

IWMI Research Reports

1. **Elkaduwa, W. K. B.; Sakthivadivel, R. 1999.** Use of historical data as a decision support tool in watershed management: A case study of the Upper Nilwala Basin in Sri Lanka. Colombo, Sri Lanka: IWMI. vi, 31p. (IIMI research report 26)
2. **Bastiaanssen, W. G. M.; Molden, D. J.; Thiruvengadachari, S.; Smit, A. A. M. F. R.; Mutuwatte, L.; Jayasinghe, G. 1999.** Remote sensing and hydrologic models for performance assessment in Sirsa Irrigation Circle, India. Colombo, Sri Lanka: IWMI. v, 29p. (IWMI research report 27)
3. **Sakthivadivel, R.; Thiruvengadachari, S.; Amerasinghe, U.; Bastiaanssen, W. G. M.; Molden, D. 1999.** Performance evaluation of the Bhakra Irrigation System, India, using remote sensing and GIS techniques. Colombo, Sri Lanka: IWMI. v, 22p. (IIMI research report 28)
4. **Renault, D.; Godaliyadda, G. G. A. 1999.** Generic typology for irrigation systems operation. Colombo, Sri Lanka: IWMI. v, 22p. (IIMI research report 29)
5. **Prathapar, S. A.; Qureshi, A. S. 1999.** Mechanically reclaiming abandoned saline soils: A numerical evaluation. Colombo, Sri Lanka: IWMI. v, 20p. (IIMI research report 30)
6. **Bastidas, E. P. 1999.** Gender issues and women's participation in irrigated agriculture: The case of two private irrigation canals in Carchi, Ecuador. Colombo, Sri Lanka: IWMI. v, 21p. (IWMI research report 31)
7. **Amarasinghe, U. A.; Mutuwatta, L.; Sakthivadivel, R. 1999.** Water scarcity variations within a country: A case study of Sri Lanka. Colombo, Sri Lanka: IWMI. vi, 28p. (IWMI research report 32)
8. **Sakthivadivel, R.; Thiruvengadachari, S.; Amarasinghe, U. A. 1999.** Modernization using the structured system design of the Bhadra Reservoir Project, India: An intervention analysis. Colombo, Sri Lanka: IWMI. v, 24p. (IWMI research report 33)
9. **Samad, M.; Vermillion, D. 1999.** Assessment of participatory management of irrigation schemes in Sri Lanka: Partial reforms, partial benefits. Colombo, Sri Lanka: IWMI. v, 31p. (IWMI research report 34)
10. **Renault, D.; Makin, I. W. 1998; 1999.** Modernizing irrigation operations: Spatially differentiated resource allocations. Colombo, Sri Lanka. 21p. (IWMI research report 35)
11. **Bandaragoda, D. J. 1999.** Institutional change and shared management of water resources in large canal systems: Results of an action research program in Pakistan. Colombo, Sri Lanka: IWMI. v, 33p. (IWMI research report 36)

IWMI SWIM Papers

1. **McKinney, D. C.; Cai, X.; Rosegrant, M. W.; Ringler, C.; Scott, C. A. 1999.** Modeling water resources management at the basin level: Review and future directions. Colombo, Sri Lanka: IWMI. ix, 59p. (SWIM paper 6)
2. **Oweis, T.; Hachum, A.; Kijne, J. 1999.** Water harvesting and supplemental irrigation for improved water use efficiency in dry areas. Colombo, Sri Lanka: IWMI. vi, 41p. (SWIM paper 7)
3. **Bakker, M.; Barker, R.; Meinzen-Dick, R.; Konradsen, F. (Eds.) 1999.** Multiple uses of water in irrigated areas: A case study from Sri Lanka. Colombo, Sri Lanka: IIMI. vii, 48p. (SWIM paper 8)

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1. **Sotomayor, J.; Kloezen, W. H.; Garcés-Restrepo, C.; Bastidas, E. 1999.** Manejo del agua en las acequias privadas Garrapatal y el Tambo en la provincia del Carchi, Ecuador. Mexico, D.F., Mexico: IWMI. xv, 60p. (IWMI, Serie Latinoamericana, no.4)
2. **Bos, M. G.; Chambouleyron, J. L. (Eds.) 1999.** Parametros de desempeño de la agricultura de riego de Mendoza, Argentina. Mexico, D.F., Mexico: IIMI. xix, 111p. (IWMI, serie Latinoamericana, no.5)
3. **Levine, G. 1999.** Entendiendo el Comportamiento del Riego: La Disponibilidad Relativa del Agua como Variable Explicativa. Mexico, D.F., Mexico: IWMI. xv, 66p. (IWMI serie Latinoamericana no.6)
4. **Garcés-Restrepo, C.; Guerra-Tovar, J. 1999.** Consideraciones sobre impacto ambiental por efecto de las obras de regadío en el distrito de riego Chancay-Lambayque, Per- México, D.F., Mexico: IWMI. Mexico Program. xviii, 66p. (IWMI, serie Latinoamericana, no.7)
5. **Monsalvo-Velázquez, G. 1999.** Sostenibilidad institucional de las asociaciones de riego en Mexico. Mexico, D.F., Mexico: IWMI. Mexico Program. xvi, 85p. (IWMI, serie Latinoamericana, no.8)
6. **López, F. J.; Scott, C. A. 1999.** Simulación de alternativas del manejo del agua en la cuenca del Rio San Juan, México. México, D.F., Mexico: IWMI. Mexico Program. xv, 53p. (IWMI, serie Latinoamericana, no.9)
7. **Hernandez, M. F.; Alhers, R. 1999.** Naturaleza y extension del mercado del agua en el D.R.017 de la Comarca Lagunera, Mexico. México, D.F., Mexico: IWMI. Mexico Program. xv, 63p. (IWMI, serie Latinoamericana, no.10)
8. **Levine, G.; Garcés-Restrepo, C. 1999.** El desempeño de los sistemas de riego y sus implicaciones para la agricultura Mexicana. [Irrigation systems performance and its implications for Mexico's agriculture] Mexico City, DF, Mexico: IIMI. Mexico Program. xvii, 37p. (IWMI Serie Latinoamericana no.11)

IWMI Pakistan Reports

1. **Aslam, M.; Hamid, A.; Hussain, A.; Tabassam, M. 1999.** Soil salinity-sodicity and land use suitability in the Fordwah Eastern Sadiqia (South) irrigated area. Lahore, Pakistan: IWMI. Pakistan National Programme. viii, 50p. (IIMI-Pakistan research report no.R-81)
2. **Alberts, J.; Kalwij, I. M. 1999.** Disseminating the bed-and-furrow irrigation method for cotton cultivation in Bahadarwah Minor. Lahore, Pakistan: IWMI. Pakistan National Program. xii, 86p. (IIMI-Pakistan research report no.R-82)
3. **Bhatti, M. A.; Cheema, M. A.; Skogerboe, G. V. 1999.** Maintenance and operational activities in the command areas of Shahpur and Mirwal small dams. Lahore, Pakistan: IIMI. Pakistan National Programme. vii, 92p. (IIMI-Pakistan research report no.R-78)
4. **Habib, Z.; Shah, S. K.; Ullah, M. K.; Vabre, A.; Mobin-ud-Din Ahmed; Sophyani, A. 1999.** Hydraulic simulations to evaluate and predict design and operation of the Chashma Right Bank Canal. Lahore, Pakistan: IWMI. Pakistan National Programme. xii, 124p. (IIMI-Pakistan research report no.R-79)
5. **Starkloff, R.; Bandaragoda, D. J.; Cheema, M. A.; Bhatti, M. A. 1999.** Social organization for improved system management and sustainable irrigated agriculture in small dams: An action research program – Final report. Lahore, Pakistan: IWMI. Pakistan Program. X, 57p. (IIMI-Pakistan report no.R-80)
6. **Kalwij, I. M.; Mirza, Z. I.; Amin, M. A.; Hameed, A. 1999.** Disseminating the bed-and-furrow irrigation method for cotton cultivation in the Hakra-4-R Distributary in collaboration with the Water Users Federation. Lahore, Pakistan: IWMI. Pakistan National Program. xii, 79p. (IIMI-Pakistan research report no.R-83)
7. **Skogerboe, G. V.; Aslam, M.; Khan, M. A.; Mahmood, K.; Mahmood, S.; Khan, A. H. 1999.** Inflow-outflow channel losses and canal lining cost-effectiveness in the Fordwah Eastern Sadiqia (South) Irrigation and Drainage Project. Lahore, Pakistan: IWMI. Pakistan National Program. vii, 31p. (IIMI-Pakistan research report no.R-85)
8. **Ejaz, M. S.; Ahmad, H. M. N. 1999.** Spatial and temporal assessment of groundwater recharge in the Fordwah Eastern Sadiqia (South) Project area. Lahore, Pakistan: IWMI. Pakistan National Program. ix, 85p. (IIMI-Pakistan research report no.R-86)
9. **Alexandridis, T.; Asif, S.; Ali, S. 1999.** Water performance indicators using satellite imagery for the Fordwah Eastern Sadiqia (South) Irrigation and Drainage Project. Lahore, Pakistan: IWMI. Pakistan Programme. vi, 16p. (IIMI-Pakistan research report no.R-87)
10. **Khan, A. H.; Vehmeyer, P. W.; Reichert, A. P.; Kalwij, I. M.; Lashari, B.; Skogerboe, G. V. 1999.** Water supply and water balance studies for the Fordwah Eastern Sadiqia (South) Project Area. Lahore, Pakistan: IWMI. Pakistan National Program. ix, 84p. (IIMI-Pakistan research report no.R-88)

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11. **Starkloff, R.; Waheed-uz-Zaman. 1999.** Farmers' participation, empowerment and the institutional reform of Pakistan's irrigation and drainage sector: Key concepts and farmers' perceptions. Lahore, Pakistan: IIMI. Pakistan National Program. vi, 83p. (IIMI Pakistan

research report no.R-89)

12. **Skogerboe, G. V.; Saeed-ur-Rehman; Aslam, M.; Reichert, A. P. 1999.** Analysis of water and salinity management alternatives for increasing agricultural production in the Fordwah Eastern Sadiqia (South) Irrigation and Drainage Project. Lahore, Pakistan: IWMI. Pakistan National Program. vi, 58p. (IIMI Pakistan report no.R-90)
13. **Munir, S.; Kalwij, I. M.; Brouwer, M. 1999.** Assessment of water distribution at watercourse and minor level of Bahadurwah Minor. Lahore, Pakistan: IIMI. Pakistan National Program. ix, 57p. (IIMI-Pakistan research report no.R-91)
14. **Kalwij, I. M.; Duke, V.; Prathapar, S. A. 1999.** Water resources management research issues in the highlands of Baluchistan: Workshop proceedings. Lahore, Pakistan: IWMI. Pakistan National Program. iv, 36p. (IIMI-Pakistan research report no.R-92)
15. **Khan, A. R. 1999.** An analysis of the surface water resources and water delivery systems in the Indus Basin. Lahore, Pakistan: IWMI. Pakistan National Program. iv, 66p. (IIMI-Pakistan research report no.R-93)

South Africa Working Papers

1. **Pardeller, L.; de Lange, M.; Magadlala, D.; Smal, S.; Sugrue, A.; Stimie, C.; van Koppen, B. 1999.** Rural women's association: An assessment of the success factors and sustainability. Colombo, Sri Lanka: IWMI. iii, 45p. (South Africa working paper no.1)
2. **Lahiff, E. P. 1999.** Land tenure on the Arabie-Olifants Irrigation Scheme. Colombo, Sri Lanka: IWMI. viii, 51p. (South Africa working paper no.2)
3. **Small, H. S.; Stimie, C. M. 1999.** An investigation into water use at the Arabie-Olifants Irrigation Scheme. Colombo, Sri Lanka: IWMI. iii, 41p. (South Africa working paper no.4)

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1. **Amerasinghe, P. H.; Amerasinghe, F. P.; Konradsen, F.; Fonseka, K. T.; Wirtz, R. A. 1999.** Malaria vectors in a traditional dry zone village in Sri Lanka. *American Journal of Tropical Medicine and Hygiene*, 60(3):421-429.

2. **Bastiaanssen, W. G. M.; Bos, M. G. 1999.** Irrigation performance indicators based on remotely sensed data: A review of literature. *Irrigation and Drainage Systems*, 13(4):291-311.
3. **Bastiaanssen, W. G. M.; Thiruvengadachari, S.; Sakthivadivel, R.; Molden, D. J. 1999.** Satellite remote sensing for estimating productivities of land and water. *International Journal of Water Resources Development*, 15(1/2):181-196.
4. **Brewer, J. D.; Sakthivadivel, R. 1999.** Maintenance management process. *Irrigation and Drainage Systems*, 13(3):207-227.
5. **de Silva, C. S.; Fernando, N.; Sakthivadivel, R.; Merrey, D. 1999.** Managing groundwater in hard-rock areas through agro-well design and development. *International Journal of Water Resources Development*, 15(3):333-348.
6. **de Voogt, K.; Kite, G. W.; Droogers, P.; Murray-Rust, H. 1999.** Modelling water allocation between a wetland and irrigated agriculture in the Gediz Basin, Turkey. *Water Resources Development*, (IWMI working paper)
7. **Droogers, P.; Kite, G. 1999.** Water productivity from integrated basin modeling. *Irrigation and Drainage Systems*, 13(3):275-290.
8. **Godaliyadda, G. G. A.; Renault, D.; Hemakumara, H. M.; Makin, I. W. 1999.** Strategies to improve manual operation of irrigation systems in Sri Lanka. *Irrigation and Drainage Systems*, 13(1):33-54.
9. **Kite, G.; Droogers, P. 1999.** Irrigation modelling in the context of basin water resources. *International Journal of Water Resources Development*, 15(1/2):43-54.
10. **Kite, G. W.; Haberlandt, U. 1999.** Atmospheric model data for macroscale hydrology. *Journal of Hydrology*, 217(3/4):303-313.
11. **Kolavalli, S.; Brewer, J. D. 1999.** Facilitating user participation in irrigation management. *Irrigation and Drainage Systems*, 13(3):249-273.
12. **Matsuno, Y.; Konradsen, F.; Tasumi, M.; van der Hoek, W.; Amerasinghe, F. P.; Amerasinghe, P. H. 1999.** Control of malaria mosquito breeding through irrigation water management. *International Journal of Water Resources Development*, 15(1/2):93-105.
13. **Meinzen-Dick, R.; Bakker, M. 1999.** Irrigation systems as multiple-use commons: Water use in Kirindi Oya, Sri Lanka. *Agriculture and Human Values*, 16(3):281-293.
14. **Merrey, D. J.; Perry, C. J. 1999.** New Directions in water research: IWMI at the threshold of the twenty-first century. *International Journal of Water Resources Development*, 15(1/2):5-16.
15. **Molden, D.; Sakthivadivel, R. 1999.** Water accounting to assess use and productivity of water. *International Journal of Water Resources Development*, 15(1&2):55-71.
16. **Murray-Rust, H.; Sakthivadivel, R.; Amarasinghe, U. A. 1999.** Impact assessment of organizing farmers in the Gal Oya Left Bank Irrigation Scheme, Sri Lanka. *International Journal of Water Resources Development*, 15(1/2):197-217.
17. **Perry, C.; Kite, G. 1999.** Water rights: Importance, difficulties, and new approaches to data collection and analysis. *Water International*, 24(4):341-347.
18. **Perry, C. J. 1999.** The IWMI water resources paradigm: Definitions and implications. *Agricultural Water Management*, 40(1):45-50.
19. **Prathapar, S. A.; Qureshi, A. S. 1999.** Modelling the effects of deficit irrigation on soil salinity, depth to water table and transpiration in semi-arid zones with monsoonal rains. *International Journal of Water Resources Development*, 15(1/2):141-159.
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25. **Samad, M.; Vermillion, D. 1999.** An assessment of the impact of participatory irrigation management in Sri Lanka. *International Journal of Water Resources Development*, 15(1/2):219-240.
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31. **Yapa, N. U. 1999.** Bibliographic control of scientific and technical publications. *Library News*, 20(2):18-24.

Chapters in Books, etc.

1. **Abernethy, C. L.; Sally, M. H. 1999.** Experiences of some government-sponsored organisations of irrigators in Niger and Burkina Faso, West Africa. In Abernethy, C. L.; Heim, F. (Eds.), *Irrigators' organisations: Government actions towards effective irrigators' organisations with special reference to Lao PDR and Vietnam*. Feldafing, Germany: German Foundation for International Development. pp.202-224.
2. **Amarasinghe, U. A.; Sally, H. 1999.** Water scarcities in Sri Lanka and implications for integrated water resources management. In Abeywickrema, N.; Sally, H.; Kurukulasuriya, P., *National Consultation on Integrated Water Resources Management (IWRM)*. Colombo, Sri Lanka: Lanka International Forum on Environment and Sustainable Development. Water Resources Unit (LIFE-WRU) 11p.
3. **Ambast, S. K.; Singh, O. P.; Tyagi, N. K.; Menenti, M.; Roerink, G. J.; Bastiaanssen, W. G. M. 1999.** Appraisal of irrigation system performance in saline irrigated command using SRS and GIS. In Nieuwenhuis, G. J. A.; Vaughan, R. A.; Molenaar, M. (Eds.), *Operational remote sensing for sustainable development: Proceedings of the 18th EARSeL Symposium on Operational Remote Sensing for Sustainable Development*, Enschede, Netherlands, 11-14 May 1998. Rotterdam, Netherlands: A. A. Balkema. pp.457-461.
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9. **Droogers, P.; Kite, G.; Bastiaanssen, W. G. M. 1999.** Land cover classification using public domain datasets: Example for Gediz Basin, Turkey. In *Proceedings of the International Symposium on Arid Soils*, Menemen, Turkey, 21-25 September 1998. pp.34-40.
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12. **Marañón Pimentel, B. 1999.** La gestión del agua subterránea en Guanajuato. La experiencia de los COTAS. [The management of groundwater in Guanajuato. The experience of the COTAS] In Mc Lean, A. (Ed.) *Estudios agrarios*. México, D.F., Mexico: Procuraduría Agraria. 5(12):153-173.
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1. **Abeywickrema, N.; Sally, H.; Kurukulasuriya, P. 1999.** National Consultation on Integrated Water Resources Management (IWRM) Colombo, Sri Lanka: Lanka International Forum on Environment and Sustainable Development. Water Resources Unit (LIFE-WRU) v.p.
2. **Ahlers, R. (Ed.) 1999.** Informe final de los estudios del IWMI en La Comarca Lagunera, Mexico. Mexico City, DF, Mexico: IIMI. Mexico Program. Compilation of IWMI research reporting papers. 15-17 January, Torreón, Coahuila, Mexico. 87p.
3. **Bandaragoda, D. J. 1999.** Institutional implications of water resources management in Central Asian republics. Report prepared on the basis of information collected during a visit to Tashkent, 16-23 May 1999. 16p.
4. **Bandaragoda, D. J. 1999.** Irrigation management in Asia: Farmer agency interface from a property rights perspective. Kathmandu, Nepal: FMIS Promotion Trust. 9p. (Award and Training series 1)
5. **Boelee, E. 1999.** Irrigation ecology of schistosomiasis: Environmental control options in Morocco. Wageningen, Netherlands: Wageningen University. 200p.
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