), Pricing of irrigation induced land degradation effects in Kabini Command, Karnataka.

Ravi, B.M., Suryaprakash, S. and **Chandrakanth**, M.G., (2002), Pricing of surface water in Bhadra command area - A resource economic study.

Rohith, B.K., Prakash, T.N. and **Chandrakanth, M.G.,** (2002), Economics of tank irrigation in Western Ghats of Karnataka.

Accavva, M.S., Chengappa, P.G. and **Chandrakanth, M.G.,** (2002), Preservation of Devaraka Kadu in Kodagu district - A resource economic study.

Chaitra, B.S. and **Chandrakanth**, **M.G.**, (2002), Valuation of Synergistic role of canals and tanks in groundwater recharge in the framework of optimal control theory.

Sripadmini, R., **Chandrakanth, M.G.**, and Chandrashekar, H. (2001), Relative economic performance of watershed development projects under different management protocols in Karnataka.

Bisrat Alemu Mengesha and **Chandrakanth**, **M.G.**, (2001), Economic access to groundwater irrigation in watershed development in Karntaka.

Lokesh, G.B. **Chandrakanth, M.G.,** (2001), A resource economic study of sweet flag (*Acorus calamus*) in Tumkur district, karnataka.

**Chandrakanth, M.G.** and Diwakara, H. (2001), Synergistic effects of watershed treatments on farm economy through groundwater recharge - A resource economic analysis.

Suneetha, M.S. and **Chandrakanth**, M.G., (2001), Demand for and valuation of medicinal plants and products in the western ghats of Kerala - A resource economics study.

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