

# IWMI PUBLICATIONS LIST -- 2004

March 1, 2005

1. The list is based on information/soft/hard copies received in the library during the period 1 January 2004 – 25 February 2005.
2. An entry in blue indicates that the library has received only the information, and needs a copy for retention.
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## I. Peer Reviewed Outputs

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- Research Reports
- Comprehensive Assessment Research Reports
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- MSc/PhD Theses Accepted

## II. Non-Peer Reviewed Outputs

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- Other Outputs
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  - Discussion papers
  - Project reports
  - Miscellaneous

## III. Key Note Addresses and other Presentations

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- Keynote speeches/presentations
- Invited papers
- Conference/Workshop presentations

## 1. PEER REVIEWED OUTPUTS

### RESEARCH REPORTS

1. **Bhattarai, Madhusudan.** 2004. Irrigation Kuznets Curve, governance and dynamics of irrigation development: A global cross-country analysis from 1972 to 1991. *Colombo, Sri Lanka. IWMI. vi, 47p. (IWMI research report 78)*
2. **Drechsel, Pay ; Giordano, Mark ; Gyiele, Lucy.** 2004. Valuing nutrients in soil and water: Concepts and techniques with examples from IWMI studies in the developing world. *Colombo, Sri Lanka. IWMI. v, 33p. (IWMI Research report 82)*
3. **Faysse, Nicolas.** 2004. An assessment of small-scale user's inclusion in large-scale water user associations of South Africa. *Colombo, Sri Lanka: IWMI. 36p. (IWMI research report 84)*
4. **Molle, François ; Mamanpoush, A. ; Miranzadeh, M.** 2004. Robbing Yadullah's water to irrigate Saeid's garden: Hydrology and water rights in a village of Central Iran. *Colombo, Sri Lanka. IWMI. vi, 43p. (IWMI research report 80)*
5. **Quereshi, Asad Sarwar; Turrall, Hugh; Masih, Ilyas.** 2004. Strategies for the management of conjunctive use of surface water and groundwater resources in semi-arid areas: A case study from Pakistan. *Vi, 24p. (IWMI research report 86)*
6. **Saleth, Rathinasamy Maria.** 2004. Strategic analysis of water institutions in India: Application of a new research paradigm. *Colombo, Sri Lanka. IWMI. vi, 37p. (IWMI research report 79)*
7. **Smakhtin, Vladimir U.; Piyankarage, Sujeewa C.; Stanzel, Philipp; Boelee, Eline.** 2004. Simulating the hydrology of small coastal ecosystems in conditions of limited data. *Colombo, Sri Lanka: IWMI. v, 28p. (IWMI research report 77)*
8. **Thenkabail, Prasad Srinivasa ; Gamage, M. S. D. Nilantha ; Smakhtin, Vladimir U.** 2004. The use of remote sensing data for drought assessment and monitoring in Southwest Asia. *Colombo, Sri Lanka. IWMI. v, 25p. (IWMI research report 85)*
9. **UI Hassan, Mehmood ; Starkloff, R. ; Nizamedinkhodjaeva, Nargiza.** 2004. Inadequacies in the water reforms in the Kyrgyz Republic: An institutional analysis. *Colombo, Sri Lanka. IWMI. vii, 44p. (IWMI research report 81)*
10. **Vermillion, Douglas Lynn; Al-Shaybani, S.** 2004. Small dams and social capital in Yemen: How assistance strategies affect local investment and institutions. *Colombo, Sri Lanka: IWMI. v, 28p. (IWMI research report 76)*

## COMPREHENSIVE ASSESSMENT RESEARCH REPORTS

11. **Barker, Randolph ; Molle, François.** 2004. Evolution of irrigation in South and Southeast Asia. *Colombo, Sri Lanka. Comprehensive Assessment Secretariat.. vi, 45p. (Comprehensive Assessment research report 5)*
12. **Barker, Randolph ; Ringler, Claudia; Nguyen Min Toen; Rosegrant, Mark .** 2004. Macro policies and investment priorities for irrigated agriculture in Vietnam. *Colombo, Sri Lanka. Comprehensive Assessment Secretariat. vii, 48p. (Comprehensive Assessment research report 6)*
13. **de Fraiture, Charlotte ; Cai, X ; Amarasinghe, Upali ; Rosegrant, M. ; Molden, David.** 2004. Does international cereal trade save water?: The impact of virtual water trade on global water use. *Colombo, Sri Lanka. Comprehensive Assessment Secretariat. v, 32p. (Comprehensive Assessment research report 4)*
14. **Giordano, Mark ; Zhu, Zhongping ; Cai, X. ; Hong, S. ; Zhang, X. ; Xue, Y.** 2004. Water management in the Yellow River Basin. *Colombo, Sri Lanka. Comprehensive Assessment Secretariat. v, 39p. (Comprehensive Assessment research report 3)*
15. **Smakhtin, Vladimir U.; Revenga, C.; Doll, P.** 2004. Taking into account environmental water requirements in global-scale water resources assessments. *Colombo, Sri Lanka: Comprehensive Assessment Secretariat. v, 24p. (Comprehensive Assessment Research Report 2)*

## JOURNAL ARTICLES

16. **Abdullaev, Iskander.** 2004. The analysis of water management in Bukhara Oasis of Uzbekistan: Historical and territorial trends. *Water International*, 29(1):20-26.
17. **Abdullaev, Iskandar; Molden, David.** 2004. Spatial and temporal variability of water productivity in the Syr Darya Basin, Central Asia. *Water Resources Research*, 40:6p.
18. **Afrane, Y. A.; Klinkenberg, Eveline; Drechsel, Pay; Owusu-Daaku, K.; Garms, R.; Kruppa, T.** 2004. Does irrigated urban agriculture influence the transmission of malaria in the City of Kumasi, Ghana? *Acta Tropica*, 89(2):125-134.
19. **Ahmad, Mobin-ud-Din.; Masih, I.; Turrall, Hugh.** 2004. Diagnostic analysis of spatial and temporal variations in crop water productivity: A field scale analysis of the rice-wheat cropping system of Punjab, Pakistan. *Journal of Applied Irrigation Science*, 39(1):43-63.
20. **Ahmad, Mobin-ud-Din ; Stein, A. ; Bastiaanssen, W. G. M.** 2004. Estimation of disaggregated canal water deliveries in Pakistan using geomatics. *International Journal of Applied Earth Observation and Geoinformation*, 6:63-75
21. **Ahmad, Mobin-ud-Din; Bastiaanssen, W. G. M.; Feddes, R. A.** 2004. A

new technique to estimate net groundwater use across large irrigated areas by combining remote sensing and water balance approaches, Rechna Doab, Pakistan. *Hydrogeology Journal*, 6 November:

22. **Ali, G.; Asghar, M. N.; Latif, M.; Hussain, Z.** 2004. Optimizing operational strategies of scavenger wells in lower Indus Basin of Pakistan. *Agricultural Water Management*, 66(3):239-249.

23. **Awulachew, Seleshi Bekele.** 2004. Modelling natural condition, impact of consumptive water use and aggradations of Abaya and Chamo Lakes: Ethiopia. *Journal of Lakes and Reservoirs: Research and Management*,

24. **Awulachew, Seleshi Bekele.** 2004. Investigation of physical characteristics and development of parameters of Abaya and Chamo Lakes: Ethiopia. *Journal of Lakes and Reservoirs: Research and Management*,

25. **Awulachew, Seleshi Bekele.** 2004. Monthly water balance model for hydrological runoff simulation in limited data situation. *Journal of Hydrological Process*,

26. **Barker, Randolph ; Tuong, To Phuc. ; Li, Y. ; Castillo, E. G. ; Bouman, B. A. M.** 2004. Growing more rice with less water: Research findings from a study in China *Paddy and Water Environment*, 2:185

27. **Bhattarai, Madusudhan. ; Hammig, M.** 2004. Governance, economic policy, and the environmental kuznets curve for natural tropical forests. *Environment and Development Economics*, 9:367-382

28. **Birdar, Chandrashekahr M.; Saran, S.; Raju, P. L. N ; Roy, P. S.** 2004. Forest canopy density stratification: How relevant is biophysical spectral response modelling approach? *Geocarto International*

29. **Boelee, Eline ; Laamrani, Hammou.** 2004. Environmental control of schistosomiasis through community participation in a Moroccan oasis. *Tropical Medicine and International Health*, 9(9):997-1004

30. **Bunemann, E. K.; Bossio, Deborah A.; Smithson, P. C.; Frossard, E.; Oberson, A.** 2004. Microbial community composition and substrate use in a highly weathered soil as affected by crop rotation and P fertigation. *Soil Biology and Biochemistry*, 36(6):889-901.

31. **Chaney, R.L.; Reeves P.G.; Ryan, J.A., Simmons, Rob W.; Welch, R.M.; Angle, J.S.** 2004. An improved understanding of soil Cd risk to humans and low cost methods to phytoextract Cd from contaminated soils to prevent soil Cd risks. *BioMetals*, 17(5):549-553.

32. **Chemin, Y.; Platonov, A.; Ul-Hassan, Mehmood.; Abdullaev, Iskander** 2004. Using remote sensing data for water depletion assessment at administrative and Irrigation-system levels: Case study of the Ferghana Province of Uzbekistan. *Agricultural Water Management*, 64(3):183-196.

33. **Cofie, Olufunke ; Pleysier, J.** 2004. Ion exchange involving calcium-potassium (Ca-K) and calcium-magnesium (Ca-Mg) in soil and organic matter fractions *Communications in Soil & Plant Analysis*, 35(17-18):2417-2431

34. **De Plaen, R.; Seka, M. L.; Koutoua, A.** 2004. The paddy, the vector and the caregiver: Lessons from an ecosystem approach to irrigation and malaria in Northern Côte d'Ivoire. *Acta Tropica, Special Issue: Malaria and Agriculture*, 89 (2): 135-146.
35. **de Rouw, Anneke.** 2004. Yield stability in Sahelian pearl millet farming. *Agricultural Systems*, 81:73-93
36. **de Rouw, Anneke.; Rajot, J. L.** 2004. Nutrient availability and pearl millet production in Sahelian farming systems based on manuring or fallowing. (Special Issue "Soil erosion with SOM dynamics and soil biology", Eds M. Kirkby and D.S. Powlson) *Agriculture, Ecosystems & Environment*, 104:249-262.
37. **de Rouw, Anneke.; Rajot, J. L.** 2004. Soil organic matter, surface crusting and erosion in Sahelian farming systems based on manuring or fallowing. (Special Issue "Soil erosion with SOM dynamics and soil biology", eds M. Kirkby and D.S. Powlson.) *Agriculture, Ecosystems & Environment*, 104:263-276.
38. **Dolo, G.; Briët, Olivier J.T.; Dao, A.; Traore, S.F.; Bouare, M.** 2004. Sogoba N et al. Malaria transmission in relation to rice cultivation in the irrigated Sahel of Mali. *Acta Tropica*, 89(2):147-159.
39. **Dong, B. ; Molden, David ; Loeve, R. ; Li, Y. H. ; Chen, C. D. ; Wang, J. Z.** 2004. Farm level practices and water productivity in Zhanghe Irrigation System *Paddy and Water Environment*, 2:217-226
40. **Ensink, Jeroen H. J. ; Mahmood, Tariq ; van der Hoek, Wim ; Raschid-Sally, Liqa ; Amerasinghe, Felix Prashantha.** 2004. A nationwide assessment of wastewater use in Pakistan: An obscure activity or a vitally important one?. *Water Policy*, 6(3):197-206.
41. **Faysse, Nicolas.** 2004. Challenges for fruitful participation of smallholders in large-scale water resource management organizations: Selected case studies in South Africa. *Agrekon*, 43(1):52-73
42. **Fleck, J. A.; Bossio, Deborah A.; Fujii, R.** 2004. Dissolved organic carbon and disinfection by-product precursor release from managed peat soils. *Journal of Environmental Quality*, 33:465-475.
43. **Fujimoto, Naoya.** 2004. Water pricing and agricultural water management in monsoon Asia [Monsoon Asia no Nougyou-yousui-kanri to Mizu no Pricing] *Journal of the Japanese Society of Irrigation, Drainage & Reclamation Engineering*, 72(3):213-216
44. **George, B. A. ; Malano, H. M. ; Vo Khac Tri ; Turrall, Hugh.** 2004. Using modelling to improve operational performance in the Cu Chi Irrigation System, Vietnam. *Irrigation and Drainage*, 53(3):237-249
45. **Ghafoor, A.; Sadiq, M.; Murtaza, G.; Brar, M.S.** 2004. Lead, copper, zinc and iron concentrations in soils and vegetables irrigated with city effluent on urban agricultural lands. *Journal of the Indian Society of Soil Science*, 52(1):114-117.

46. **Gichuki Francis.** 2004. "Managing the externalities associated with dry season river flows" *Water Resources Research*, 40(8) 8p.
47. **Jimenez R.; Planchon O.; Silvera, N.; Govers, G.** 2004. Longitudinal velocity patterns and bed morphology interaction in a rill. *Earth Surface Processes and Landforms*, 29 :105-114
48. **Girardin, O.; Dao, D.; Koudou, B. G.; Essé, C.; Cissé, G.; Yao, T.; N'Goran, E. K.; Tschannen, A. B.; Bordmann, G.; Lehmann, B.; Nsabimana, C.; Keiser, J.; Killeen, G. F.; Singer, B. H.; Tanner, M; Utzinger, J.** 2004. Opportunities and limiting factors of intensive vegetable farming in malaria endemic Côte d'Ivoire. *Acta Tropica, Special Issue: Malaria and Agriculture*, 89(2):109-123.
49. **Hamid, Abdul** 2004. Social mobilization and women's participation in water resource management: A case study of Southern Punjab, Pakistan. *Journal of Applied Irrigation Science*, 39(1):23-41.
50. **Herrel, N. ; Amerasinghe, Felix P. ; Ensink, Jeroen ; Mukhtar, M. ; van der Hoek, Wim ; Konradsen, F.** 2004. Adult anopheline ecology and malaria transmission in irrigated areas of South Punjab, *Pakistan Medical and Veterinary Entomology*, 18:141-152
51. **Hussain, Intizar ; Mudasser, Muhammad ; Hanjra, Munir A. ; Amarasinghe, Upali ; Molden, David.** 2004. Improving wheat productivity in Pakistan: Econometric analysis using panel data from Chaj in the Upper Indus Basin. *Water International*, 29(2):189-200
52. **Hussain, Intizar; Hanjra, M. A.** 2004. Irrigation and poverty alleviation: Review of the empirical evidence. *Irrigation and Drainage*, 53(1):1-15.
53. **Jayakody, Priyantha; Mowjood, M.; Gunawardena, E.** 2004. Modifying and testing a cascade water balance model using a mini cascade system with two tanks. *Tropical Agriculture Research*, 16:159-170.
54. **Jeganathan C.; Biradar, Chandrasekhar. M.; Roy P. S.** 2004. Intelligent Morphometric Object Based Smoothing (MOBS) *International Journal of Photogrammetric Engineering and Remote Sensing*,
55. **Jenson, P. K.; Jayasinghe, Gayathri; van der Hoek, W.; Cairncross, S.; Dalsgaard, A.** 2004. Is there an association between bacteriological drinking water quality and childhood diarrhea in developing countries. *Tropical Medicine and International Health*, 9(11)1210-1215
56. **Joshi, P. K.; Pangrave, V.; Shiferaw, B.; Wani, S. P.; Bouma, Jetske; Scott, Christopher.** 2004. Watershed development in India: Synthesis of past experiences and needs for future research. *Indian Journal of Agricultural Economics*, 59(3):303-320
57. **Kamara, Abdul B.** 2004. The impact of market access on input use and agricultural productivity: Evidence from Machakos District, Kenya. *Agrekon*, 43(2):202-217
58. **Kamara, Abdul; Sally, Hilmy.** 2004. Water management options for food

security in South Africa: Scenarios, simulations and policy implications.

***Development Southern Africa*** 21(2):365-384 .

59. Kamara, Abdul B. ; Swallow, B. ; Kirk, M. 2004. Policies, interventions and institutional change in pastoral resource management in Borana, Southern Ethiopia. ***Development Policy Review***, 22(4):381-403.

60. Karlberg, L.; Penning de Vries, Frits. 2004. Exploring potentials and constraints of low-cost drip irrigation with saline water in sub-Saharan Africa. ***Physics and Chemistry of the Earth***, 29:1035-1042.

61. Klinkenberg, Eveline; van der Hoek, Wim; Amerasinghe, Felix P. 2004. A malaria risk analysis in an irrigated area in Sri Lanka. ***Acta Tropica***, 89(2):215-225.

62. Klinkenberg, Eveline; Konradsen, F.; Herrel, N.; Mukhtar, M.; van der Hoek, Wim; Amerasinghe, Felix P. 2004. Malaria vectors in the changing environment of the southern Punjab, Pakistan. ***Transactions of the Royal Society of Tropical Medicine and Hygiene***, 98(7):442-449.

63. Klinkenberg, Eveline; McCall, P.J.; Hastings, I.M. Wilson, M.D., Amerasinghe, Felix.P.; Donnelly, M.J. 2004. High malaria prevalence and irrigated urban agriculture in Accra, Ghana. ***American Journal of Tropical Medicine and Hygiene***. 71S, p. 9.

64. Konradsen, Fleming ; van der Hoek, Wim ; Amerasinghe, Felix P. ; Mutero, Clifford ; Boelee, Eline. 2004. Engineering and malaria control: Learning from the past 100 years. ***Acta Tropica***, 89(2):99-108

65. Kumar, M. Dinesh 2004. Roof water harvesting for domestic water security: Who gains and who loses? ***Water International***, 29(1):43-53.

66. Kumar, M. Dinesh; Singh, O. P. 2004. Virtual water in global food and water policy making: Is there a need for rethinking? ***Water Resources Management***, pp.1-31.

67. Kurian, Mathew; Dietz, T. 2004. Public-private partnerships. ***Water Policy***, 6(2):131-152.

68. Kurian, Matthew.; Dietz, T. 2004. Irrigation and collective action: A study in method with reference to the Shiwalik Hills, Haryana. ***Natural Resources Forum*** 28(1):34-49.

69. Lankford, B. ; van Koppen, Barbara ; Franks, T. ; Mahoo, H. 2004. Entrenched views or insufficient science? – Contested causes and solutions of water allocation: Insights from the Great Ruaha River Basin, Tanzania. ***Agricultural Water Management***, 69(2):135-153

70. Lesturgez1, G.; Possl, R.; Hartmaan, C.; Bourdon, E.; Noble, Andrew; Ratana-Anupap, S. 2004. Roots of *Stylosanthes hamata* create macropores in the compact layer of a sandy soil. ***Plant and Soil***, 260(1-2):101-109.

71. Li, Y. ; Barker, Randolph. 2004. Increasing water productivity for paddy irrigation in China ***Paddy and Water Environment***, 2:187-193

72. Loeve, R. ; Dong, B. ; Molden, David ; Li, Y. H. ; Chen, C. D. ; Wang, J. Z. 2004. Issues of scale in water productivity in the Zhanghe Irrigation system: Implications for irrigation in the basin context *Paddy and Water Environment*, 2:227-236
73. Loeve, R. ; Hong, L. ; Dong, B. ; Mao, G. ; Chen, C. D. ; Dawe, D. ; Barker, Randolph. 2004. Long-term trends in intersectoral water allocation and crop water productivity in Zhanghe and Kaifeng, China *Paddy and Water Environment*, 2:237-245
74. Mahé, G.; Bamba, F.; Soumaguel, A.; Orange, D.; Olivry, J. C. 2004. Water losses in the Niger river inner delta: Water balance and flooded surfaces. *Hydrological Processes*,
75. Malano, H. ; Burton, M. ; Makin, Ian. 2004. Benchmarking performance in the irrigation and drainage sector: A tool for change. *Irrigation and Drainage*, 53(2):119-133
76. Marrama, L.; Jambou, R.; Rakotoarivony, I.; Tsi, J. M. L. P.; Duchemin, J. B.; Laventure, S.; Mouchet, J.; Rouxh, J. 2004. Malaria transmission in Southern Madagascar: Influence of the environment and hydro-agricultural works in sub-arid and humid regions: Part 1, Entomological investigations. *Acta Tropica, Special Issue: Malaria and Agriculture*, 89 (2):193-203.
77. McCartney, Matthew Peter ; de la Hera, A. 2004. Hydrological assessment for wetland conservation at Wicken Fen. *Wetlands Ecology and Management*, 12:189-204
78. McCornick, Peter. 2004. Wastewater reuse in the Middle East and North Africa. *Waterlines*, 23(1):9-11
79. Molle, François. 2004. Defining water rights: By prescription or negotiation?. *Water Policy*, 6(3): 207-227
80. Molle, Francois. 2004. Technical and institutional responses to basin closure in the Chao Phraya river basin, Thailand. *Water International*, 29(1):70-80.
81. Mutero, Clifford M.; Ng'ang'a, P. N.; Wekoyela, P.; Githure, J.; Konradsen, F. 2004. Ammonium sulphate fertiliser increases larval populations of *Anopheles arabiensis* and culicine mosquitoes in rice fields. *Acta Tropica*, 89(2):187-192.
82. Mutero, Clifford M.; Kabutha, C.; Kimani, V.; Kabuage, L.; Gitau, G.; Ssenyonga, J.; Githure, J.; Muthamie, L.; Kaida, A.; Musyoka, L.; Kiarie, E.; Oganda, M. 2004. A transdisciplinary perspective on the links between malaria and agroecosystems in Kenya. *Acta Tropica*, 89(2):171-186.
83. Namara, Regassa E. ; Manig, W. 2004. Returns to alternative organisational models of wheat breeding research: Simulation results from Ethiopia. *Indian Journal of Agricultural Economics*, 59(2):231-248.
84. Ngigi, S. N. ; Savenije, H. H. G. ; Thome, J. N. ; Rockström, J. ; Penning de Vries, Frits W. T. 2004. Agro-hydrological evaluation of on-farm rainwater storage systems for supplemental irrigation in Laikipia district, Kenya *Agricultural Water*

*Management*, 21p.

85. **Nguyen Khoa , Sophie; Smith, L. E. D.** 2004. Irrigation and fisheries: Irreconcilable conflicts or potential synergies?" *Irrigation and Drainage* 53:415-427.
86. **Piyankarage, Sujeewa C.; Mallawatantri, A. P.; Matsuno, Yutaka; Pathiratne, K.A.S.** 2004. Human impacts and the status of water quality in the Bundala RAMSAR wetland lagoon system in Southern Sri Lanka. *Wetlands Ecology and Management*, 12(5):473-482.
87. **Podwojewski, P.; Germain, N.** 2004. Evolution of the soil structure in a deep tilled hardened volcanic ash-soil (Cangahua) in Ecuador. *European Journal of Soil Science*,
88. **Poulenard, J.; Michel, F.; Bartoli, J. M.; Portal, P.; Podwojewski, P.** 2004. Water repellency of volcanic ash soil from Ecuadorian Páramo: Effect of water content and characterization of water repellent materials. *European Journal of Soil Science*, 55(3):
89. **Qadir, Manzoor; Oster, J. D.** 2004. Crop and irrigation management strategies for saline-sodic soils and waters aimed at environmentally sustainable agriculture. *Science of the Total Environment*, 323:1-19.
90. **Qafuku, N., Van Ranst, E., Noble, Andrew; Baert, G.** 2004. Variable charge soils: Their mineralogy, chemistry and management. *Advances in Agronomy* 84:157–213.
91. **Qureshi, Asad Sarwar ; Akhtar, Mujeeb ; Shah, Tushaar.** 2004. Role of changing energy pricing policies on groundwater development in Pakistan. *Journal of Applied Irrigation Science*, 39(2):329-342
92. **Qureshi, Asad Sarwar ; Asghar, M. N. ; Ahmed, Shehzad ; Masih, Ilyas.** 2004. Sustaining crop production in saline groundwater areas: A case study from Pakistani Punjab. *Australian Journal of Agricultural Research*, 55:421-431
93. **Raschid-Sally, Liqa ; Parkinson, J.** 2004. Wastewater reuse for agriculture and aquaculture: Current and future perspectives for low-income countries. *Waterlines*, 23(1):2-4
94. **Saeed, M.M.; Bruen, M.** 2004. Simulation of hydrosalinity behavior under skimming wells. *Irrigation and Drainage Systems*,18(2):167-200.
95. **Saleth, Rathinasamy Maria.** 2004. Introduction to special section on river basin management: Economics, management, and policy. *Water Resources Research*, 40(8) 6p.
96. **Saleth, Rathinasamy Maria ; Sastry, G. S.** 2004. Water supply and sanitation sector of Karnataka, India: Status, performance and change. *Water Policy*, 6:161-183
97. **Samita, S. ; Anputhas, Markandu ; De Z. Abey Siriwardena, S.** 2005. Accounting multi traits in recommending paddy varieties for diverse environments. *Experimental Agriculture*, 41(2):14p.

98. **Schreiner, B. ; Mohapi, N. ; van Koppen, Barbara.** 2004. Washing away poverty: Water, democracy and gendered poverty eradication in South Africa. *Natural Resources Forum*, 28(3):171-178
99. **Scott, Christopher A.; Shah, Tushar.** 2004. Groundwater overdraft reduction through agricultural energy policy: Insights from India and Mexico. *International Journal of Water Resources Development*, 20(2):149-164.
100. **Shah, Tushar ; Singh, Om Prakash.** Irrigation development and rural poverty in Gujarat, India: A disaggregated analysis. *Water International*, 29(2):167-177
101. **Simmons, Robert ; Pongsakul, P.** 2004. Preliminary stepwise multiple linear regression method to predict cadmium and zinc uptake in soybean. *Communications in Soil Science and Plant Analysis*,35(13&14):1815-1828
102. **Sissoko, M. S.; Dicko, A.; Briët, Olivier J. T.; Sissoko, M.; Sagara, I.; Keita, H. D.; Sogoba, M.; Rogier, C.; Touré, Y. T.; Doumbo, O. K.** 2004. Malaria incidence in relation to rice cultivation in the irrigated Sahel of Mali. *Acta Tropica, Special Issue: Malaria and Agriculture*, 89 (2):161-170.
103. **Smakhtin, Vladimir ; Revenga, C. ; Döll, P.** 2004. A pilot global assessment of environmental water requirements and scarcity *Water International*, 29(3):307-317
104. **Smakhtin, Vladimir U.** 2004. Evaluating wetland flow regulating functions using discharge time series. *Hydrological Processes*,
105. **Smakhtin, Vladimir U.** 2004. Simulating the hydrology and mouth conditions of small, temporarily closed/open estuaries. *Wetlands*, 24(1):123-132.
106. **Stratford, C. J. ; McCartney, Matthew P. ; Williams, R. J.** 2004. Seasonal and diurnal hydro-chemical variations in a recreated reed bed. *Hydrology and Earth System Sciences*, 8(2):266-275
107. **Thoyer, S. ; Morardet, Sylvie ; Rio, P. ; Goodhue, R.** 2004. Comparaison des procédures de décentralisation et de négociation de la gestion de l'eau en France et en Californie. *Natures Sciences Societes*, 12:7-17
108. **Thenkabail, Prasad S.; Enclona, E. A.; Ashton, M. S.; Legg, C.; de Dieu, M. J.** 2004. Hyperion, IKONOS, ALI, and ETM+ sensors in the study of African rainforests. *Remote Sensing of Environment*, 90(1):23-43.
109. **Thenkabail, Prasad S.; Enclona, E. A.; Ashton, M. S.; Van Der Meer, B.** 2004. Accuracy assessments of hyperspectral waveband performance for vegetation analysis applications. *Remote Sensing of Environment*, 91(3-4):354-376
110. **Thenkabail, Prasad. S. ; Stucky, N. ; Griscom, B. W. ; Ashton, M. S. ; Diels, J. ; van der Meer, B. ; Enclona, E.** 2004. Biomass estimations and carbon stock calculations in the oil palm plantations of African derived savannas using IKONOS data. *International Journal of Remote Sensing*, 25(23):5447-5472

111. Tyagi, N. K. ; Agrawal, A. ; Sakthivadivel, Ramasamy ; Ambast, S. K. ; Sharma, D. K. 2004. Productivity of rice-wheat cropping system in a part of Indo-Gangetic Plain: A spatial analysis. *Irrigation and Drainage Systems*, 18(1):73-88
112. Upadhyay, Bhawana 2004. Gender aspects of smallholder irrigation technology: Insights from Nepal. *Journal of Applied Irrigation Science*, 39(2):315-327
113. Upadhyay, Bhawana. 2004. Women and water issues in Gujarat. *Asian Women*, 19:69-83
114. Valentin, Christian.; Rajot, J. L.; Mitja, D. 2004. Responses of soil crusting, runoff and erosion to fallowing in the sub-humid and semi-arid regions of West-Africa. *Agriculture, Ecosystems, Environment*, 104: 287-302
115. van der Hoek, Wim. 2004. How can better farming methods reduce malaria. *Acta Tropica*, 89(2):95-97.
116. van Ittersum, M.K.; Roetter, R. P.; van Keulen, H.; de Ridder, N.; Hoanh, C.T.; Laborte, A. G.; Aggarwal, P. K.; Ismail, A. B.; Tawang, A. 2004. A systems network (SysNet) approach for interactively evaluating strategic land use options at sub-national scale in South and South-east Asia. *Journal of Land Use Policy*, 21:101–113
117. Verma, Shilp ; Tsephal, S. ; Jose, T. 2004. Pepses systems: Grassroots innovation under groundwater stress *Water Policy*, 6(4):303-318
118. Wassmann, R. ; Hien, N. X. ; Hoanh, Chu Thai ; Tuong, T. P. 2004. Sea level rise affecting the Vietnamese Mekong Delta: Water elevation in the flood season and implications for rice production. *Climatic Change*, 66(1-2): 89-107
119. Yoffe, S. ; Fiske, G. ; Giordano, Mark ; Giordano, Meredith ; Larson, K. ; Stahl, K. ; Wolf, A. T. 2004. Geography of international water conflict and cooperation: Data sets and applications. *Water Resources Research*, 40(5):1-12
120. Zhu, Zhongpin; Giordano, Mark; Cai, X.; Molden, David. 2004. The Yellow River Basin: Water accounting, water accounts and current issues. *Water International*, 29(1):2-10.

## BOOKS

121. Aerts, J.; Droogers, Peter (Eds) 2004. Climate change in contrasting river basins: Adaptation strategies for water, food and environment . Wallingford, UK: CABI. 288p.
122. Ghafoor, A. ; Qadir, Manzoor. ; Murtaza, G. 2004. Salt-affected soils: Principles of management. *Lahore, Pakistan. Allied Book Centre. xxv, 304p.*

123. **Moriarty, P. ; Butterworth, J. ; van Koppen, Barbara.** (Eds.) 2004. Beyond domestic: Case studies on poverty and productive uses of water at the household level. *Delft, Netherlands. IRC International Water and Sanitation Centre; IWMI.* 242p.

124. **Saleth, Rathinasamy Maria; Dinar, A.** 2004. The institutional economics of water: A cross-country analysis of institutions and performance. Cheltenham, UK: Edward Elgar. xvi, 398p.

125. **Scott, Christopher. A. ; Faruqui, N. I. ; Raschid-Sally, Liqa.** (Eds.) 2004. Wastewater use in irrigated agriculture: Confronting the livelihood and environmental realities *Wallingford, UK Colombo, Sri Lanka Ottawa, Canada. CABI Publishing IWMI IDRC.* ix, 193p.

## **BOOK CHAPTERS**

126. **Bhamoriya, Vaibhav.** 2004. Wastewater irrigation in Vadodara, Gujarat, India: Economic catalyst for marginalised communities *In Scott, C. A.; Faruqui, N. I.; Raschid-Sally, L. (Eds.), Wastewater use in irrigated agriculture: Confronting the livelihood and environmental realities. Wallingford, UK ; Colombo, Sri Lanka; Ottawa, Canada: CABI Publishing; IWMI; IDRC.* pp.127-134

127. **Biradar, Chandrashekhar M.; Singh, S.; Das, N. K.; Roy, P. S.** 2004. Wildlife-human conflict analysis in protected area: Geospatial approach. *In Protected Habitats. Nature Conservators Pub.* pp.168-179

128. **Boelee, Eline ; Laamrani, H.** 2004. Multiple use of irrigation water in Northeastern Morocco. *In Moriarty, P.; Butterworth, J.; van Koppen, B. (Eds.), Beyond domestic: Case studies on poverty and productive uses of water at the household level. Delft, Netherlands: IRC International Water and Sanitation Centre; IWMI.* pp.119-135.

129. **Buechler, Stephanie J.** 2004. A sustainable livelihoods approach for action research on wastewater use in agriculture *In Scott, C. A.; Faruqui, N. I.; Raschid-Sally, L. (Eds.), Wastewater use in irrigated agriculture: Confronting the livelihood and environmental realities. Wallingford, UK ; Colombo, Sri Lanka; Ottawa, Canada: CABI Publishing; IWMI; IDRC.* pp.25-40.

130. **Buechler, Stephanie.** 2004. Women at the helm of irrigated agriculture in Mexico: The other side of male migration. *In Bennett, V.; Poblete, S. D.; Rico, M. N. (Eds.). Opposing currents: The politics of water and gender in Latin America. USA: University of Pittsburgh Press.*

131. **de Lange, Marna.** 2004. Water policy and law review process in South Africa with focus on the agricultural sector. *In Mollinga, P. P.; Bolding, A., The politics of irrigation reform: Contested policy formulation and implementation in Asia, Africa and Latin America. Aldershot, England: Ashgate.* pp.11-56.

132. **de Rouw, Anneke.** 2004. "Good" and "bad" weeds in shifting cultivation,. *Contribution to the Golden Book for Prof dr. Ir. R. Oldeman. The Netherlands.*

133. **Drechsel, Pay; Giordano, Mark; Enters, T.** 2004. Valuing soil fertility change: Selected methods and case studies. In Shiferaw, B.; Freeman, H. A.; Swinton, S. M. (Eds.), *Natural resource management in agriculture: Methods for assessing economic and environmental impacts*. Wallingford, UK: CABI. pp.199-222.
134. **Ensink, Jeroen, H. J. ; Simmons, Robert W. ; van der Hoek, Wim.** 2004. Wastewater use in Pakistan: The cases of Haroonabad and Faisalabad In Scott, C. A.; Faruqui, N. I.; Raschid-Sally, L. (Eds.), *Wastewater use in irrigated agriculture: Confronting the livelihood and environmental realities*. Wallingford, UK ; Colombo, Sri Lanka; Ottawa, Canada: CABI Publishing; IWMI; IDRC. pp.91-99
135. **Faruqui, N. I. ; Scott, Christopher A. ; Raschid-Sally, Liqa.** 2004. Confronting the realities of wastewater use in irrigated agriculture: Lessons learned and recommendations In Scott, C. A.; Faruqui, N. I.; Raschid-Sally, L. (Eds.), *Wastewater use in irrigated agriculture: Confronting the livelihood and environmental realities*. Wallingford, UK ; Colombo, Sri Lanka; Ottawa, Canada: CABI Publishing; IWMI; IDRC. pp.173-185.
136. **Hoanh, C.T.; Guttman, H.; Droogers, P; Aerts, J.** 2004. Will we produce sufficient food under climate change? Mekong Basin (South East Asia) In Aerts, J.; Droogers, P. (Eds.), *Climate change in contrasting river basins: Adaptation strategies for water, food and environment*. Wallingford, UK: CABI. pp.157-180
137. **Rijsberman, Frank.** 2004. The water challenge. In Lomborg, B. (Ed.) *Global challenges, global solutions*. Cambridge, UK: CUP. 34p.
138. **Keraita, Bernard N. ; Drechsel, Pay.** 2004. Agricultural use of untreated urban wastewater in Ghana In Scott, C. A.; Faruqui, N. I.; Raschid-Sally, L. (Eds.), *Wastewater use in irrigated agriculture: Confronting the livelihood and environmental realities*. Wallingford, UK ; Colombo, Sri Lanka; Ottawa, Canada: CABI Publishing; IWMI; IDRC. pp.101-112.
139. **Matsuno, Y.; Ensink, Jeroen H. .; van der Hoek, Wim; Simmons, Robert W.** 2004. *Assessment of the use of wastewater for irrigation: A case in Punjab, Pakistan*. In Steenvoorden, J.; Endreny, T. (Eds.) 2004. *Wastewater re-use and groundwater quality*. Wallingford, Oxfordshire, UK: IAHS Press, Centre for Ecology and Hydrology. pp.28-33. (IAHS Publication 285).
140. **McCartney, Matthew ; Sally, Hilmy ; Senzanje, A.** 2004. Integrated water resources management and agriculture in Southern Africa. In Stephenson, D.; Shemang, E. M.; Chaoka, T. R. (Eds.), *Water resources of arid areas*. A. A. Balkema: Leiden, Netherlands. pp.493-499
141. **McCornick, Peter G. ; Hijazi, A. ; Sheikh, B.** 2004. From wastewater reuse to water reclamation: Progression of water reuse standards in Jordan In Scott, C. A.; Faruqui, N. I.; Raschid-Sally, L. (Eds.), *Wastewater use in irrigated agriculture: Confronting the livelihood and environmental realities*. Wallingford, UK ; Colombo, Sri Lanka; Ottawa, Canada: CABI Publishing; IWMI; IDRC. pp.153-162.
142. **Moriarty, P. ; Butterworth, J. ; van Koppen, Barbara ; Soussan, J.** 2004. Water, poverty and productive uses of water at the household level. In Moriarty, P.; Butterworth, J.; van Koppen, B. (Eds.), *Beyond domestic: Case studies on poverty and productive uses of water at the household level*. Delft, Netherlands: IRC

143. **Mukherji, A.; Shah, Tushar.** 2004. Socio-ecology of groundwater irrigation in South Asia. In Shauquillo et al. (Eds.), Selected papers on intensive use of groundwater. Dordrecht, Netherlands: Balkema Publishing Co. pp. 67-92.

144. **Phansalkar, Sanjiv J. ; Verma, Shilp.** 2004. El Manejo del Agua y las Tribus en la India: Oportunidades, Restricciones y Estrategias. In Pena, Francisco (Ed.), Los pueblos indigenas y el agua: Desafios del Siglo XXI. San Luis Potosi: El Colegio de San Luis Mexico y Mexico, D.F.: Obranegra,. [Indigenous groups and water: Challenges for the 21st century. In Pena, Francisco (Ed.) Water management and tribals in India: Opportunities, barriers and strategies] (Chapter 6), pp. 139-161.

145. **Rap, E. ; Wester, Phillip ; Pérez-Prado, L. N.** 2004. The politics of creating commitment: Irrigation reforms and the reconstitution of the hydraulic bureaucracy in Mexico. In Mollinga, P. P.; Bolding, A., The politics of irrigation reform: Contested policy formulation and implementation in Asia, Africa and Latin America. Aldershot, England: Ashgate. pp.57-94

146. **Raschid-Sally, Liqa ; Bradford, A. M. ; Endamana, D.** 2004. Productive use of wastewater by poor urban and peri-urban farmers: Asian and African case studies in the context of the Hyderabad declaration on wastewater use. In Moriarty, P.; Butterworth, J.; van Koppen, B. (Eds.), Beyond domestic: Case studies on poverty and productive uses of water at the household level. Delft, Netherlands: IRC International Water and Sanitation Centre; IWMI. pp.95-116

147. **Raschid-Sally, Liqa ; Tuan, D. D. ; Abayawardana, Sarath.** 2004. National assessments on wastewater use in agriculture and an emerging typology: The Vietnam case study In Scott, C. A.; Faruqui, N. I.; Raschid-Sally, L. (Eds.), Wastewater use in irrigated agriculture: Confronting the livelihood and environmental realities. Wallingford, UK ; Colombo, Sri Lanka; Ottawa, Canada: CABI Publishing; IWMI; IDRC. pp.81-90

148. **Rijsberman, Frank.** 2004. Sanitation and access to clean water. In Lomborg, B. (Ed.), Global crises, global solutions. Cambridge, UK: CUP. pp. 498-527

149. **Saleth, Rathinasamy Maria** 2004. Water institutions in India: Structure, performance, and change. In Gopalakrishnan, C.; Biswas, A. K.; Tortajada, C. (Eds.), Water resources management-structure, evolution and performance of water institutions. New York, NY, USA: Springer-Verlag, 2003. 33p.

150. **Saleth, Rathinasamy Maria, 2004.** Agricultural strategy for a globalizing economy: Continuity and change. In Krishnaswamy, C. G.; Keshava, S. R.; Tirlapur, R. M. (Eds.) Better impression on globalization, *Bangalore, India: Department of Post Graduate Studies and Research in Economics, Bangalore University, pp.69-103.*

151. **Scott, Christopher ; Faruqui, N. I. ; Raschid-Sally, Liqa.** 2004. Wastewater use in irrigated agriculture: Management challenges in developing countries In Scott, C. A.; Faruqui, N. I.; Raschid-Sally, L. (Eds.), Wastewater use in irrigated agriculture: Confronting the livelihood and environmental realities. Wallingford, UK ; Colombo, Sri Lanka; Ottawa, Canada: CABI Publishing; IWMI; IDRC. pp.1-10.

152. **Silva-Ochoa, P. ; Scott, Christopher A.** 2004. Treatment plant effects on wastewater irrigation benefits: Revisiting a case study in the Guanajuato River Basin, Mexico In Scott, C. A.; Faruqui, N. I.; Raschid-Sally, L. (Eds.), Wastewater use in irrigated agriculture: Confronting the livelihood and environmental realities. Wallingford, UK ; Colombo, Sri Lanka; Ottawa, Canada: CABI Publishing; IWMI; IDRC. pp.145-152.

153. **Valentin, Christian.** 2004. Overland flow, erosion and associated sediment and biogeochemical transports. In Kabat, P.; Claussen, M.; Dirmeyer, P. A.; Gash, J. H.C.; Bravo, L.; de Guenni, M.; Meybeck, R. A.; Pielke, Sr., C. J.; Vörösmarty, R.; Hutjes, W. A. ; Lütkemeier, S. (Eds.), Vegetation, water, humans and the climate. A new perspective on an interactive system. Berlin, Germany: Springer verlag, Berlin, (Global Change - The IGBP Series, 2003). Pp.317-322

154. **van der Hoek, Wim.** 2004. A framework for a global assessment of the extent of wastewater irrigation: The need for a common wastewater typology In Scott, C. A.; Faruqui, N. I.; Raschid-Sally, L. (Eds.), Wastewater use in irrigated agriculture: Confronting the livelihood and environmental realities. Wallingford, UK ; Colombo, Sri Lanka; Ottawa, Canada: CABI Publishing; IWMI; IDRC. pp.11-24

155. **Yandle, B. ; Vijayaraghavan, M. ; Bhattarai, Madhusudan.** 2004. Income and the race to the top. In Anderson, T. L. (Ed.), You have to admit it's getting better: From economic prosperity to environmental quality. Stanford, CA, USA: Hoover Institution Press. pp.83-108.

#### **CONFERENCES/WORKSHOP PROCEEDINGS – CHAPTERS**

156. **McCornick, Peter G.; Taddes, G.** 2004. Rights to water in the context of Ethiopia's development. Water rights and related water supply issues., Salt Lake City, USA: USCID. Proceedings, 2004 Water Management Conference. pp. 73-81.

157. **Sharma, Bharat R.; Smakhtin, Vladimir U.** 2004. Potential of water harvesting as a strategic tool for drought mitigation. Proceedings of 55th International Meeting of the International Commission on Irrigation and drainage (ICID).FAO/ICID International Workshop on Water Harvesting and Sustainable Agriculture. Moscow, Russia, September, 2004.

#### **THESES (MSC/PHD) ACCEPTED**

**Jinendradasa, Sithara S.** 2004. Selected ecological processes and bleaching induced alterations in *Acropora formosa* dominated shallow reefs of South West Sri Lanka. Thesis submitted to and accepted by the Faculty of Science, University of Colombo, Sri Lanka in fulfillment of requirements for the Degree of Doctor of Philosophy. xxi, 356p. + annexes.

#### **II. NON PEER REVIEWED OUTPUTS**

##### **JOURNAL ARTICLES**

158. **Abdullaev Iskander.** 2004. Making a Difference to the Dying Aral Sea. Appropriate Technology 31(1): 48-49

159. **Hari Prasad, V.** 2004 Groundwater recharge estimation using remote sensing and Geographic Information System. *Sri Lankan Journal of Geo-Informatics*, 1(1) 41-51
160. **Jayakody, Priyantha.; Mowjood, M.; Gunawardena, E.** 2004. Modifying and testing a cascade water balance model using a mini cascade system with two tanks. *Tropical Agriculture Research*, 16:159-170.
161. **Jehangir, Waqar A.; Turral, Hugh; Khan, S.** 2004. Gains from conjunctive use of surface and groundwater. *Pakistan Development Review*, 41(4)
162. **Jehangir, Waqar A.; Turral, Hugh; Masih, Ilyas.** 2004. Socio-economic impacts of water related disasters. *The Environ Monitor*, 4(6):17-25.
163. **Kessler, A. ; Streiffeler, F. ; Obuobie, Emmanuel.** 2004. Women in urban agriculture in West Africa. *Urban Agriculture Magazine*, 12:16-17
164. **Kishore, Avinash.** 2004. Understanding agrarian impasse in Bihar. *Economic and Political Weekly*, 39(31):3484-3491
165. **Kumar, M. Dinesh ; Singhal, L. ; Rath, P.** 2004. Value of Groundwater: Case studies in Banaskantha. *Economic and Political Weekly*, 39(31):3498-3503
166. **Nilantha, M.G.S.D.; Hari Prasad, V.** 2004. Groundwater recharge estimation using remote sensing and Geographic Information System. *Sri Lankan Journal of Geo-Informatics*, 1(1):41-51.
167. **Obuobie, Emmanuel ; Drechsel, Pay ; Danso, George ; Raschid- Sally, Liqa.** 2004. Gender in open- space irrigated urban vegetable farming in Ghana. *Urban Agriculture Magazine*, 12:13-15
168. **Phansalkar, Sanjiv J. ; Verma, Shilp.** 2004. Improved water control as strategy for enhancing tribal livelihoods. *Economic and Political Weekly*, 39(31):3469-3476
169. **Puskur, Ranjitha ; Bouma, Jetske ; Scott, Christopher.** 2004. Sustainable livestock production in semi-arid watersheds. *Economic and Political Weekly*, 39(31):3477-3483
170. **Ranade, Rahul ; Kumar, M. Dinesh.** 2004. Narmada water for groundwater recharge in North Gujarat. *Economic and Political Weekly*, 39(31):3510-3513
171. **Rodriguez, Dawn.** 2004. Corporate showcase: Annual reports. *LMD*, 11(1):158
172. **Rodriguez, Dawn.** 2004. Managing the media. *LMD*, September:149
173. **Rodriguez, Dawn.** 2004. Innovative smallholder solutions for improved food and livelihood security in South Asia. *SACEP News*, 3(1):5-6.
174. **Sakthivadivel, Ramaswamy ; Gomathinayagam, P. ; Shah, Tushaar.** 2004. Rejuvenating irrigation tanks through local institutions. *Economic and Political Weekly*, 39(31):3521-3526

175. **Shah, Tushar.** 2004. Water and welfare: Critical issues in India's water future. *Economic and Political Weekly*, 39(12):1211-1213.
176. **Shah, Tushar.** 2004. Groundwater and human development: Challenges and opportunities in livelihoods and environment. *Wastelands News*, 20(1):33-38
177. **Shah, Tushaar ; Giordano, Mark ; Wang, Jinxia.** 2004. Irrigation institutions in a dynamic economy: What is China doing differently from India?. *Economic and Political Weekly*, 39(31):3452-3461
178. **Shah, Tushar; Scott, Christopher; Buechler, Stephanie** 2004. Water sector reforms in Mexico: Lessons for India's new water policy. *Economic and Political Weekly*, 39(4):361-370.
179. **Sing, Omprakash P. ; Sharma, Amrita ; Singh, Rahul ; Shah, Tushaar.** 2004. Virtual water trade in dairy economy: Irrigation water productivity in Gujarat. *Economic and Political Weekly*, 39(31):3492-3497
180. **Talati, Jayesh ; Shah, Tushaar.** 2004. Institutional vacuum in Sardar Sarovar Project: Farming "rules-of-the-game". *Economic and Political Weekly*, 39(31):3504-3509
181. **Upadhyay, Bhawana; Bhamoriya, V.** 2004. Drip irrigation helps women farmers to expand production. *Appropriate Technology*, 31(2):
182. **Upadhyay, Bhawana.** 2004. Treadle pumps trigger rural transformation in Nepal Terai. *Appropriate Technology*, 31(4):

#### **WORKING PAPERS**

183. **Ahmad, Shahid; Hussain, Zahid; Qureshi, Asad Sarwar; Majeed, Rashida; Saleem, Mohammad.** 2004. Drought mitigation in Pakistan: Current status and options for future strategies. Colombo, Sri Lanka: IWMI. vii, 47p. (IWMI working paper 85 / Drought series: Paper 3)
184. **Bhattacharyya, K.; Azizi, P. M.; Shobair, S. S.; Mohsini, M. Y.** 2004. Drought impacts and potential for their mitigation in southern and western Afghanistan. Colombo, Sri Lanka: IWMI. 26p. (Working Paper 91).
185. **Faysse, Nicolas ; Gumbo, J.** 2004. The transformation of irrigation boards into water user associations in South Africa: Case studies of the Umlaas, Komati, Lomati and Hereford Irrigation Boards. Volume 2. Colombo, Sri Lanka. IWMI. ix, 57p. (IWMI working paper 73)
186. **Hussain, Intizar ; Perera, Liyanage R.** 2004. Improving agricultural productivity for poverty alleviation through integrated service provision with public-private sector partnerships: Examples and issues. Colombo, Sri Lanka. IWMI. v, 26p. (IWMI working paper 66)
187. **IWMI.** 2004. Accounting of agricultural and nonagricultural impacts of irrigation and drainage Systems: A report of research in Taiwan and Sri Lanka in 2003.

Colombo, Sri Lanka. IWMI. v, 31p. (IWMI working paper 68)

188. **IWMI**. 2004. Growing more rice with less water: Increasing water productivity in rice- based cropping systems: Progress of research, 1 July 2002 to 30 June 2003. Colombo, Sri Lanka. IWMI. vi, 59p. (IWMI working paper 65)

189. **Ladki, Marvan ; Seshoka, Jetrick ; Faysse, Nicolas ; Léville, Herve ; van Koppen, Barbara**. 2004. Possible impacts of the transformation of water infrastructure on productive water uses: The case of the Seokodibeng village in South Africa. Colombo, Sri Lanka. IWMI. ix, 45p. (IWMI working paper 74)

190. **Lankford, B. ; Sokile, C. ; Yawson, Daniel ; Léville, Herve**. 2004. The river basin game: A water dialogue tool *Colombo, Sri Lanka. IWMI. v, 34p. (IWMI working paper 75)*

191. **Loeve, Ronald ; Somaratne, Pallewatte G. ; Ariyaratne, Badugodahewa Ranjith ; Anputhas, Markandu ; Jinapala, Kiribandage**. 2004. Institutional changes to reduce land preparation delay in the North Central Province of Sri Lanka. Colombo, Sri Lanka. IWMI. x, 68p. (IWMI working paper 69)

192. **McCartney, Matthew P. ; Yawson, Daniel. K. ; Magagula, Thulani F. ; Seshoka, Jetrick**. 2004. Hydrology and water resources development in the Olifants River Catchment. Colombo, Sri Lanka. IWMI. vii, 50p. (IWMI working paper 76)

193. **Qureshi, Asad Sarwar ; Akhtar, Mujeeb**. 2004. Analysis of drought- coping strategies in Baluchistan and Sindh provinces of Pakistan. Colombo, Sri Lanka. IWMI. vi, 33p. (IWMI working paper 86: Drought series paper 4)

194. **Samra, J. S.** 2004. Review and analysis of drought monitoring, declaration and management in India. Colombo, Sri Lanka. IWMI. vii, 31p. (IWMI working paper 84: Drought series paper 2)

195. **Sakthivadivel, R.; Bhattacharya, Kamal; Scott, Christopher**. 2004. Biophysical and institutional factors in watershed management: A comparative analysis of four pilot watershed projects in India's Tribal Belt. Colombo, Sri Lanka. IWMI. v, 30p. (IWMI working paper 88)

196. **Seshoka, Jetrick ; de Lange, Willem ; Faysse, Nicolas**. 2004. The transformation of irrigation boards into water user associations in South Africa: Case studies of the Lower Olifants, Great Letaba and Vaalharts water user associations. Volume 1. Colombo, Sri Lanka. IWMI. vii, 64p. (IWMI working paper 72)

197. **Smakhtin, Vladimir U. ; Hughes, D. A.** 2004. Review, automated estimation and analyses of drought indices in South Asia. Colombo, Sri Lanka. IWMI. v, 24p. (IWMI working paper 83: Drought series paper 1)

198. **Upadhyay, Bhawana**. 2004. Gender roles and multiple uses of water in North Gujarat. Colombo, Sri Lanka. IWMI. 15p. (IWMI working paper 70)

199. **van Heerden, Peter**. 2004. Estimating water requirements and water storage requirements for farms, community and backyard gardens, and for large irrigation

systems: A user manual for PLANWAT version 1.2.3b and a CD-Rom to install the program. Colombo, Sri Lanka: IWMI. 25p. (Working paper 82).

200. **van Koppen, Barbara ; Sokile, C. S. ; Hatibu, N. ; Lankford, B. A. ; Mahoo, H. ; Yanda, P.Z.** 2004. Formal water rights in rural Tanzania: Deepening the dichotomy?. Colombo, Sri Lanka. IWMI. vii, 26p. (IWMI working paper 71)

201. **Walmsley, Danny; Havenga, Tommie; Braune, Eberhard; Schmidt, Chris; Prasad, Krishna; van Koppen, Barbara.** 2004. An Evaluation of proposed World Water Programme Indicators for use in South Africa. Colombo, Sri Lanka: IWMI, South Africa. 91p. (Working paper 90)

## MONOGRAPHS

202. **Murray-Rust, Hammond; Droogers, Peter.** 2004. Water for the future: Linking irrigation and water allocation in the Zayandeh Rud Basin, Iran. Colombo, Sri Lanka: IWMI. lii, 168p.

## MONOGRAPH CHAPTERS

203. **Akhtar, Mujeeb; Munir, Muhammad; Nazir, Aamir; Asghar, Muhammad Nadeem.** 2004. Socio-Economic assessment of skimming wells in the selected commands of the Lower Indus Basin. In Asghar, Muhammad Nadeem; Zhu, Zhongping; Sohag, Mumtaz Ahmed; Lashari, Bhakshal, Assessment of hydro-geological potential of skimming wells in the Lower Indus Basin of Pakistan. Lahore, Pakistan: IWMI. pp.30-47.

204. **Asghar, Muhammad Nadeem; Prathapar, S. A.; Shafique, Muhammad Siddique.** 2004. Extracting freshwater from aquifers underlain by saltywater. In Asghar, Muhammad Nadeem; Shafique, Muhammad Siddique; Ahmad, S.; Kahlow, M. A. (Eds.), Root zone salinity management using fractional skimming wells with pressurized Irrigation: Proceedings of the Year-End Seminar 2000. Lahore, Pakistan: IWMI. pp.35-54.

205. **Asghar, Muhammad Nadeem; Qureshi, Asad Sarwar; Ahmad, S.; Masih, I.** 2004. Root zone salinity management for sustaining crop production in saline groundwater areas. In Asghar, Muhammad Nadeem; Yasin, M.; Alam, M. M.; Qureshi, Asad Sarwar (Eds.), Root zone salinity management using fractional skimming wells with pressurized Irrigation: Proceedings of the Project-End Workshop 2003. Lahore, Pakistan: IWMI. pp.59-70.

206. **Ashraf, M.; Asghar, Muhammad Nadeem; Shafique, Muhammad Siddique; Saeed, M. M.** 2004. Irrigation scheduling with skimmed groundwater to manage root zone salinity. In Asghar, Muhammad Nadeem; Shafique, Muhammad Siddique; Yasin, Muhammad ; Alam, Muhammad Mehboob (Eds.), Root zone salinity management using fractional skimming wells with pressurized Irrigation: Proceedings of the Year-End Seminar 2001. Lahore, Pakistan: IWMI. pp.80-104.

207. **Aziz, Zahid; Asghar, Muhammad Nadeem; Munir, Muhammad.** 2004. Water quality survey of tubewells in Hyderabad district. In Asghar, Muhammad Nadeem; Zhu, Zhongping; Sohag, Mumtaz Ahmed; Lashari, Bhakshal. Assessment of hydro-geological potential of skimming wells in the Lower Indus Basin of

Pakistan. Lahore, Pakistan: IWMI. pp.48-61

208. **Droogers, P.; Bastiaanssen, W. G. M.; Gieske, A.; Toomanian, N.; Akbari, M.** 2004. Satellite assessment of irrigation performance. In Murray-Rust, H.; Droogers, P. (Eds.), *Water for the future: Linking irrigation and water allocation in the Zayandeh Rud Basin, Iran*. Colombo, Sri Lanka: IWMI. pp.58-63.

209. **Droogers, P.; Miranzadeh, M.** 2004. Spatial and temporal analysis of groundwater. In Murray-Rust, H.; Droogers, P. (Eds.), *Water for the future: Linking irrigation and water allocation in the Zayandeh Rud Basin, Iran*. Colombo, Sri Lanka: IWMI. pp.91-96.

210. **Droogers, P.; Salemi, H. R.; Mamanpoush, A.** 2004. Basin level water-salt balance model. In Murray-Rust, H.; Droogers, P. (Eds.), *Water for the future: Linking irrigation and water allocation in the Zayandeh Rud Basin, Iran*. Colombo, Sri Lanka: IWMI. pp.103-108.

211. **George, B.; Malano, H.; Tri, V. K.; Chien, N.; Turrall Hugh.** 2004. Modeling and monitoring of system operation: Three different irrigation systems in Vietnam. In Malano, G.; Davidson (Eds.), *A framework for improving the management of irrigation schemes in Vietnam*. Canberra, Australia: ACIAR. (ACIAR Proceedings 118)

212. **Gieske, A.; Mamanpoush, A.; Akbari, M.; Miranzadeh, M.; Torabi, M.; Salemi, H. R.** 2004. *Crop and land cover classification by Landsat 7, and determination of irrigated areas*. In Murray-Rust, H.; Droogers, P. (Eds.), *Water for the future: Linking irrigation and water allocation in the Zayandeh Rud Basin, Iran*. Colombo, Sri Lanka: IWMI. pp.64-69.

213. **Gieske, A.; Toomanian, N.; Akbari, M.** 2004. Irrigated area by NOAA-Landsat upscaling techniques. In Murray-Rust, H.; Droogers, P. (Eds.), *Water for the future: Linking irrigation and water allocation in the Zayandeh Rud Basin, Iran*. Colombo, Sri Lanka: IWMI. pp.70-75.

214. **Gieske, A.; Miranzadeh, M.** 2004. Groundwater resources modeling of the Lenjanat aquifer system. In Murray-Rust, H.; Droogers, P. (Eds.), *Water for the future: Linking irrigation and water allocation in the Zayandeh Rud Basin, Iran*. Colombo, Sri Lanka: IWMI. pp.97-102.

215. **Gieske, Ambro; Miranzadeh, M.; Mamanpoush, A.** 2004. Variations in groundwater chemistry to identify source of groundwater. In Murray-Rust, H.; Droogers, P. (Eds.), *Water for the future: Linking irrigation and water allocation in the Zayandeh Rud Basin, Iran*. Colombo, Sri Lanka: IWMI. pp.86-90.

216. **Horinkova, Vilma M. ; Dukhovny, V. A.** 2004. Water resources in Central Asia: Current constraints and development potential *Ryan, J.; Vlek, P.; Paroda, R. (Eds.), Agriculture in Central Asia: Research for development. Aleppo, Syria: ICARDA. pp.44-55.*

217. **Hussain, Intizar; Namara, Regassa; Samad, Madar.** 2004. Water for food security for the poor. In ADB. pp.76-91.

218. **Kumar, Dinesh ; Shah, Tushar.** 2004. Groundwater contamination: The emerging challenge. In *The Hindu survey of the environment. pp.7-9, 11-12.*

219. **Maglinao, Amado; Penning de Vries, Frits W. T.** 2004. Management of soil erosion for sustainable upland agriculture in Asia: IWMI's experience. In Wani, S. P.; Maglinao, A. R.; Ramakrishna, A.; Rego, J. T. (Eds.), *Integrated watershed management for land and Water management and sustainable agricultural production in Asia*. Patancheru, India; Colombo, Sri Lanka; Manila, Philippines: ICRISAT; IWMI; ADB. pp.209-217.

220. **Murray-Rust, H.; Salemi, H. R.; Droogers, P.** 2004. *Basin level water resources development, 1945-2010*. In Murray-Rust, H.; Droogers, P. (Eds.), *Water for the future: Linking irrigation and water allocation in the Zayandeh Rud Basin*, Iran. Colombo, Sri Lanka: IWMI. pp.76-80.

221. **Murray-Rust, H.; Sally, H.** 2004. *Hydrologic assessment of the Zayandeh Rud*. In Murray-Rust, H.; Droogers, P. (Eds.), *Water for the future: Linking irrigation and water allocation in the Zayandeh Rud Basin*, Iran. Colombo, Sri Lanka: IWMI. pp.81-85.

222. **Noble, Andrew D.; Ruaysoongnern, S.; Sukchan, S.; Berthelsen, S.** 2004. Role of soil resource data in assessing soil acidification risk: An example from Northeast Thailand. In Eswaran, H.; Vijarnsorn, P.; Vearasilp, T. ; Padmanabhan, E. (Eds.) *Innovative techniques in soil survey: Developing the foundation for a new generation of soil resource inventories and their utilization* Bangkok, Thailand: Land Development Department, Chattuchak. pp. 333-340.

223. **Phong, N. D.; Tuong T. P.; Dam, N. V.; Tho, L. T.; George, B. A.; Dang, N. V.; Turrall, Hugh.** 2004. Operational and resources-use performance in the Cu Chi Irrigation System. In Malano, G.; Davidson (Eds.), *A framework for improving the management of irrigation schemes in Vietnam*. Canberra, Australia: ACIAR. (ACIAR proceedings 118) pp.

224. **Sally, Hilmy; Murray-Rust, H.; Mamanpoush, A. R.; Akbari, M.** 2004. *Irrigation supply and demand modeling*. In Murray-Rust, H.; Droogers, P. (Eds.), *Water for the future: Linking irrigation and water allocation in the Zayandeh Rud Basin*, Iran. Colombo, Sri Lanka: IWMI. pp.53-57.

225. **Vermillion, Douglas Lynn.** 2004. Irrigation, collective action, and property rights. In Meinzen-Dick, R. S.; Di Gregorio, M. (Eds.), *Collective action and property rights for sustainable development*. Washington, DC, USA: IFPRI. pp.11-12. (IFPRI 2020 Vision focus briefs 11(6)).

## **POLICY BRIEFS**

226. **IWMI; ADB.** 2004. Pro-poor intervention strategies in irrigated agriculture in Asia: Issues, lessons and Guidelines. Colombo, Sri Lanka: IWMI; ADB. 8p. (IWMI policy briefs: Synthesis lessons and guidelines)

227. **IWMI; ADB.** 2004. Pro-poor interventions in irrigated agriculture in Bangladesh: Issues, options and proposed actions. Colombo, Sri Lanka: IWMI; ADB. 6p. (IWMI pro poor country brief)

228. **IWMI; ADB.** 2004. Pro-poor interventions in irrigated agriculture in Pakistan:

Issues, options and proposed actions. Colombo, Sri Lanka: IWMI; ADB. 7p.  
(IWMI pro poor country brief)

229. **IWMI; ADB.** 2004. Pro-poor interventions in irrigated agriculture in India: Issues, options and proposed actions. Colombo, Sri Lanka: IWMI; ADB. 7p.  
(IWMI pro poor country brief)

230. **IWMI; ADB.** 2004. Pro-poor interventions in irrigated agriculture in Vietnam: Issues, options and proposed actions. Colombo, Sri Lanka: IWMI; ADB. 7p.  
(IWMI pro poor country brief)

231. **IWMI; ADB.** 2004. Pro-poor interventions in irrigated agriculture in Indonesia: Issues, options and proposed actions. Colombo, Sri Lanka: IWMI; ADB. 7P. (IWMI pro poor country brief)

232. **IWMI; ADB.** 2004. Pro-poor interventions in irrigated agriculture in China: Issues, options and proposed actions. Colombo, Sri Lanka: IWMI; ADB. 7p.  
(IWMI pro poor country brief)

### **233. EDITORIALS/BOOK REVIEWS**

234. **Giordano, Meredith A.** 2004. Book review of "The Middle East Water Question" by Tony Allan. *The Geographical Journal* 170: 282-282.

235. **Kurian, Mathew.** 2004. Book review of "Watershed development projects in India- An evaluation" by John Kerr. *Development and Change Journal*, 35(1):212-214.

236. **Malano, H. M. ; Burton, M. ; Makin, Ian.** 2004. Guest editors' editorial. *Irrigation and Drainage*, 53(2):117-118

237. **Rijsberman, Frank.** 2004. Editorial - Growing more rice with less water. *Paddy and Water Environment*, 2:181-183

238. **van der Hoek, Wim.** 2004. How can better farming methods reduce malaria? – Guest editorial. *Acta Tropica*, 89(2):95-97

### **CONFERENCE/WORKSHOP PROCEEDINGS**

239. **Asghar, Muhammed Nadeem ; Yasin, M.; Alam, M. M.; Qureshi, Asad Sarwar** (Eds). 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation: Proceedings of the project-end workshop 2003. Lahore, Pakistan: IWMI. 81p.

240. **Asghar, Muhammed Nadeem ; Shafique, M. S.; Yasin, M.; Alam, M.** (Eds). 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation: Proceedings of the year-end Seminar 2001. Lahore, Pakistan: IWMI. v.p.

241. **Asghar, Muhammed Nadeem ; Shafique, M. S.; Ahmad, S.; Kahlowan, M. A.** (Eds). 2004. Root zone salinity management using fractional skimming wells with

pressurized irrigation: Proceedings of the year-end Seminar 2000. Lahore, Pakistan: IWMI. 143p.

242. **Boelee, Eline; Morardet, Sylvie; Butterworth, J.** 2004. Workshop Documentation, MUS basin planning workshop held at ARC, Pretoria, South Africa, 4-6 November 2004. 81p.

243. **IWMI.** 2004. Observing river basins from space: Why is it important for IWMI - A Remote Sensing and GIS (RS/GIS) Workshop for IWMI by IWMI, at Board Room of IWMI Headquarters in Sri Lanka, 28 June 2004 – RS/GIS Training Materials – Realizing a dream: Making the world your backyard. Training materials of a 1 day RS/GIS Awareness Workshop, held at Boardroom, IWMI Headquarters, 28th June 2004. v.p. + 1 CD.

244. **IWMI.** 2004. IWMI's Annual Research Meeting, 8-9 November 2004, IWMI Headquarters. Papers presented at IWMI's Annual Research Meeting, IWMI Headquarters, Battaramulla, Sri Lanka, 8-9 November 2004. v.p.

245. **Jayakody, Priyantha ; Ariyaratne, Ranjith ; Abayawardana, Sarath.** (Eds.) 2004. Synthesis report of the RBMB Network Meeting, Peacock Beach Hotel, Hambantota, 20th May 2004. *IWMI, Colombo, Sri Lanka. 18p. (Ruhuna Benchmark Basin Proceedings no.2)*

246. **Jehangir, Waqar A.; Hussain, Intizar** (Eds.) 2004. Poverty Reduction through Improved Agricultural Water Management: Proceedings of the Workshop on Pro-poor Intervention Strategies in Irrigated Agriculture in Asia, Islamabad, Pakistan, 23-24 April 2003. Lahore, Pakistan: IWMI. xxvii, 292p.

247. **Maglinao, Amado .R.; Valentin, Christian; Penning de Vries, Frits** (Eds.) 2004. From soil research to land and water management: Harmonizing people and nature. Bangkok, Thailand: IWMI, ADB. 250p.

248. **Simmons, Robert W.; Noble, Andrew D.; Lefroy, R.D.B.** (Eds.) 2004. International Workshop on Nutrient Balances for Sustainable Agricultural Production and Natural Resource Management in Southeast Asia, 20-22 February 2001, Bangkok, Thailand. Bangkok, Thailand. IWMI. Southeast Asia. 1 CD.

249. **Yong Li,; Poesen, J.; Valentin, Christian. (Eds), 2004.** Gully erosion under global change: Symposium on Gully Erosion under Global Change. Chengdu, China, May, 22-25, 2002.. China: Sichuan Science Technology Press. 354p.

#### **CONFERENCES/WORKSHOP PROCEEDINGS - CHAPTERS**

250. **Ahmad, Mobin-ud-Din ; Masih, Ilyas ; Turrall, Hugh.** 2004. A comparative analysis of crop water productivity of rice-wheat and cotton-wheat rotations in Rechna Doab, Punjab, Pakistan. In Proceedings of the 4th International Crop Science Congress on "New directions for a diverse planet," 26 September-1 October 2004, Brisbane, Australia. 7p

251. **Ahmad, S.; Yasin, M.; Ahmad, M. M.; Akbar, G.; Khan, Z.; Majeed, R.** 2004. Performance evaluation of locally manufactured raingun sprinkler irrigation systems. In

Asghar, M.N., M.S. Shafique, M. Yasin and M.M. Alam (Eds.), 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation: Proceedings of the year-end seminar 2001. Lahore, Pakistan: IWMI. pp.1-32.

252. **Ahmad, S.; Yasin, M.; Akbar, G.; Khan, Z.; Ahmad, M. M.** 2004. Methodology development for selection of sites for skimming wells and pressurized irrigation systems. In Asghar, M.N., M.S. Shafique, S. Ahmad and M.A. Kahlown (Eds.), 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation: Proceedings of the year-end seminar 2000. Lahore, Pakistan: IWMI. pp. 81-100.

253. **Ahmad, S.; Yasin, M.; Akbar, G.; Khan, Z.; Ahmad, M. M.** 2004. Pressurized and innovative irrigation systems: Raingun sprinkler systems. In Asghar, M.N., M.S. Shafique, S. Ahmad and M.A. Kahlown (Eds.), 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation: Proceedings of the year-end seminar 2000. Lahore, Pakistan: IWMI. pp.55-80.

254. **Alam, M. M., Murtaza, G.; Hanif, M.; Jaffery, S.H.M.** 2004. Design methodology and refined guidelines for managing saline groundwater upcoming. In: Asghar, M.N., M. Yasin, M.M. Alam and A.S. Qureshi (Eds.), 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation: Proceedings of the project-end workshop 2003. Lahore, Pakistan: IWMI. pp. 15-28.

255. **Anputhas, Markandu ; Samita, S. ; De Z. Abey Siriwardena, S.** 2004. Regression based on multivariate index as a tool for varietal recommendation. *In* Proceedings of the International Sri Lankan Statistical Conference, 28-30 December 2004. 9p.

256. **Arthington, A. H.; Tharme, Rebecca E.; Brizga, S. O.; Pusey, B. J.; Kennard, M. J.** 2004. Environmental flow assessment with emphasis on holistic methodologies. In Welcomme, R. L.; Petr, T. (Eds.) Proceedings of the Second International Symposium on the Management of Large Rivers for Fisheries: Sustaining Livelihoods and Biodiversity in the New Millennium, 11-14 February 2003 in Phnom Penh in the Kingdom of Cambodia. Vol. 1. Bangkok, Thailand: FAO. Regional Office for Asia and the Pacific. pp. 37-66. (RAP publication 2004/16)

257. **Ashraf, Muhammad; Idrees, M.** 2004. Farmers' groundwater skimming practices. In: Asghar, M.N., M.S. Shafique, S. Ahmad and M.A. Kahlown (Eds.), 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation: Proceedings of the year-end seminar 2000. Lahore, Pakistan: IWMI. pp.12-21.

258. **Ashfaq, Muhammad; Jehangir, Waqar A.; Hussain, Intizar; Mudasser, Muhammad.** 2004. Poverty in Pakistan: Trends and issues, in poverty reduction through improved agricultural water management Pakistan In Jehangir, Waqar A.; Hussain, Intizar (Eds). 2004. Poverty Reduction through Improved Agricultural Water Management: Proceedings of the Workshop on Pro-poor Intervention Strategies in Irrigated Agriculture in Asia, Islamabad, Pakistan, 23-24 April 2003. Lahore, Pakistan: IWMI. pp.47-58.

259. **Barry, Boubacar; Sonou, Moise.** 2004. Best practice on rainfed agriculture in West Africa. In Beukes, Danie; deVilliers, Mara; Mkhize, Sizwe; Sally, Hilmy; van Rensburg, Leon (Eds.) 2004. Proceedings of the Symposium and Workshop on WCT, Bloomfontain, South Africa, pp.60-74.

260. **Bhattarai, Madhusudan ; Pant, Dhruva.** 2004. Local water management

institutions and the bulk intersectoral water transfer: A case study of the Melamchi Water Transfer Project in Nepal. The commons in an age of global transition: Challenges, risks and opportunities. In Tenth Biennial Conference - Proceedings of the International Association for the Study of Common Property (IASCP), 9-13 August 2004, Oaxaca , Mexico. 27p.

261. **Bhattarai, Madhusudan; Pant, Dhruba.** 2004. Changing water institutions and governance of the intersectoral water transfer: Melamchi Water Transfer Project in Nepal. Paper presented and published in Abstract Volume, the 14th Stockholm Water Symposium on 16-20 August 2004, Drainage Basin Management-Regional Approaches for Food and Urban Security. pp.374-375.

262. **Biggs, Trent; Ahmad, Mobin-ud-Din.** 2004. ET Krishna Basin. In IWMI, Observing river basins from space: Why is it important for IWMI - A Remote Sensing and GIS (RS/GIS) Workshop for IWMI by IWMI, at Board Room of IWMI Headquarters in Sri Lanka, 28 June 2004. Training materials. 11p.

263. **Biradar, Chandrashekhar.** 2004. DSP – River basins: Benchmark river basins inside insight. In IWMI, Observing river basins from space: Why is it important for IWMI - A Remote Sensing and GIS (RS/GIS) Workshop for IWMI by IWMI, at Board Room of IWMI Headquarters in Sri Lanka, 28 June 2004. Training materials. 13p.

264. **Boelee, Eline** 2004. Environmental disease control in irrigation: Morocco & Sri Lanka. Presentation at WHO/IWA Seminar on Water and Health, Post-conference event of the 4th IWA Water Congress, 19-24 September, Marrakech, Morocco. Published in the CD Water and Health - Proceedings of a one-day Seminar jointly organized by the International Water Association and the WHO.

265. **Briët, Olivier J. T.** 2004. Analysis of impacts of climate variability on malaria transmission in Sri Lanka and the development of an early-warning system. In Workshop report: Synthesis Workshop on Climate Variability, Climate Change and Health in Small-Island States, Bandos Island, Maldives, 1-4 December 2003,. Geneva, Switzerland: WHO, pp.26-27.

266. **Chaplot V., Giboire G., Marchand P., Valentin C.** 2004. Dynamic modeling for gully initiation and development under climate and land-use changes in northern Laos. In Yong Li; Poesen, J.; Valentin, Christian (Eds.) Gully erosion under global change. Proceedings of the 2nd Intern. Symposium on Gully Erosion under Global Change. Chengdu, China, May, 22-25, 2002. China: Sichuan Science Technology Press pp 233-245.

267. **Danso, G., Drechsel, P. and Gyiele, G., 2004.** Urban household perception of urine-excreta and solid waste source separation in urban areas of Ghana. In C.Werner et al: Ecosan -closing the loop, Proceedings of the 2<sup>nd</sup> international symposium on ecological sanitation, 7-11 April, 2003, Lübeck, Germany. Germany, GTZ and IWA, pp.191-196.

268. **Ensink, Jerone;, Matzuno, Y.; Van der Hoek, Wim; Simmons, Rob W.** 2004 Assessment of wastewater for irrigation: A case study in Pakistan. In Steenvoorden, J.; Endredy, T. (Eds.) Methodologies for risk assessment of waste water re-use on groundwater quality. Proceedings of the Sapporo Symposium, 3-11 July 2003 (IAHS Publication Series)

269. **Fujimoto, Naoya.** 2004. Characteristics of Agricultural Water Policies in China: An analysis using web-site information. Proceedings of the 85th Symposium of Kyushu Branch of the Japanese Society of Irrigation, Drainage and Reclamation Engineering, 28th November 2004. 4p
270. **Gangodagamage, Chandana.** 2004. DSP baseline data: Model baseline datasets for a river basin: Limpopo example. In IWMI, Observing river basins from space: Why is it important for IWMI - A Remote Sensing and GIS (RS/GIS) Workshop for IWMI by IWMI, at Board Room of IWMI Headquarters in Sri Lanka, 28 June 2004. Training materials. 24p.
271. **Hoanh, Chu T.; Tuong, T. P.; Phong, N. D.; Kam, S. P.** 2004. Managing conflicting demands on water quality for shrimp and rice production: Lessons from the Mekong River Delta. In Annual Meeting Abstracts ASA, CSSA, and SSSA, Madison, WI. (CD)
272. **Humphreys, E. ; Meisner, C. ; Gupta, R. K. ; Timsina, J. ; Beecher, H. G. ; Lu, T. Y. ; Singh, Y. ; Gill, M. A. ; Masih, Ilyas ; Guo, Z. J. ; Thompson, J. A.** 2004. Water saving in rice-wheat systems. In proceedings of the 4th International Crop Science Congress on "New directions for a diverse planet," 26 September-1 October 2004, Brisbane, Australia. 28p.
273. **Hussain, Intizar** 2004. Approaches to poverty alleviation in Rural Pakistan. In Jehangir, Waqar A.; Hussain, Intizar (Eds). 2004. Poverty Reduction through Improved Agricultural Water Management: Proceedings of the Workshop on Pro-poor Intervention Strategies in Irrigated Agriculture in Asia, Islamabad, Pakistan, 23-24 April 2003. Lahore, Pakistan: IWMI. pp.23-30.
274. **Islam, Aminul.** 2004. DSP global: Global and regional databases in IWMI-DSP. In IWMI, Observing river basins from space: Why is it important for IWMI - A Remote Sensing and GIS (RS/GIS) Workshop for IWMI by IWMI, at Board Room of IWMI Headquarters in Sri Lanka, 28 June 2004. Training materials. 19p.
275. **Jayakody, Priyantha ; Molle, Francois ; Gamage, Champika.** 2004. Growing pressure over land and water resources: Transformations in the Belihuloya catchment In De Silva, R. P. (Ed.), Proceedings of the "Water Professionals' Day," University of Peradeniya , Sri Lanka. 12p.
276. **Jaffery, S.H.M.; Sufi, A. B.; Alam, M. M.,** 2004. Impact of number of well points of skimming well on the saline-fresh water interface. In: Asghar, M.N., M.S. Shafique, M. Yasin and M.M. Alam (Eds.), 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation: Proceedings of the year-end seminar 2001. Lahore, Pakistan: IWMI. pp. 50-59.
277. **Jehangir, Waqar A. ; Turrall, Hugh ; Masih, Ilyas.** 2004. Water productivity of rice crop in irrigated areas. In Proceedings of the 4th International Crop Science Congress on "New directions for a diverse planet," 26 September -1 October 2004, Brisbane, Australia. 6p.
278. **Jehangir, Waqar A; Hussain, Intizar; Ashfaq, Muhammad; Mudasser, Muhammad.** 2004. Poverty across districts in irrigated Punjab, Pakistan. In Jehangir, Waqar A.; Hussain, Intizar (Eds). 2004. Poverty Reduction through Improved Agricultural Water Management: Proceedings of the Workshop on Pro-poor Intervention Strategies

in Irrigated Agriculture in Asia, Islamabad, Pakistan, 23-24 April 2003. Lahore, Pakistan: IWMI. pp.31-46.

279. **Kahlowan, K.; Hanif, A. M.** 2004. Skimming well concept. In: Asghar, M.N., M.S. Shafique, S. Ahmad and M.A. Kahlowan (Eds.), 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation: Proceedings of the year-end seminar 2000. Lahore, Pakistan: IWMI. pp.10-11.

280. **Koné, D. K. ; Gallizzi, K. ; Drescher, S.; Cofie, Olufunke; Zurbrügg, C.; Forster, D.; Montangero, A.; Awuah, E.; Strauss, Martin.** 2004. Efficiency of Helminth eggs removal in dewatered faecal sludge by co-composting. In Godfrey, Sam (Ed.) People-Centered Approach to Water and Environmental Sanitation: Proceedings of 30th WEDC International Conference, Vientiane, Lao PDR, 2004. pp. 21-25.

281. **Makin Ian W, Tushaar Shah, Doug Vermillion, Mehmood Ul Hassan,** 2004 **Who Will Do What and How? Achieving Effective Capacity Building in Water Resources.** In **FAO. Proceedings of Capacity Building Workshop, ICID IEC Meeting, Montpellier, September 2003. Chapter. 3 (FAO Water report 26).**

282. **Mann, R. A. ; Jehangir, Waqar A. ; Masih, Ilyas.** 2004. Improving crop and water productivity of rice-wheat system in Punjab, Pakistan. In Proceedings of the 4th International Crop Science Congress on “New directions for a diverse planet,” 26 September-1 October 2004, Brisbane, Australia. 6p.

283. **Mudasser, Muhammad; Jehangir, Waqar A.; Husain, Intizar; Ashfaq, Muhammad.** 2004. Poverty across various canal commands in irrigated Punjab, Pakistan. In Jehangir, Waqar A.; Hussain, Intizar (Eds). 2004. Poverty Reduction through Improved Agricultural Water Management: Proceedings of the Workshop on Pro-poor Intervention Strategies in Irrigated Agriculture in Asia, Islamabad, Pakistan, 23-24 April 2003. Lahore, Pakistan: IWMI. pp..71-88.

284. **Noble, Andrew D.; Ruaysoongnern, S.; Penning de Vries, Frits W. T.; Hartmann, C.; Webb, M. J.** 2004. Enhancing the agronomic productivity of degraded soils in Northeast Thailand through clay-based interventions. In Seng, V.; Craswell, E.; Fukai, S.; Fischer, K. (Eds.), Water in agriculture: Proceedings of a CARDI International Conference “Research on Water in Agricultural Production in Asia for the 21st Century” Phnom Penh, Cambodia, 25-28 November 2003. Canberra, Australia: ACIAR. pp.147-160.

285. **Qureshi, Asad Sarwar; Akhtar, Mujeeb.** 2004. Targeting Food Security: Reducing Poverty through irrigated Agriculture. In Jehangir, Waqar A.; Hussain, Intizar (Eds). 2004. Poverty Reduction through Improved Agricultural Water Management: Proceedings of the Workshop on Pro-poor Intervention Strategies in Irrigated Agriculture in Asia, Islamabad, Pakistan, 23-24 April 2003. Lahore, Pakistan: IWMI. pp. 227-240.

286. **Rijsberman, Frank.** 2004. Water scarcity: Fact or fiction? In New directions for a diverse planet. Proceedings of the 4th International Crop Science Congress, Brisbane, Australia, 26 September – 1 October 2004. 14p

287. **Saeed, M.M.; Ashraf, M.; Asghar, Muhammed Nadeem ; Shafique, M. S.** 2004. Diagnostic analysis of farmers' skimming well technologies in the Indus basin. In Asghar, M.N.; Shafique, M.; Yasin, M; Alam, M. M. (Eds.), 2004. Root zone salinity management

using fractional skimming wells with pressurized irrigation: Proceedings of the year-end seminar 2001. Lahore, Pakistan: IWMI. pp.60-79.

288. **Saleth, Rathinasamy Maria.** 2004. Irrigation privatization in India: Options, issues, and experience. In Gunasena, H. P. M.; Niranjan, F. (Eds.) State-private sector interface in agricultural development in Sri Lanka - Proceedings of a Workshop held in Colombo, Sri Lanka, 26 May 2003. Colombo, Sri Lanka: Sri Lanka Council for Agricultural Research Policy, Colombo. pp.73-116.

289. **Shafique, M.S.; Asghar, Muhammed Nadeem; Ashraf, M.; Prathapar, S. A.; Aslam, M.** 2004. Guidelines for irrigation scheduling with skimmed groundwater to manage root zone salinity –a preliminary framework. In: Asghar, M.N., M.S. Shafique, S. Ahmad and M.A. Kahlown (Eds.), 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation: Proceedings of the year-end seminar 2000. Lahore, Pakistan: IWMI. pp.101-141.

290. **Shakoor, Abdul; Asghar, Muhammad Nadeem; Ahmed, Shehzad; Kaleem Ullah, Muhammad.** 2004. In the Proceedings of the International Water Demand Management Conference (WAMDEC), Dead Sea, Jordan, May 30-June 3, 2004.

291. **Simmons, Robert W.; Noble, Andrew D.; Pongsakul, D.; Saiyasitpanich; Klinphoklap, S.** 2004. Irrigation infrastructure-based Cadmium hazard mapping methodology (Irr-Cad) coupled with bio-available indices of soil Cadmium as a tool for rapid risk assessment. Proceedings of the 2<sup>nd</sup> International conference on Soil Pollution and Remediation, Nanjing, China 9-12<sup>th</sup> November 2004 pp.47.

292. **Simmons, Robert W.** 2004. Review of the current contamination status of Potentially Toxic elements (PTEs) in the Greater Mekong Sub-region: Implications for public health. Proceedings of the 10<sup>th</sup> Joint International Tropical Medicine Meeting Bangkok, Thailand 29<sup>th</sup> November to 1<sup>st</sup> December 2004 pp.115.

293. **Smakhtin, Vladimir U.** 2004 Hydrological data provision for ungauged rivers in developing countries: Use of pragmatic methods. Proceedings of the 1<sup>st</sup> International Conference on Managing Rivers in the 21<sup>st</sup> Century: Issues and Challenges” (Rivers’04). Penang, Malaysia

294. **Thenkabail, Prasad Srinivasa; Biradar, C. M.; Gangodagamage, Chandana; Islam, Aminul; Schull, Mitchell; Gamage, Nilantha; Turrall, Hugh; Zomer, Robert; Biggs, Trent; Scott, Christopher; Ahmad, Mobin-ud Din; De Fraiture, Charlotte.** 2004. RS/GIS training materials for awareness: Version 1.0. In IWMI, Observing river basins from space: Why is it important for IWMI - A Remote Sensing and GIS (RS/GIS) Workshop for IWMI by IWMI, at Board Room of IWMI Headquarters in Sri Lanka, 28 June 2004. Training materials. 6p.

295. **Thenkabail, Prasad Srinivasa.** 2004. Overview of the agenda of the RS/GIS Workshop and introduction to IWMI Data Storehouse Pathway (IWMI-DSP) In IWMI, Observing river basins from space: Why is it important for IWMI - A Remote Sensing and GIS (RS/GIS) Workshop for IWMI by IWMI, at Board Room of IWMI Headquarters in Sri Lanka, 28 June 2004. Training materials. 26p.

296. **Thenkabail, Prasad Srinivasa; Schull, Mitch; Turrall, Hugh.** 2004. LULC and irrigated area mapping in Ganges. In IWMI, Observing river basins from space: Why is it important for IWMI - A Remote Sensing and GIS (RS/GIS) Workshop for IWMI by IWMI,

at Board Room of IWMI Headquarters in Sri Lanka, 28 June 2004. Training materials. 21p.

297. **Thenkabail, Prasad Srinivasa.** 2004. Data preparation 3: Normalization of satellite sensor data. In IWMI, Observing river basins from space: Why is it important for IWMI - A Remote Sensing and GIS (RS/GIS) Workshop for IWMI by IWMI, at Board Room of IWMI Headquarters in Sri Lanka, 28 June 2004. Training materials. 23p.

298. **Turrall, Hugh.** 2004. Global irrigated area mapping. In IWMI, Observing river basins from space: Why is it important for IWMI - A Remote Sensing and GIS (RS/GIS) Workshop for IWMI by IWMI, at Board Room of IWMI Headquarters in Sri Lanka, 28 June 2004. Training materials. 22p.

299. **Weragala, Neelanga.** 2004. Estimation of monthly river flows for un-gauged catchments in Sri Lanka: A non-linear spatial interpolation approach In Conference on Sri Lanka: Current Challenges, organized by the Faculty of Graduate Studies, University of Colombo, 17-18 December 2004: Proceedings, Vol. 1. pp3-14.

300. **Weragala, D. K. Neelanga.** 2004. Use of GIS/RS technologies in distributed hydrological modeling of the Walawe River Basin. In First National Symposium on Geo-Informatics - Session 01, Postgraduate Institute of Agriculture, Peradeniya, Sri Lanka, 30 July 2004. Proceedings. pp.31-42.

301. **Weragala, D. K. Neelanga; Smakhtin, Vladimir U.** 2004. Simulating hydrological alterations in the conditions of limited data: lessons from the Walawe River Basin in Sri Lanka. In Proceedings of the International Conference on Sustainable Water Resources Management in the Changing Environment of the Monsoon Region. Colombo, Sri Lanka. November, 2004. Vol 1. pp.251-259.

302. **Yasin, M.; Asghar, Muhammad Nadeem; Alam, M. M.; Akbar, G.; Khan, Z.** 2004. Methodology for site selection to introduce skimming well source pressurized irrigation systems. In Asghar, Muhammad Nadeem; Yasin, M.; Alam, M. M.; Qureshi, Asad Sarwar (Eds.), Root zone salinity management using fractional skimming wells with pressurized Irrigation: Proceedings of the Project-End Workshop 2003. Lahore, Pakistan: IWMI. pp.1-13.

303. **Yasin, M.; Ahmed, M. M.; Akbar, G.; Khan, Z.** 2004. Performance evaluation of locally manufactured pressurized irrigation. In: Asghar, M.N., M. Yasin, M.M. Alam and A.S. Qureshi (Eds.), 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation: Proceedings of the project-end workshop 2003. Lahore, Pakistan: IWMI. pp. 28-58.

304. **Yasin, M.; Ahmad, S.; Roohi, R. ; Majeed, R.; Hussain, S. A.; Rehan, A.; Ahmad, M. M,** 2004. Assessment of hydrological potential for installation of dugwells: Development of practical methodology. In: Asghar, M.N., M.S. Shafique, M. Yasin and M.M. Alam (Eds.), 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation: Proceedings of the year-end seminar 2001. Lahore, Pakistan: IWMI. pp.33-49.

305. **Yasin, M.; Ahmad, S.; Ahmad, M. M.; Akbar, G.; Khan, Z,** 2004. Dugwell as an option of skimming well. In: Asghar, M.N., M.S. Shafique, S. Ahmad and M.A. Kahlown (Eds.), 2004. Root zone salinity management using fractional skimming wells with

pressurized irrigation: Proceedings of the year-end seminar 2000. Lahore, Pakistan: IWMI. pp.22-34.

306. **Zomer, Robert.** 2004. Project planning 2: Linking ICT/KM activities and their relevance to IWMI. In IWMI, Observing river basins from space: Why is it important for IWMI - A Remote Sensing and GIS (RS/GIS) Workshop for IWMI by IWMI, at Board Room of IWMI Headquarters in Sri Lanka, 28 June 2004. Training materials. 11p.

## OTHER OUTPUTS

### NEWSPAPER ARTICLES

307. **Hussain, Intizar.** 2004. Abiana: Flat or differential rate ? Economic and Business Review, *Dawn*, 5 January 2004, 5p.

308. **IWMI.** 2004. Pro-poor intervention strategies in irrigated agriculture in Asia. *The Sunday Times*, 22 August:.

### DISCUSSION PAPERS

309. **Phansalkar, S.J.; Verma, Shilp.** 2004. Improved water control as a strategy for enhancing tribal livelihoods: A synthesis of studies undertaken in CInI. Discussion Paper, IWMI-TATA Water Policy Program, Anand.

310. **Verma, Shilp.** 2004. Promoting micro-irrigation in India: A review of evidence and recent developments. Discussion Paper, IWMI-TATA Water Policy Program.

311. **Verma, Shilp; Tsephal, S.; Jose, T.** 2004. Promoting micro irrigation in India: Lessons from Maikaal. Discussion Paper, IWMI-TATA Water Policy Program

### PROJECT REPORTS

312. **Ahmad, S.; Alam, M.M.; Asghar, Muhammed Nadeem; Yasin, M.** 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation. Volume II: Site Selection Methodology. Lahore, Pakistan: IWMI. 86p.

313. **Ahmad, S.; Yasin, M.; Asghar, Muhammed Nadeem; Ahmad, M. M.** 2004. Root zone salinity management using Fractional skimming wells with pressurized irrigation. Volume V: Hand Book on Pressurized Irrigation. Lahore, Pakistan: IWMI. 87p..

314. **Appell, V.; Baluch, M. S.; Hussain, Intizar.** 2004. Pro-poor water harvesting systems in drought-prone areas: A case study of the Karez system in Baluchistan, Pakistan. In Hussain, Intizar; Giordano, Mark (Eds.), Water and poverty linkages: Case studies from Nepal, Pakistan and Sri Lanka - Project report 1. Colombo, Sri Lanka: IWMI. pp.51-75.

315. **Asghar, Muhammed Nadeem; Zhu, Zhonping; Sohaq, M.A.; Lashari, B.** 2004. Assessment of Hydro-geological potential of skimming wells in the Lower Indus Basin of Pakistan. Lahore, Pakistan: IWMI. v.p.

316. **Asghar, Muhammed Nadeem ; Yasin, M.; Alam, M. M.; Quereshi, Asad Sarwar.** 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation. Volume I: Main Report. Lahore, Pakistan: IWMI. 80p.
317. **Asghar, Muhammed Nadeem ; Saeed, M. M.; Ashraf, M; Alam, M. M.** 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation. Volume III: Skimming Wells. Lahore, Pakistan: IWMI 55p.
318. **Asghar, Muhammed Nadeem ; Ashraf, M.; Yasin, M.; Ahmad, S..** 2004. Root zone salinity management using fractional skimming wells with pressurized irrigation. Volume IV: Irrigation Scheduling. Lahore, Pakistan: IWMI 66p.
319. **Biltonen, Eric; Hussain, Intizar; Tuan, Doan Doan.** (Eds.) 2004. Pro-poor intervention strategies in irrigated agriculture in Asia: Poverty in irrigated agriculture: Issues and options: Vietnam. Colombo, Sri Lanka: IWMI. v, 185p. (IWMI country report Vietnam)
320. **Biradar, C. M.; Islam, Aminul; Thenkabail Prasad Srinivas; Tharme, Rebecca** 2004. Expansion without extinction: How can biodiversity be preserved in irrigation systems? Biodiversity Project: Udawalawe Left Bank Extension: Ground truth CD
321. **Bricquet, Jean-Pierre; Janeau, J. L.; Boonsaner, A.; Luc, J. P., Huon, S.; Boulais, C.; Lestrelin, G.; Kurian, Mathew** 2004. Catchment approach to combating soil erosion in Thailand. In Community-based land and water management systems for sustainable upland development in Asia: MSEC Phase 2. Maglinao A.R., Valentin C. (Eds) in MSEC 2003 Annual report, IWMI-IRD, Bangkok, pp. 115-142.
322. **Fujimoto, Naoya.** 2004. Research on intensification of effective water-use policy Annual Project Report FY2003 (37670SL JAP21) - IWMI/Government Cooperative Programme Trust Fund Project with Government of Japan. IWMI, Colombo, Sri Lanka. 6p.
323. **Gichuki, Francis.** 2004. Indicators for sustainable agricultural water management. CPWF report
324. **Gichuki, Francis.** 2004. Data and information management strategies. CPWF report
325. **Gichuki, Francis.** 2004. Integrated basin water management system research agenda. CPWF report
326. **Gichuki, Francis.** 2004. Integrated Basin Water Management Research Conceptual framework. CPWF report..
327. **Hussain, Intizar.** 2004. Pro-poor interventions strategies in irrigated agriculture in Asia: Poverty in irrigated agriculture: Realities, issues, and options with guidelines. Colombo, Sri Lanka: IWMI. xxix, 270p.
328. **Hussain, Intizar.** 2004. Pro-Poor Intervention Strategies in Irrigated Agriculture in Asia (RETA-5945): Report on the Study Achievements, Second Regional workshop - Outcomes and Follow-up Activities submitted to the ADB. Colombo, Sri Lanka: IWMI. 31p.

329. **Hussain, Intizar; Giordano, Mark.** (Eds.) 2004. Water and poverty linkages: Case studies from Nepal, Pakistan and Sri Lanka - Project report 1. Colombo, Sri Lanka: IWMI. v, 108p.
330. **Hussain, Intizar (Ed.) ; Sivamohan, M.V.K.; Scott, Christopher; Bouma Jetske; Ujjal Ganguly; Thrikawala, Sunil; Wijerathne Deeptha.** 2004. Pro-poor intervention strategies in irrigated agriculture in Asia - poverty in irrigated agriculture – Issues and options: India. Colombo, Sri Lanka: IWMI; ADB. 204p.
331. **Hussain, Intizar; Biltonen, Eric (Eds.) ; Jinxia Wang; Jikun Huang; Zhigang Xu; Scott Rozelle; Qiuqiong Huang; Siwa Msangi.** 2004. Pro-poor intervention strategies in irrigated agriculture in Asia - Poverty in irrigated agriculture – Issues and options: China. Colombo, Sri Lanka: IWMI.ADB. 191p.
332. **Hussain, Intizar (Ed.); Arif, S. Sigit; Maksum, Mohammad; Suparmi, Murtiningrum; Hartono, Slamet; Mawarni, Agnes; Rahardjo; Wijerathne, Deeptha .** 2004. Pro-poor intervention strategies in irrigated agriculture in Asia - Poverty in irrigated agriculture – Issues and options: Indonesia. Colombo, Sri Lanka: IWMI. ADB. 219p.
333. **Hussain, Intizar (Ed.); Jehangir, Waqar A.; Ahfaq, Muhammad; Mudasser, Muhammad; Nazir, Aamir.** 2004. Pro-poor intervention strategies in irrigated agriculture in Asia – Poverty in irrigated agriculture in Pakistan: Issues and options: Pakistan. Colombo, Sri Lanka: IWMI; ADB. 274p.
334. **Hussain, Intizar (Ed.); Ahmed, Q.K.; Karim, Zahurul; Haq, A. Khandaker; Quasem, Abul; Rahman, Khalilur; Chakravorty, Nityananda; Ali, Noajesh; Akhter, Rowshan; Hasan, Z. Mohammad; Zubair,H. ;Mohammad; Younus, A. F.; Hossain, Afzal; Karim, M.A.; Siddiqui, S.M. Hussain; Khoshbu, A.Newaz,** 2004. Pro-poor Intervention Strategies in Irrigated Agriculture in Asia - Poverty in irrigated Agriculture: Issues and Options – Bangladesh Colombo, Sri Lanka. IWMI; ADB. 169p.
335. **Hussain, Intizar ; Tuan, Doan; Biltonen, Eric (Eds.); Quy, N. Nguyen; Phong, Dang; Hung, Ngoc Le; Hung,, Dinh; Tiep, Xuan Nguyen; Ban, Van Pham; Dung, Danh, Nguyen; Chinh, Van Le; Dung, Anh Tran; Vu Manh, Nguyen; Tuan, Doan, Doan.** 2004. Pro-poor intervention strategies in irrigated agriculture in Asia: Poverty in irrigated agriculture: Issues and options: - Vietnam. Colombo, Sri Lanka: IWMI. ADB. 191p.
336. **IWMI ; JBIC.** 2004. Analysis report of the first benchmark survey of Mahaweli System C Upgrading Project. *Unpublished report, IWMI, Colombo, Sri Lanka.* iv, 60p.
337. **Jayakody, Priyantha; Molle, Francois; Pieris, R.; Ariyaratne, Ranjith; Kumararatna, K. P. G. H.; Weragala, Neelanga.** 2004. Survey report on the study of water management in three distributary canals of Uda Walawe Irrigation Project (Yala 2003). Colombo, Sri Lanka: IWMI. 86p.
338. **Joshi, P. K. ; Pangare, V. ; Shiferaw, B. ; Wani, S. P. ; Bouma, Jetske ; Scott, Christopher.** 2004. Socioeconomic and policy research on watershed management in India: Synthesis of past experiences and needs for future research. *Patancheru, India Manila, Philippines[ Colombo, Sri Lanka. ICRISAT[ ADB[ IWMI. viii, 80p. (Global Theme on Agroecosystems report no.7)*

339. **Maglinao, A. R.; Valentin, Christian** 2004. Community-based land and water management systems for sustainable upland development in Asia: MSEC Phase 2. In MSEC 2003 Annual report, IWMI-IRD, Bangkok, pp. 1- 38.
340. **Mainuddin, M.; Sangunurai, S.; Kwanyen, B.; Penning de Vries, Frits W. T.** 2004. Management of land and water resources for sustainable smallholder agriculture: Case studies in the Mae Klong River basin, Thailand. Final Project Report. 81p.
341. **Masiyandima, Mutsa ; McCartney, Matthew Peter.** 2004. Wetland contributions to livelihoods in Zambia. Rome, Italy: FAO. vi, 50p.
342. **McCartney, Matthew Peter; van Koppen, Barbara.** 2004. Wetland contributions to livelihoods in United Republic of Tanzania.. Rome, Italy: FAO. vi, 42p.
343. **Orange, D.; Podwojewski, P.; Toan, T. D.; Phai, D.D.; Bayer, A.; Phuong, N.D.; Thiet, N.V.; Rinh, P.V.; Koikas, J.** 2004. Soil erosion management at the watershed level for sustainable agriculture and forestry in Vietnam. In Maglinao A.R.; Valentin C. (Eds.) Community-based land and water management systems for sustainable upland development in Asia: MSEC Phase 2.-MSEC 2003 Annual report, IWMI-IRD, Bangkok, pp.143-177.
344. **Qureshi, Asad Sarwar; Akhtar, Mujeeb.** 2004. A survey of drought impacts and coping measures in Hermand and Kandahar Provinces of Afghanistan. Lahore, Pakistan: IWMI. 22p.
345. **Shahram, A.; Qureshi Asad ; Gichuki, Francis.** 2004. Karkeh Basin Profile. CPWF report
346. **Smakhtin, Vladimir.** 2004. Assessment and mitigation of droughts in South-West Asia: Issues and prospects: Background document for the Regional Workshop on Drought Assessment and Mitigation, Colombo, Sri Lanka, 7 - 8 October 2004. 20p.
347. **Somaratne, Pallewatte G.; Jayakody, Priyantha; Molle, Francois; Jinapala, Kiribandage C.** 2004. Small tank cascade systems in the Walawe river basin. Colombo, Sri Lanka: IWMI. 46p. (IWMI Technical report)
348. **Takubov, Murat ; Matyakubov, Bakhtiyar.** 2004. The baseline survey of 3 pilot water user associations in the Ferghana Valley. *Tashkent, Uzbekistan. IWMI-CAC. 81p.*
349. **Tharme, Rebecca.** 2004. In Mott MacDonald; IWMI *et al.* 2004. Identifying sustainable options for the mitigation of diffuse agricultural pollution. Inception Report. June 2004. Mott MacDonald, Cambridge, UK. 28p.
350. **Thenkabail, Prasad Srinivas; Biradar, Chandrashekhar, M., Gangodagamage, Chandana., Islam, Aminul; Schull, M., Gamage, Nilantha; Turrall, Hugh;; Zomer, Robert; Biggs, Trent; Canisius, Francis;; Villholth, Karen; Hoanh, Chu T.; Scott, Christopher; Gichuki, Francis; Mobin,. Ahmed; Parthasarathy, G.; Murli Krishna, Roost, Nicholas; Marchand, Pierre.** 2004 RS/GIS Training Materials for Specialists:

Version 1.0, *Observing River Basins from Space: Why is it Important for IWMI A Remote Sensing and GIS (RS/GIS) Workshop for IWMI by IWMI, June 21-25, 2004, IWMI Headquarters in Sri Lanka.*

351. **Valentin, Christian; Chantavongsa, A.; de Rouw, Anneke; Chaplot, V.; Thiébaux, J .P.; Silvera, N.; Lestrelin, G.** 2004. MSEC : An innovative approach for sustainable land management in Lao PDR. In In Maglinao A.R.; Valentin C. (Eds.) *Community-based land and water management systems for sustainable upland development in Asia: MSEC Phase 2 - MSEC 2003 Annual report, IWMI-IRD, Bangkok, pp. 83-104.*

352. **Western, A.; Smith, G.; Turral, Hugh; Bethune, M.; Whitfield, D.; Abuzar, M.; McAllister, A.** 2004. *Colbinabbin Test Site report: PACRIM AIRSAR Mission 2000 – Soil moisture and salinity in irrigated catchments.* Melbourne, Victoria, Australia: University of Melbourne.

353. **Yakubov, Murat.** 2004. *The 2004 Follow-up Survey of 3 pilot WUAs in the Ferghana Valley.* IWRM-Ferghana Project. Tashkent, Uzbekistan. IWMI. CAC. October, 2004. 27p.

354. **Yakubov, Murat; Matyakubov, M.** 2004. *Baseline Survey of 3 pilot WUAs of the Ferghana Valley.* IWRM-Ferghana Project. Tashkent, Uzbekistan. July, 2004.

355. **Yasin, M.; Ahmad, S.; Asghar, Muhammad Nadeem; Ahmad, M. M.** 2004. *Root zone salinity management using fractional skimming wells with pressurized Irrigation – Volume IV, Pressurized irrigation.* Lahore, Pakistan: IWMI. 68p.

356. **Yawson, Daniel K. ; Penning de Vries, Frits W. T. ; Merrey, Douglas J. ; Mutero, Clifford M.** 2004. *Water for Africa: Challenges, innovative technologies and research capacities Project completion report to NEPAD.* 64p.

#### **MISCELLANEOUS**

357. **Abdullaev, Iskandar; Ul Hassan, Mehmood; Yakubov, Murat.** 2004. *Handbook on implementing a time-based water distribution.* Tashkent, Uzbekistan: IWMI. 15p.

358. **Abdullaev, Iskandar; Yakubov, Murat.** 2004. *Water management reforms, irrigation management transfer and water rights: Synthesis from Karakalpakistan case study.* Colombo, Sri Lanka: IWMI. 12p.

359. **Biltonen, Eric; Tuan, D. D.; Wang, Jinxia.** 2004. *Making irrigation management pro-poor: Lessons from China and Vietnam.* Research paper, IWMI-ADB Project. 18p.

360. **Hussain, Intizar; Namara, Regassa; Samad, Madar.** 2004. *Water for food security for the poor.* In ADB, *Water for All Publication Series.* pp.66-81.

361. **IWMI.** 2004. *Assessment and mitigation of droughts in South-West Asia: Issues and prospects.* Background document for the Regional Workshop on

Drought Assessment and Mitigation. 20p

362. **IWMI South Africa**. 2004. Directory of institutions active in small scale irrigation in Ethiopia. Pretoria, South Africa: IWMI South Africa.

363. **Molden, David ; de Fraiture, Charlotte**. 2004. Investing in water for food, ecosystems and livelihoods – Blue paper, Stockholm 2004. Discussion draft. Colombo, Sri Lanka: Comprehensive Assessment Secretariat. 22p.

364. **Namara, Regassa; Upadhyay, Bhawana; Nagar, R.** 2004. Drivers of micro-irrigation adoption: Empirical results from selected villages of Gujarat and Maharashtra states. 15p.

365. **Nguyen-Khoa, S.** 2004. E-Forum in November-December 2004 - In preparation of the FAO/Netherlands Conference on "Water for Food and Ecosystems: Make it Happen" held in The Hague from January 31 to February 5.

366. **Pieris, R.; Molle, Francois; Ariyaratne, Ranjith; Kumararatna, K. P. G. H.** 2004. Study of the water balance of Uda Walawe Right Bank main canal (1984-2003) Technical report, IWMI, Colombo, Sri Lanka. 30p.

367. **Qureshi, Asad Sarwar; Akhtar, Mujeeb**. 2004. A survey of drought impacts and coping measures in Helmand and Kandahar provinces of Afghanistan. Colombo, Sri Lanka: IWMI. 21p.

368. **SIWI; IWMI**. 2004. Water – More nutrition per drop?: Towards sustainable food production and consumption patterns in a rapidly changing world. Stockholm, Sweden: SIWI. 35p.

369. **Smakhtin, Vladimir; GWP Advisory Center**. 2004. Newsletter "Environmental Flows", 1(1):4p. July 2004.

370. **Smakhtin, Vladimir. GWP Advisory Center**. 2004. Newsletter "Environmental Flows", 1(2):4p. November 2004.

371. **Wang, J.; Xu, Z.; Huang, J.; Rozelle, S.; Hussain, Intizar; Biltonen, Eric**. 2004. Water management reforms in the Yellow River Basin: Implications for water savings, farm incomes and poverty. Research paper, IWMI-ADB Project. 26p.

### III. KEY NOTE ADDRESSES AND OTHER PRESENTATIONS

#### KEYNOTE SPEECHES / PRESENTATIONS

372. **Abdullaev, Iskander; Yakubov, Murat**. 2004. Water Management Reforms, Irrigation Management Transfer and Water Rights: Synthesis from Karakalpakistan Case Study. A paper presented at the Scientific and practical seminar titled "Deepening reforms in and perfecting of legal base of water management in Uzbekistan" in Tashkent on 25 November 2004, organized by the Agriculture and Water Committee of Oliy Majlis (Parliament) of Uzbekistan. 12p.

373. **Abdullaev, Iskander; Yakubov, Murat**. 2004. Assessing the Gender

Performance of the Water Users Associations of Central Asia: Case Study from the IWRM-Fergana Project . ICWC 39<sup>th</sup> Annual Water Conference, Almaty, Kazakhstan. 19-21 May 2004. 11p.

374. **Abdullaev, Iskander.** 2004. Challenges of Establishing and Developing WUAs in Central Asia and WUA experiences in Karakalpakstan. Presented at Uzbek MAWR-hosted WUA Development Workshop in Jizzak Province, Jizzak, Uzbekistan. 2 April, 2004

375. **Awulachew, Seleshi Bekele.** 2004. Integrated water resources management – A vision and a programme. **Key note** paper presented at the LARS Symposium, 10-12 November 2004. 14p.

376. **de Rouw, Anneke; Souldad, B.; Jullien, F.; Phonmisa, K..** 2004. The adaptation of upland rice cropping to a ever-shorter fallow periods and it's limit. **Keynote paper** - Poverty reduction and shifting cultivation stabilization in the uplands of Lao PDR: Technologies, approaches and methods for improving upland livelihoods, January 27-30, 2004, Luang Phrabang, NAFRI/SIDA.

377. **Matyakubov, Bahtiyar (IWMI-CAC).** 2004. WUA Development Experiences by the IWRM-Ferghana Project. Presented at Uzbek MAWR-hosted WUA Development Workshop in Jizzak Province, Jizzak, Uzbekistan. 2 April, 2004

378. **Molden, David.** 2004. Increasing productivity of water in river basins. Workshop Meeting for Networking Research on Water Productivity, Indian Council on Agricultural Research, 14-15 October 2004, New Delhi. **Keynote - presentation**

379. **Molden, David.** 2004. Improving basin water use in linked agricultural, ecological and urban systems: Seeking new flow paths and avoiding dead ends. **Keynote presentation** for workshop on water use in cascading basin systems at Stockholm World Water Week, 25-27 August 2004,

380. **Molden, David.** 2004. - Increasing productivity of water in river basins: Workshop Meeting for Networking Research on Water Productivity, 14-16 October, 2004, New Delhi., India organized by Indian Council on Agricultural Research. **Keynote presentation**

381. **Molden, David** 2004. Workshop on water use in cascading basin systems. World Water Week, Stockholm, 25 to 27 August, **Keynote presentation.**

382. **Nizamedinkhojaeva, N. ; Ul-Hassan, Mehmood.** 2004. Poverty and users participation in IWRM in the Fergana Valley. A paper presented at the Water Journalist Workshop in Almaty Kazakhstan, Asian Development Bank. September 27-30, 2004.

383. **Nguyen-Khoa, Sophie.** 2004. Integrated Water and Fisheries Resource Management in Developing Countries, **Key note Speech**, at the International Symposium-Workshop on Integrated Water and Fisheries Resources Management in Developing Countries (IWFRM 2004), Calamba City, Laguna, Philippines, 20-22 September 2004.

384. **Nguyen-Khoa, Sophie.** 2004. Integrated Management of Water and Fish: Riverine Ecosystem. **Chair-note** Speech, at the International Symposium-Workshop on Integrated Water and Fisheries Resources Management in Developing Countries (IWFRM 2004), Calamba City, Laguna, Philippines, 20-22 September 2004.

385. **Rijsberman, Frank.** 2004. Sustainable agriculture and wetlands **Keynote lecture** at the 7<sup>th</sup> INTECOL International Wetlands Conference, Utrecht, The Netherlands, 25-30 July 2004.
386. **Rijsberman, Frank.** 2004. Water scarcity: Fact or fiction? **Keynote lecture** at "New directions for a diverse planet", 4th International Crop Science Congress, Brisbane, Australia, 26 September – 1 October 2004. 14p.
387. **Saleth, Rathinasamy Maria** 2004. Understanding water institutions: Structure, environment, environment, and change process. **Keynote paper** delivered at the International Workshop on Water Resources Management for Local Development: Governance, Institutions, and Policies", Loskop Dam, South Africa, November 8-10, 2004. 18p.
388. **Sharma, B.R.** 2004. The potential of water harvesting as an anti-drought measure. Keynote lecture at a Drought Management session of the 55-th ICID Congress in Moscow. (Potential of water harvesting as a strategic tool for drought mitigation. Proceedings of 55th International Meeting of the International Commission on Irrigation and drainage (ICID). FAO/ICID. International workshop on Water Harvesting and Sustainable Agriculture. Moscow, Russia, September, 2004 )
389. **Tharme, Rebecca.** 2004. Wetlands and the Global Water Agenda. Presented at Wetlands International Board of Members Meeting, 26 November, 2004. Bangkok, Thailand.
390. **Ul-Hassan, Mehmood.** 2004. Strategic IMT Design and Implementation. INPIM International Seminar on Capacity Building, Menemin, Izmir, Turkey. December 5-15, 2004.
391. **Ul-Hassan, Mehmood.** 2004. Social mobilization to establish WUAs. INPIM International Seminar on Capacity Building, Menemin, Izmir, Turkey. December 5-15, 2004.
392. **Ul-Hassan, Mehmood.** 2004. Socio-Economic aspects of agricultural production in CAC countries with emphasis on salt affected environments. Training Seminar on Biosaline Agriculture: Principles and Applications, With Reference to Central Asia and Caucus Region. International Center for Biosaline Agriculture, International Center for Agriculture in Dry Areas, and International Water Management Institute. Tashkent, Uzbekistan. 2-10 September, 2004.
393. **Ul-Hassan, Mehmood.** 2004. *Institutional Reforms for Agricultural Water Management.* A paper presented at the IWMI-AREO Workshop on Iran Collaborative Research Program, Tehran. September, 2004.
394. **Ul-Hassan, Mehmood.** 2004. Salinity and threat to Sustainable Environment of Central Asia. A paper presented at the Water Journalist Workshop in Almaty Kazakhstan. Asian Development Bank. September 27-30, 2004.
395. **Ul-Hassan, Mehmood.** 2004. Issues in Water Sector Reforms: Lessons from IWRM-Fergana Project. ICWC 39<sup>th</sup> Annual Water Conference, Almaty, Kazakhstan. May 19-21, 2004.

396. **Ul-Hassan, Mehmood.** 2004. *Social Mobilization for Creating Sustainable Water Users Association. NATO- Advanced Science Workshop. Bishkek, Kyrgyzstan. 23-27 February, 2004.*
397. **Ul-Hassan, Mehmood.** 2004. Constraint to IWRM Implementation with special reference to Water Users Association. A paper presented at the Scientific and practical seminar titled "Deepening reforms in and perfecting of legal base of water management in Uzbekistan" in Tashkent on 25 November 2004, organized by the Agriculture and Water Committee of Oliy Majlis (parliament) of Uzbekistan.
398. **Yakubov, Murat.** 2004. SMID When Establishing WUAs: Logic, Stages and Key Players. Presented at Uzbek MAWR-hosted WUA Development Workshop in Jizzak Province, Jizzak, Uzbekistan. 2 April, 2004
399. **Zomer, Robert; Puskur, Ranjitha; Chapuis, Prisca; de Putter, Johan; Bouma, Jetske; Scott, Christopher.** 2004. Analysis of socio-ecological resilience: Developing meso-scale indicators of watershed robustness. **Key note paper** for the "National level seminar on Impact Assessment of Watershed Development: Conceptual and Methodological Issues", Water Technology Centre, Tamil Nadu Agricultural University, Coimbatore, India, 24-26 November 2004

### INVITED PAPERS

400. **Makin, Ian W.; Samad, M.; Shah, Tushar.** 2004. River basin organizations – Lessons from recent research. **Invited paper** presented at: 1<sup>st</sup> General Meeting of NARBO, Batu, Indonesia, 24<sup>th</sup>-25<sup>th</sup> February, 2004.
401. **Makin, Ian W** 2004 World Water Supplies: are they adequate? **Invited presentation** to Rotary Club (District 3350) Bangkok, Thailand March 2004.
402. **Makin, Ian W** 2004 World Water Supplies: are they adequate? **Invited presentation** to World Potato Congress, Kunming 26<sup>th</sup>-30<sup>th</sup> March 2004 (developed from an earlier presentation by Frank Rijsberman to the 3rd Rosenberg International Forum on Water Policy, Canberra, October 7-11.) Published in Proceedings of World Potato Congress
403. **Molden, David; Tharme, Rebecca; Abdullaev, Iskandar; Puskur, Ranjitha.** 2004. Water, food, livelihoods and environment: Maintaining biodiversity in irrigated landscapes: **Invited paper** for "International Ecoagriculture Conference and Practitioners' Fair", 27 September -1 October 2004, Nairobi, Kenya.
404. **Noble, Andrew D.; Suzuki, S.; Ruaysoongnern, S.** 2004. The role of high activity clays in remediating degraded soils: A case study from Northeast Thailand. **Invited speaker** at: Symposium on Phytoremediation Technology, 2-5 July 2004, Petchburi, Thailand, organized by the Department of Biology, Faculty of Science Mahidol University and Department of Primary Industries and Mines Ministry of Industry, Royal Thai Government.
405. **Phonkarm, R.; Suraphol Chandrapatya; Makin, Ian W.** 2004, Using Information Technology to Make Research Results More Readily Available. **Invited paper** presented to the 2nd Meeting of Working Group on Agriculture for the Greater Mekong Sub-region. Chang Mai, March 2004.
406. **Rijsberman, Frank.** 2004. The water challenge. **Invited paper** prepared as one

of 10 challenge papers for the Copenhagen Consensus project of the Environmental Assessment Institute, Copenhagen, Denmark. 37p.

407. **Rijsberman, Frank R.; de Silva, Sanjiv.** 2004. Water for food, health and livelihoods: Providing for the disadvantaged in times of scarcity. **Invited paper** presented at the 5th Annual Business Convention of the Ceylon Chamber of Commerce, at the Colombo Plaza, Colombo, Sri Lanka, 15 October 2004. 14p.

408. **Samad, Mardar; Makin, Ian W.** 2004 International Experiences with IMT: An overview of IWMI's research results. **Invited paper** at INWent Policy Dialogue Workshop on "Irrigation Management Transfer and Irrigators' Organizations". Chang Mai, Thailand 26<sup>th</sup>-28<sup>th</sup> October, 2004.

409. **Sharma, Bharat .R.; Scott, Christopher.; Sikka, A.** 2004. Water for agriculture vis-a-vis' environment. **Invited paper** 91st Session of Indian Science Congress, January 3-7, Chandigarh, India. 13p.

410. **Sikka, A.; Scott, Christopher; Sharma, Bharat R.** 2004. Integrated basin water management in the Indo-Gangetic basin. **Invited Paper**, 91st Session of Indian Science Congress, 3-7 January, Chandigarh, India.

411. **Smakhtin, Vladimir.** 2004. Environmental flows, hydrology and water management, Roorkey National Institute of Hydrology (NIH) in March 2004. **Lecture by invitation** of the NIH DG as part of the lecture series on the occasion of the Silver Jubilee of the NIH. (Power Point Presentation).

#### **CONFERENCE / WORKSHOP PRESENTATIONS**

412. **Abdullaev, Iskandar.** 2004. Water management policies of Central Asian countries: Integration or disintegration?. *Paper presented at USDS organized conference "Celebrating 10 years of Contemporary Issues Fellowships Conference on Water Issues in Central Asia," Tashkent, Uzbekistan, 25 September 2004.* 15p.

413. **Abdullaev, Iskandar; Yakubov, Murat.** 2004. Assessing the gender performance of the water users associations of Central Asia: Case study from IWRM Ferghana Project. Paper presented at the ICWC 39th Annual Water Conference, Almaty, Kazakhstan, 19-21 May 2004. 11p.

414. **Abdullaev, Iskandar ; Horinkova, Vilma.** 2004. Water rights in Central Asia: History, present and perspectives. *Paper presented at Conference on Water Rights and Related Water Supply Issues, Salt Lake City, Utah, 13-16 October 2004.* 8p.

415. **Ahmad, Mobin-ud-Din; Bastiaanssen, W. G. M.; Feddes, R. A.** 2004. A new technique to estimate net groundwater use across large irrigated areas by combining remote sensing and water balance approaches, Rechna Doab, Pakistan. Paper presented at IWMI's Annual Research Meeting, IWMI Headquarters, Battaramulla, Sri Lanka, 8-9 November 2004. 20p.

416. **Ahmed, S.; Shakoor, A.; Kaleem Ullah, M.; Asghar, M. N.** 2004. Is water scarcity a real constraint for meeting the future food requirements of Pakistan? Paper presented at the International Conference on Water and Wastewater Management for Developing Countries (WAMDEC), Victoria Falls, Zimbabwe, 28- July 2004.

417. **Alamban, R. B.; de Guzman, M.T. L.; Maglinao, Amado R.; Toan, T.D.; Subagyono, K.**, 2004. Management of Soil Erosion for Increased Farm Productivity and Sustainable Land Management in Southeast Asia. Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments, 14-17 December 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.

418. **Amerasinghe, Felix; Boelee, Eline.** 2004. Assessing the impact of irrigation development on the environment and human health. Paper presented at Inception workshop on IWMI-BOKU-Siebersdorf-EARO-Arbaminch University collaborative study on the impact of irrigation development on poverty and the environment, 26-30 April 2004, Addis Ababa.

419. **Amoah, Philip; Drechsel, Pay; Abaidoo, R. C.; Obuobie, Emmanuel.** 2004? Vegetable irrigation with low-quality water in West Africa: Risk factors and risk elimination. Paper presented at the International Workshop on Management of Poor Quality Waters for Irrigation: Institutional, Health & Environmental Aspects, Moscow, 9-10 September 2004.

420. **Andreini, Marc.** 2004. Principles and Strategies for the formulation Regulatory Policies, Multiple Use and Conflict Management. Presentation at the Forum on Irrigation Development and Management in Ghana: The Way Forward Workshop, 21-23 January 2004, Nungua, Ghana.

421. **Andreini, Marc.** 2004. More Crop per Drop? Alternatives in African Smallholder Irrigation. Presentation at the Ministerial Conference on Harnessing Science and Technology to Increase Agricultural Productivity in Africa - West African Perspectives, Ouagadougou, Burkina Faso, June 21-23 2004.

422. **Asghar, M. N.; Kaleem Ullah, M.; Shakoor, A.; Ahmed, S.** 2004. Mitigation of agricultural drought using deficit but supplemental irrigation methods and practices. Paper Presented at the International Conference on Water and Wastewater Management for Developing Countries (WAMDEC), Victoria Falls, Zimbabwe, 28-30 July 2004.

423. **Asghar, Muhammad Nadeem; Nazeer, A.; Shakoor, Abdul; Ahmed, Shehzad; Akhtar, M.; Kaleem Ullah, Muhammad; Hussain, A.** 2004. Socio-economic appraisal of skimming wells source pressurized irrigation systems for irrigated agricultural areas. Paper, Third National Drainage Seminar on Drainage in Pakistan, NWFP Agricultural University, Peshawar, 7-8, June, 2004.

424. **Awulachew, Seleshi Bekele.** 2004. Modeling Impact of Consumptive Water Use and Natural Resources Degradation on Southern Rift Valley Lakes in Ethiopia. Paper presented at the MOWR Water Forum, 25-27 October 2004. 11p

425. **Awulachew, Seleshi Bekele.** 2004. Assessment of irrigation potential and investigation of impact on the Abaya-Chamo Lakes. IWMI Workshop - Impact of Irrigation on Poverty and Environment, 26-30 April, 2004. 13p.

426. **Awulachew, Seleshi Bekele.** 2004. Water balance of Abaya & Chamo lakes and impact scenario modelling. LARS Symposium, 10-12, November 2004. 5p.

427. **Awulachew, Seleshi Bekele.** 2004. Irrigation and water harvesting roles in Ethiopian agricultural development: Assessment of existing situation . Paper presented at Workshop, Conservation Agriculture and Rain Water Harvesting, 19-20, November, 2004. 12p.
428. **Awulachew, Seleshi Bekele; Mati, Bancy; Penning de Vries, Frits.** 2004. Small scale technologies for water management for food security in sub-Saharan Africa. (Power Point) Presentation at Technology Exhibition, 28-29 June 2004, ILRI-Campus, Addis Ababa. 41p.
429. **Awulachew, Seleshi Bekele.** 2004. Status and opportunities for promoting irrigation and rainwater harvesting for food security in Ethiopia. Resource paper for Ethiopian Development Research Institute. (Power Point) Presentation, 19th October 2004. 33p
430. **Bonté, P. ; Huon, S. ; Valentin, Christian ; Telès, V. ; de Rouw, Anneke ; Podwojewski, P.** 2004. Monitoring soil erosion with <sup>137</sup>Cs inventory measurements on small-cultivated catchments with steep slopes in SE Asia, Laos, Vietnam, Thailand.. Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. 14-17 December 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.
431. **Bouma, Jetske.** 2004. Constraints and incentives for local watershed management in India's semi-arid regions. Paper presented at the IWMI-TATA annual partners research workshop 'Water and Welfare: critical issues in India's water future', 17-19 February 2004, Institute of Rural Management, Anand, India.
432. **Bouma, Jetske; Bulte, Erwin; van Soest, Dan.** 2004. Local participation in soil and water conservation in India's semi-arid watersheds. Paper presented at the Follow Up Workshop of the First School of Ecological Economics, 22-26 March 2004, ICTP/Beijer Institute of Ecological Economics, Trieste, Italy.
433. **Bouma, Jetske; van Soest, Daan; Bulte, Erwin.** Participatory watershed development in India - A sustainable approach. Paper presented at the Tenth Biennial Conference of The International Association of the Study of Common Property (IASCP), 9-12 August 2004, Oaxaca, Mexico.
434. **Bouma, Jetske; Samad, Madar.** 2004. Effective governance of river basins: Directions for future research. Paper presented at conference 'Good water governance for people and nature' organized by the International Water Law Research Institute (IWLRI) and the American Water Resources Association (AWRA), August 29-September 2 2004, in Dundee, Scotland.
435. **Bricquet, J. P. ; Janeau, J.L., Boonsaner, A.,** 2004. Erosion and land use changes in Northern Thailand: Results of a four years study on a small watershed. Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. 14-17 December 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.
436. **Chanthavongsa, A.; Valentin, Christian; de Rouw Annette; Bricquet, J.P.; Chaplot, V. ; Silvera, N.; Thiébaux, J.P.; Lestrelin, G.; Soullieuth, B.; Phachomphon, K.; Xayyakouman, K.; Xayyathip, K.; Phapmisay, P.** 2004. The Houay Pano Catchment, Ban Lak Sip, Lao PDR. Oral presentation. Second International

Symposium, Land use change and soil and water processes in tropical mountain environments. December 14-17, 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.

437. **Cofie, Olufunke ; Barry, Boubacar ; Bossio, Deborah.** 2004. Human resources as a driver of bright spots: The case of rainwater harvesting in West Africa *Paper presented at the NEPAD/IGAD Regional Conference "Agricultural Successes in the Greater Horn of Africa," Nairobi, Kenya, 22-25 November 2004. Conference paper no.19. 23p.*

438. **Cofie, Olufunke.** 2004. Potential for recycling liquid and solid waste in urban agriculture: case of Ghana. Abstract and presentation at the IWMI/SANDEC/KMA/KNUST Workshop on Co-composting of Solid and Liquid Waste for Agriculture, January 2004, Kumasi, Ghana.

439. **Cofie, Olufunke; Sarkode, J.; Danso, George.** 2004. Agronomic and socio-economic aspects of co-composting. Abstract and Presentation at the IWMI/SANDEC/KMA/KNUST Workshop on Co-composting of Solid and Liquid Waste for Agriculture January 2004, Kumasi, Ghana.

440.

441. **Cour, J. G. ; Kadigi, R. M. ; Lankford, B. A. ; Yawson, Daniel K.** 2004. A decision-aid for resolving environment-agriculture water conflicts in the Great Ruaha River Basin, Tanzania. Paper presented at the *First SANTREN Conference and Exhibition on "Challenges in Environmental Protection and Sustainable Use of Natural Resources, Gaborone, Botswana, 19-21 May 2004. 8p.*

442. **Danso, George ; Cofie, Olufunke ; Annang, L. ; Obuobie, Emmanuel ; Keraita, Bernard.** 2004. Gender and urban agriculture: The case of Accra, Ghana *Paper presented at the RUAF/IWMI/Urban Harvest Woman Feeding Cities Workshop on Gender Mainstreaming in Urban Food Production and Food Security, Accra, Ghana, 20-23 September 2004. 10p.*

443. **de Rouw, Anneke; Soullilad, B. ; Kadsachac, K. ; Gay, I. ; Kosakan, C.** 2004. The testing of three alternative cropping systems in Houay Pano, 2004. Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. 14-17 December 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.

444. **de Rouw, Anneke; Soullilad, B.; Dupin, B.; Jullien, F.; Phoumitsa, K.** 2004. History of land use in Houay Pano catchment. Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. 14-17 December 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.

445. **Gangodagamage, Chandana.; Biradar, C.M.; Islam, Aminul; Thenkabail, Prasad Srinivas.** 2004. Shuttle Radar Topography Mission (SRTM) data for Sri Lanka: Potential contributions in river basin research. Paper presented at the First national symposium on Geoinformatics 2004, 30 July, Peradeniya, Sri Lanka.

446. **Gichuki, Francis.** 2004 "Opportunities and Constraints for enhancing smallholder crop production" presented at the CropLife International Conference held in Brussels

447. **Gichuki, Francis.** 2004. Assessing hydrologic impacts of enhancing agricultural production: Application of SWAT model” presented at the IWMI training workshop on Remote Sensing and GIS.
448. **Gichuki, Francis.** 2004 “Agrodiversity and Food Security: The Crucial Role of Water”, presented at the Global Biodiversity Forum held in Dar Es Salaam, Tanzania
449. **Gichuki, Francis.** 2004. “Enhancing water productivity at different scales: Challenges and opportunities” presented at the Rockefeller Foundation Workshop on Enhancing Soil Productivity in Africa
450. **Gichuki, Francis.** 2004. Low flow hydrology and off-season irrigation: Challenges and opportunities of managing dry season river flows” presented during the IWMI-WB hub training held in December 2004 in South Africa
451. **Giordano, Mark; Awulachew, Seleshi Bekele.** 2004. Agricultural groundwater use in Sub-Saharan Africa: Analysis and considerations for Ethiopia. Paper presented at International Ground Water Conference, Ababa, Ethiopia, 25-27, May 2004. 17p.
452. **Hoanh, Chu T.** 2004. Mekong river delta: Effective water control for solving conflicts among agriculture, fisheries, aquaculture in coastal zones *Summary sheet of good practices for E-Forum of the FAO/Netherlands Conference on Water for Food and Ecosystems: Make it happen.* 3p.
453. **Hoanh, Chu T ; Tuong, T. P. ; Khiem, N. T. ; Nhan, N. V.** 2004. Management of conflicts in rice-fishery production in the coastal zone of the Mekong River Delta and impacts on rural livelihood *Paper presented at the Mekong Rice Conference, 15-17 October 2004, Ho Chi Min City, Vietnam.* 15p.
454. **Huon, S.; Bonté, P.; Girardin, P.; Valentin, Christian,** 2004. Monitoring rainwater and soil particles contribution to stream flow with <sup>7</sup>Be and <sup>210</sup>Pb activity measurements during flood events on the Houay Pano catchment (Lao PDR). Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. 14-17 December, 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.
455. **Hussain, Intizar.** 2004. Have low irrigation service charges disadvantaged the poor? Paper presented at the Second ADB Water Week, Manila, Philippines, 26-30 January 2004. 29p.
456. **Hussain, Intizar.** 2004. Assessing impacts of irrigation on poverty: approaches: methods, Case studies and lessons. Paper presented at the Workshop on Impact of Irrigation on Poverty and Environment organized by International Water Management Institute (IWMI) and Partners, April 26-30, 2004, Addis Ababa, Ethiopia. 9p.
457. **Kaleem Ullah, M.; Ahmed, S.; Asghar, M. N.; Shakoor, A.** 2004. Promoting conjunctive water use with pressurized irrigation systems: Water demand management through intermittent irrigation. Paper presented at the International Conference on Water and Wastewater Management for Developing Countries (WAMDEC), Victoria Falls, Zimbabwe, 28-30 July 2004.
458. **Kaleem Ullah, M.; Ahmed, S.; Asghar, M. N.; Shakoor, A.** 2004. Sustaining crop production in saline groundwater areas: A case study from Pakistani Punjab. Paper

presented at the International Conference on Water and Wastewater Management for Developing Countries (WAMDEC), Victoria Falls, Zimbabwe, 28-30 July 2004.

459. **Khan, Abdul Hakeem; Munir, Sarfraz; Mahmood, Shahzad; Turrall, Hugh.** 2004. Transition from conventional to modern water management in Pakistan. Paper presented at the International Forum on Food Security Under Water Scarcity in the Middle East: Problems and Solutions. Landau Network-Centro Volta, Water Security Division. Como, Italy, 24-28 November 2004. 12p.

460. **Klinkenberg, Eveline.** 2004. Water, health and environment in irrigated agriculture. Presentation at the Forum on Irrigation Development and Management in Ghana: The Way Forward Workshop, 21-23 January 2004, Nungua, Ghana.

461. **Klinkenberg, Eveline; McCall, P.J.; Hastings, I.M. Wilson, M.D., Amerasinghe, Felix.P.; Donnelly, M.J.** 2004. High malaria prevalence and irrigated urban agriculture in Accra, Ghana. Abstract of presentation given at 53rd annual meeting of the American Society of Tropical Medicine and Hygiene, November 7-11, Miami Beach Florida. p.9.

462. **Kumar, M. Dinesh; Shah, Tushar; Bhatt, Maulik; Kapadia, Madhu.** 2004: Dripping water to a water guzzler: Techno economic evaluation of drip irrigation of alfalfa in North Gujarat, India. Paper presented at the 2<sup>nd</sup> Annual Conference of the Asia Pacific Association of Hydrology and Water Resources (APHW 2004), Singapore, 5-9 July, 2004. 8p.

463. **Kurian Mathew.** 2004. Do participatory watershed management projects guarantee sufficient attention to pro-poor concerns: An Indian case study. Paper presented at Workshop in Political Theory and Policy Analysis Indiana University, Bloomington, USA, June 2-6, 2004.

464. **Kurian Mathew.** 2004. Institutions for integrated water resources management: A developing country perspective. Paper presented as Panel Chair, University of New Brunswick, Commission on Folk Law and Legal Pluralism Fredericton, Canada, 26-29 August

465. **Kurian, Mathew; Lestrelin, G.** 2004. Market integration, natural resource degradation and poverty: Perspectives from two upland watersheds in Thailand and Lao PDR. Oral presentation at International Conference on Innovative Practices for Sustainable Sloping Lands and Watershed Management, Department of Agricultural Extension, Royal Thai Government, Chiang Mai, Thailand, 5-9, September 2004. DOAE, IWMI, AFD, SDC.

466. **Lankford, B. ; Sokile, C. ; Yawson, Daniel ; Léville, Herve ; Sally, Hilmy.** 2004. The river basin game: A role-playing board game for initiating discussions on visions and strategies of water allocation Paper presented at CIRAD Workshop on Water Resource Management for Local Development: Governance, Institutions and Policies, Aventura Loskop Dam, South Africa, 8-1 November 2004. 23p.

467. **Lempérière, Philippe; Van der Schans, Martin.** 2004. Improving small-scale irrigation performance in Ethiopia through on the job training of extension officers:

Experience of the APPIA project [APPIA Amélioration des Performances des Périmètres Irrigués en Afrique Improving Irrigation Performance in Africa]. Paper presented at the first National Water Forum in Ethiopia organized by the Ministry of Water Resource, September 2004. 24p.

468. **Lestrelin, G.; Giordano, M.; Keohavong, B.** 2004. When conservation leads to land degradation: Lessons from Ban Lak Sip, Laos. Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. 14-17 December 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.

469. **Lorenzen, K.; Nguyen-Khoa, S.; Garaway, C.; Chamsingh, B.; Siebert, D.** 2004. Impacts of irrigation on fisheries in rainfed rice farming landscapes. Paper presented at the conference: 7th Asian Fisheries Forum 2004 (7AFF2004) held in Penang, Malaysia, from the 30<sup>th</sup> November to 4<sup>th</sup> of December 2004

470. **Makin, Ian W.; Parks, Y. P.; Arriens, Wouter Lincklaen.** 2004 Supporting the development of effective and efficient River Basin Organizations in Asia. A discussion of the application of organizational benchmarking approaches. Paper presented at NARBO Workshop Jahatilihur October 2004. (Revised for subsequent workshop November 2004)

471. **Mattah, Memuna M. ; Cofie, Olufunke O.** 2004. Effect of farming practices on the performance of rice (*oryza sativa*) in selected farms of Ashaiman Irrigation Project *Paper presented at the 2nd WASAE International Conference on Agricultural Engineering, KNUST, 20-24 Sept 2004. 10p.*

472. **McCornick, Peter; Awulachew, Seleshi Bekele.** 2004. Water use rights in Ethiopia. Paper presented at MOWR Water Forum, 25-27 October 2004. 9p.

473. **Molle, Francois.** 2004. Water reuse and third-party-impact in a closing basin: The case of the Zayandeh Rud, Iran. Paper prepared for the World Water Week, SIWI, Stockholm, August 2004. 3p

474. **Molle, Francois; Turrall, Hugh.** 2004. Demand management in a basin perspective: Is the potential for water saving overestimated? Paper prepared for the International Water Demand Management Conference, Dead Sea, Jordan, June 2004. 13p.

475. **Morardet, Sylvie ; Koukou-Tchamba, Ate.** 2004. Assessing trade-offs between agricultural production and wetlands preservation in Limpopo River Basin: A participatory framework Communication to the International Workshop on Water Resource Management for Local Development: Governance, Institutions and Policies, Cirad, Department of Water Affairs and Forestry, Water Research Commission, French Embassy in South Africa, Loskop Dam, 8-11 November 2004. 27p.

476. **Namara, Regassa.** 2004. Assessing the adoption of irrigation technologies by small farmers: Methodological issues and some empirical results. Paper presented at the inception workshop of the project "The Impact of Irrigation Development on Rural Poverty and the Environment, 26-30 April, 2004 in Addis

Ababa Ethiopia.

477. **Nguyen-Khoa, S.; Smith, L.; Lorenzen, K. .2004** A composite approach to the assessment of irrigation impacts on fisheries: Adaptive, Participatory and integrated Assessment (APIA). Synthesis paper presented under Theme 1: "Fostering Implementation: Know-how for Action"

478. **Nguyen-Khoa, Sophie; Smith, L.; Lorenzen, K. 2004.** .New perspectives on the impacts of irrigation on fisheries. Synthesis paper presented under Theme 2: "A "new economy' of Water for Food and Ecosystems"

479. **Olaleye, A. O. ; Osiname, O. A. ; Cofie, Olufunke. 2004.** Soil and water management for rice production in Nigeria Paper presented at the West Africa International Conference on Hunger Without Frontiers, West African Society for Agricultural Engineering (WASAE 2004), Kumasi, *Ghana, 20-24 September 2004.* 11p.

480. **Orange, Didier.; Hoareau, J.; Ortiz, C.; Pham Van, R.; Perrin, C., 2004.** Rainfall-runoff modelling on a small agricultural watershed in North Vietnam. Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. 14-17 December 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.

481. **Pant, Dhruva; Adhikari, K. .2004.** Food security, livelihood and environment: Resource management dynamics. Paper /poster presented at the 14th Stockholm Water Symposium, 16-20 August 2004, Stockholm, Sweden. 4p.

482. **Phansalkar, S.J. ; Verma, Shilp. 2004.** Improved Water control as a strategy for enhancing tribal livelihoods. Paper presented at the 'National Seminar on Forests, Water and People' (FORWAP 2004), Belgaum, Karnataka, 29-30 July.

483. **Phansalkar, S.J.; Verma, Shilp. 2004.** Improved water control as a strategy for enhancing tribal livelihoods: Research results from ITP-SRTT's Central India Initiative. Paper presented at the CInI Dissemination Workshop, Ranchi, Jharkhand, 13 March.

484. **Phansalkar, S.J. ; Verma, Shilp. 2004.** Mainstreaming the margins: Water control strategies for enhancing tribal livelihoods in watersheds. Paper presented at the IWMI-ICAR-ICRISAT workshop, 'Watershed Management Challenges: Improved Productivity, Resources and Livelihoods', National Bureau of Plant Genetic Resources, New Delhi, 3-4 November.

485. **Phansalkar, S.J. ; Verma, Shilp. 2004.** Water control and tribal livelihoods in Orissa. Paper presented at the CInI Dissemination Workshop, Bhubaneshwar, Orissa, 22 June.

486. **Podwojewski, P.; Janeau, J.L.; Boosaner, A. ; Chanthavongsa, A.; Chaplot, V.; Toan, T.D.; Valentin, Christian., 2004.** Interactions between soil characters and soil erosion processes in Northern Thailand, Laos and Vietnam. Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. 14-17 December 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.

487. **Podwojewski, P.; Toan, T. D.; Agus, F.; Alamban, R.; Boonsaer, A.; de Rouw, Anneke**, 2004. Effects of innovative agriculture systems on soil protection and erosion at a water catchment level in Indonesia, Laos, the Philippines, Thailand and Vietnam. Oral presentation. International conference on Innovative practices for sustainable sloping lands and watershed development. 5-9 September 2004, Chiang Mai, Thailand, DOAE, IWMI, AFD, SDC.
488. **Prasad, Krishna. C.; Strzepek, K. M.** 2004. Assessing socioeconomic implications of water management alternatives: Findings from application of multi criteria decision analysis in Olifants River Basin of South Africa. Abstract of a paper presented at the Workshop on Modeling and Control for Participatory Planning and Management of Water Systems, Venice, Italy, 29 September – 1 October 2004. 2p.
489. **Puskur, Ranjitha; Thorpe, William.** 2004. Crop and non-crop productivity gains: Livestock in water scarce watersheds. Paper presented at the ICAR-IWMI International Workshop on “Watershed Management Challenges: Improved Productivity, Resources and Livelihoods”, New Delhi, India, 3-4 November 2004.
490. **Qureshi, Asad Sarwar.** 2004. Improving water productivity at different scales for rice-wheat cropping systems. Paper presented at the IWMI sponsored Project-End Workshop of the Rice-Wheat Consortium Project, 29 April, 2004 Lahore, Pakistan.
491. **Qureshi, Asad Sarwar.** 2004. Protecting food and livelihoods security through groundwater management: Challenges and opportunities. Paper presented at the International Conference on “Community Based Solutions for Integrated Water Resources Management” organized by United Nations Development Program, Islamabad, Pakistan. 16-17 February 2004.
492. **Qureshi, Asad Sarwar ; Akhtar, Mujeeb .** 2004. Energy-Irrigation nexus: Impact of energy pricing on groundwater management in Pakistan. Paper prepared for the third South Asia Water Forum, Dhaka, Bangladesh, 13-15 July 2004. 13p.
493. **Qureshi, Asad Sarwar ; Akhtar, Mujeeb** 2004. The groundwater management in Pakistan: Issues and the way forward. National Symposium on ‘World Water Day’, Pakistan, University of Agriculture, Faisalabad, Pakistan. pp.14-26.
494. **Qureshi, Asad Sarwar; Smakhtin, Vladimir U.** 2004. Extracting wetness from dryness: Water harvesting against droughts in Pakistan. A contribution for the special session on “Drought mitigation” at the 55th ICID Conference held in Moscow, September 5-12, 2004.
495. **Ribolzi, O.; Bariac, T.; Bresson, L.M.; Dupin, B.; Kaewoudone, K.; Richard, P.; Thiébaux, J.P.; Silvera, N.; Soullilab, B.; Valentin, Christian; Vandervaere, J.P.** 2004. Why does infiltration rate increase with slope gradient? Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. December 14-17, 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.
496. **Ribolzi, O.; Vandervaere, J.-P.; Szeftel, P.; Bariac, T.; Benedetti, M.; Lapetite, J.-M.; Miscioscia, J.-M.; Richard, P.** 2004. Chemical and isotopic transfers

from soil solution to surface runoff – Effect of raindrop impact. Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. 14-17 December 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.

497. **Rijsberman, Frank.** 2004. Soft path water technologies. Presentation at the Seckler Symposium, National Academy of Sciences, Irvine, CA, 9-10 October 2004.

498. **Rijsberman, Frank.** 2004. Balancing water uses. Presentation at the 12<sup>th</sup> meeting of the UN Commission on Sustainable Development (CSD12), New York, 12 April 2004.

499. **Rijsberman, Frank.** 2004. Demand management and water conservation. Presentation at the 12<sup>th</sup> meeting of the UN Commission on Sustainable Development (CSD12), New York, 12 April 2004.

500. **Sakthivadivel, R.; Talati, Jayesh.** 2004. Sea water intrusion in Mangrol Coastal Aquifers: Possible technical and institutional measures. Paper presented at 7th National Seminar on “Advances in Coastal Agriculture and Value Addition from National Perspectives”, CPCRI, Kasaragod, Kerala, India, 21-24 January 2004.

501. **Sakthivadivel, R. ;Talati, Jayesh.** 2004. Sea water intrusion in Mangrol Coastal Aquifers: Possible technical and institutional measures. Paper presented at state level seminar on “Environmental problems of Saurashtra and Kachchh: Challenges and solutions”, Shree Manibhai Virani and Smt. Navalben Virani Science College and Shree Yogiji Maharaj Arts and Commerce College, Rajkot, Gujarat, India, 01 February 2004.

502. **Shah, Tushar.** 2004. Groundwater and human development: Challenges and opportunities in livelihoods and environment. Paper presented at 14th Stockholm Water Symposium in Stockholm, August 16-20. 8p.

503. **Shakoor, A.; Asghar, M. N.; Ahmed, S.; Kaleem Ullah, M.** 2004. Application of remote sensing techniques for efficient use of scarce water resources. Paper Presented in the International Conference on Water and Wastewater Management for Developing Countries (WAMDEC), Victoria Falls, Zimbabwe, 28-30 July 2004.

504. **Sharma, Bharat R.; Scott, Christopher A.; Shah, Tushar.** 2004. Ground water – Energy nexus: Implications for sustainable resource use. Paper presented at Expert Meet on “Sustainable Use of Groundwater in North-West India,” Centre for Advancement of Sustainable Agriculture (CASA) at Indian National Science Academy, New Delhi, India, 13 April, 2004. 14p.

505. **Silvera, N.; Planchon, O.; Huang, C-H.** 2004. Experimental comparison between surface velocity and mean velocity in shallow water flows, 2004. Chemical and isotopic transfers from soil solution to surface runoff – Effect of raindrop impact. Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. 14-17 December 2004, Luang Phrabang, Lao PDR, IRD, NAFRI, IWMI.

506. **Smakhtin, Vladimir** 2004. Drought assessment and mitigation in South Asia: Project overview, International workshop on Economic Cost of Droughts to Farmers, IRRI, Los Banos, Phillipines, December 2004.
507. **Smakhtin, Vladimir U.** 2004. Droughts: What to know and what to do - Presentation at the International Conference of US Health and Environment Officers, Delhi, India, March 2004. (Power Point).
508. **Talati, Jayesh; Liebrand, Janwillem.** 2004. Evolving irrigation management institutions in Sardar Sarovar Project. Paper presented at the third international seminar on: "Farmer Managed Irrigation Systems and Governance Alternatives" organized by Farmer Managed Irrigation Systems Promotion Trust, 9-10 September 2004, Kathmandu, Nepal
509. **Tharme, Rebecca.** 2004. The Mediterranean Wetlands Initiative (MedWet). Report on Regional Workshop on Agriculture, Water and Wetlands in the South and East Mediterranean, Tunis, 10-11 January 2004, Tunisia. 13p.
510. **Tharme, Rebecca.** 2004. Expansion without extinction: How can biodiversity be preserved in irrigation systems? Walawe Left Bank Irrigation Upgrading & Extension Project. Third Environmental Steering Committee Meeting. Mahaweli Authority of Sri Lanka, Colombo, 28 January 2004.
511. **Tharme, Rebecca.** 2004. Planning meeting for Environmental Flow Assessment of the Huong River, 25-27 March, 2004, Hue, Viet Nam. Presentation (Power Point)
512. **Tharme, Rebecca.** 2004. Ramsar Convention Scientific and Technical Review Panel Mid-term workshops, 23 July 2004. Wageningen, The Netherlands. Presentation (Power Point)
513. **Tharme, Rebecca.** 2004. Rapid Environmental Flow Assessment of the Huong River. Workshop, Hanoi, Viet Nam, 13-14 December 2004. Presentation (Power Point)
514. **Tharme, Rebecca; Biradar, Chandrashekhar. M.; Islam, Aminul; Jinapala, Kiribandage; Kekulandala, B.; Somaratne P. ; Thenkabail, Prasad Srinivas.** 2004. Biodiversity conservation and livelihoods: Impact of a Sri Lankan irrigation system. Ecoagriculture monitoring at a landscape scale. ECOAGRICULTURE Conference, Nairobi, Kenya: World Agroforestry Centre.
515. **Tharme, Rebecca; Jinapala, Kiribandage.** 2004. Integration of biodiversity conservation and irrigation development. Presented at joint IUCN-IWMI Awareness Programme for Environmental Journalists on integrating Biodiversity concepts with Irrigation Development Initiatives. 19<sup>th</sup> –21<sup>st</sup> March 2004, Viharamahadevi Center, Mirijjawila, Hambantota, Sri Lanka.
516. **Tharme, Rebecca; Jinapala, Kiribandage.** 2004. Expansion without extinction. Paper presented at Ruhuna Benchmark Basin Stakeholder Network Meeting. Peacock Beach Hotel, Hambantota, 20 May 2004, Sri Lanka.
517. **Tharme, Rebecca; Molden, David.** 2004. Guidelines for wetlands affected by agriculture: A draft framework. Presented at the Ramsar Convention Scientific and Technical Review Panel Mid-term workshops, 23 July 2004. Wageningen, The Netherlands. 6p.

518. **Tharme, Rebecca; Smakhtin, Vladimir.** 2004. Process for Rapid Environmental Flow Assessment of the Huong River, Viet Nam. Presented at IUCN Rapid Environmental Flow Assessment Workshop, Hanoi, Viet Nam, 13-14 December 2004.
519. **Thenkabail, Prasad S.; Biradar, Chandrashekhar. M.; Islam, Aminul.** 2004. International Water Management Institute's Data Storehouse Pathway (IWMIDSP): Gateway to Remote Sensing and GIS data on River Basins, Nations, Regions, and the World. Proceedings of the Water Resources Research in Sri Lanka. Paper presented at the Water Professionals' Day Symposium, Sri Lanka. Held at University of Peradeniya, Sri Lanka, on 1 October 2004.
520. **Thenkabail, Prasad Srinivas; Biradar, Chandrashekhar M.; Gangodagamage, Chandana; Islam, Aminul; Schull, M.; Gamage, Nilantha; Turral, Hugh; Zomer, Robert; Biggs, Trent; Scott, Christopher; Mobin, Ahmad.; Parthasarathy, G.; Murali Krishna.** 2004. RS/GIS Training Materials for Awareness: Version 1.0, Observing River Basins from Space: Why is it Important for IWMI. Paper presented at IWMI - A Remote Sensing and GIS (RS/GIS) Workshop for IWMI by IWMI, June 28th, 2004, IWMI Headquarters Sri Lanka.
521. **Thothong, W.; Huon, S.; Ten-Hage, L.; Janeau, J.L.; Boonsaner, A.** 2004. Monitoring off-site effects of soil erosion on water quality in the Mae Thang reservoir (Northern Thailand). Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. 14-17 December 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.
522. **Thothong, W.; Huon, S.; Janeau, J-L.; Boonsaner, A.** 2004. Monitoring off-site effects of soil erosion in a water reservoir. (the Mae Thang reservoir, Phrae province, North Thailand). Oral presentation. International conference on Innovative practices for sustainable sloping lands and watershed development. 5-9 September 2004, Chiang Mai, Thailand, DOAE, IWMI, AFD, SDC.
523. **Toan, T. D.; Phoung, N. D.; Rinh, P.V.; Orange, D.; Podwojewski, P.; Thiet, N.V.** 2004. Impact of land use change on soil erosion, water resource and crop productivity in Dong Cao catchment, Northern of Vietnam. Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. 14-17 December 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.
524. **Ul-Hassan, Mehmood.** 2004. Institutional reforms for agricultural water management. Paper presented at the IWMI-AREO Workshop on Iran Collaborative Research Program, Tehran. September, 2004. 4p.
525. **Ul-Hassan, Mehmood.** 2004. Constraint to IWRM implementation with special reference to Water Users Association. Paper presented at the scientific and practical seminar titled "Deepening reforms in and perfecting of legal base of water management in Uzbekistan", Tashkent on 25 November 2004, organized by the Agriculture and Water Committee of Oliy Majlis (Parliament) of Uzbekistan. 9p.
526. **Upadhyay, Bhawana.** 2004. Gender roles in precision irrigation in West Nepal: A study of economics of drip technology. Paper presented at the 7th International Conference on Precision Agriculture, July 25-28, 2004. Minneapolis,

MN, USA.

527. **Upadhyay, Bhawana.** 2004. Socio-economic and gender aspects of agricultural technology for smallholders. Paper presented at Agricongress 2004, October 4-7, 2004. Selangor, Malaysia.

528. **Valentin, Christian,** 2004. Catchment approach to managing soil erosion in Asia. Oral presentation. International conference on Innovative practices for sustainable sloping lands and watershed development. 5-9 September 2004, Chiang Mai, Thailand, DOAE, IWMI, AFD, SDC.

529. **Valentin, Christian ; Janeau, J.-L.,** 2004. Rehabilitation of a degraded catchment in Northeastern Thailand. Oral presentation. National workshop, 23-29 September 2004, Khon Kaen, Thailand, LDD, IWMI, IRD.

530. **Valentin, Christian.; Bouahom, B.; de Rouw, Anneke; Chaplot, V.; Ribolzi, O.; Dupin, B.** 2004. Land use change and soil erosion processes in mountain environments: a multidisciplinary and multi-scale issue. Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. 14-17 December 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.

531. **Valentin, Christian ; Janeau, J.L. ; Chaplot, V. ; Xayyathip, K. ; Bayer, A. ; Frère, B. ; Tessier, J.** 2004. Soil crusting and infiltration on steep slopes in Laos and Thailand. Oral presentation. Second International Symposium, Land use change and soil and water processes in tropical mountain environments. 14-17 December 2004, Luang Phrabang, Lao Pdr, IRD, NAFRI, IWMI.

532. **van der Hoek, Wim.** 2004. The use of untreated wastewater in agriculture: Strategies for health risk management. Background paper for RAUF-IWMI e-mail conference on Use of Untreated Urban Wastewater in Agriculture in Low Income Countries. 7p.

533. **van Koppen, Barbara; Hussain, Intizar.** 2004. Irrigation, gender and poverty: Overview of issues and options. Paper presented at IWMI's Annual Research Meeting, IWMI Headquarters, Battaramulla, Sri Lanka, 8-9 November 2004. 15p.

534. **Verma, Shilp; Phansalkar, S.J.** 2004. India Inc. 2025/2050: The emerging agenda for 'Water Future' research. Paper presented at the National Conference on Climate Change and its Impact on Water Resources in India. Madurai Kamraj University, Tamil Nadu, 15-17 December.

535. **Verma, Shilp; Dasgupta, A.; Singh, S.** 2004. Mapping the Tribal Agrarian Economy: Evidence from farmer surveys in Madhya Pradesh, Chattisgarh, Jharkhand and Orissa. Paper presented at the IWMI-TATA Annual Partners' Meet 'Water and Welfare: Critical Issues in India's Water Future', 17-19 February, Institute of Rural Management, Anand.

536. **Verma, Shilp; Ghosh, S. ; Seshadri, S.** 2004. Basin Level Simulation Modeling as a Decision Support System for CInI. Paper presented at the IWMI-TATA Annual Partners' Meet 'Water and Welfare: Critical Issues in India's Water Future', 17-19 February, Institute of Rural Management, Anand.

537. **Verma, Shilp; Nair, P. and Sharma, S.** (2004). Mapping the Tribal Agrarian Economy: Evidence from farmer surveys in Rajasthan, Gujarat and Maharashtra. Paper presented at the IWMI-TATA Annual Partners' Meet 'Water and Welfare: Critical Issues in India's *Water Future*', 17-19 February, Institute of Rural Management, Anand.

538. **Werfring, Alex; Lempérière, Philippe; Boelee, Eline** 2004. Typology of irrigation in Ethiopia. Paper presented at Inception workshop on IWMI-BOKU-Siebersdorf-EARO-Arbaminch University collaborative study on the impact of irrigation development on poverty and the environment, 26-30 April 2004, Addis Ababa.