

POWER, NATURE AND NEOLIBERALISM: THE POLITICAL ECOLOGY OF WATER IN CHILE

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ABSTRACT

Since the 1990s, international water sector reforms have centred heavily on economic and market approaches. In regard to water resources management, tradable water rights have been promoted, often supported by the neoliberal model adopted in Chile. Chile's 1981 Water Code was reformed to comprise a system of water rights that could be freely traded with few restrictions. International financial institutions have embraced the Chilean model, claiming that it results in more efficient water use, and potentially fosters social and environmental benefits. However, in Chile the Water Code is deeply contested. It has been criticised for being too permissive and has produced a number of problems in practice. Moreover, attempts to modify it have become the focus of a lengthy polemic debate. This paper employs a political ecology perspective to explore the socio-environmental outcomes of water management in Chile, drawing on a case study of agriculture in the semi-arid Norte Chico. The case illustrates how large-scale farmers exert greater control over water, while peasant farmers have increasingly less access. I argue that these outcomes are facilitated by the mode of water management implemented within the framework of the Water Code. Through this preliminary examination of social equity and the environmental aspects of water resources management in Chile, I suggest that the omission of these issues from the international debates on water rights markets is a cause for concern.

REFERENCES

Bakker, K. (2002) 'From state to market?: Water *mercantilización* in Spain', *Environment and Planning A*, 34(5), 767–90.

[Web of Science®](#) | [Google Scholar](#)

Bauer, C. (1997) 'Bringing water markets down to earth: The political economy of water rights in Chile, 1976–95', *World Development*, 25(5), 639–56.

[Web of Science®](#) | [Google Scholar](#)

Bauer, C. (1998a) *Against the Current? Privatization, Water Markets and the State in Chile*, Boston : Kluwer Academic Publishers.

[Google Scholar](#)

Bauer, C. (1998b) 'Slippery property rights: Multiple water uses and the neoliberal model in Chile 1981-95', *Natural Resources Journal*, 38(1), 109-55.

[Web of Science®](#) | [Google Scholar](#)

Bauer, C. (2004) *Siren Song: Chilean Water Law as a Model for International Reform*, Washington, D.C. : Resources for the Future Press.

[Google Scholar](#)

Blaikie, P. (1985) *The Political Economy of Soil Erosion in Developing Countries*, London : Longman.

[Google Scholar](#)

Blaikie, P. (1995) 'Changing environments or changing views? A political ecology for developing countries', *Geography*, 80(3), 203-14.

[Google Scholar](#)

Blaikie, P. (2001) 'Social nature and environmental policy in the South: Views from verandah and veld', in N. Castree & B. Braun, (eds.), *Social Nature: Theory, Practice, and Politics*, Oxford : Blackwell, 133-50.

[Google Scholar](#)

Blaikie, P. & Brookfield, H. (1987) *Land Degradation and Society*, London : Methuen.

[Google Scholar](#)

Briscoe, J. (1996) *Water Resources Management in Chile: Lessons from a World Bank Study Tour*, World Bank Working Paper, Washington, D.C. : World Bank.

[Google Scholar](#)

Bryant, R. (1992) 'Political ecology: An emerging research agenda in Third World studies', *Political Geography*, 11(1), 12-36.

[Web of Science®](#) | [Google Scholar](#)

Bryant, R. & Bailey, S. (1997) *Third World Political Ecology*, London : Routledge.

[Google Scholar](#)

Budds, J. & McGranahan, G. (2003) 'Are the debates on water privatization missing the point? Experiences from Africa, Asia and Latin America', *Environment and Urbanization*, 15(2), 87-113.

[Web of Science®](#) | [Google Scholar](#)

Castree, N. (2001) ' Socializing nature: Theory, practice, and politics', in N. Castree & B. Braun, (eds.), *Social Nature: Theory, Practice, and Politics*, Oxford : Blackwell, 1–21.

[Google Scholar](#)

Comisión Nacional de Riego (CNR) (2003a) ' Chile: tercer exportador mundial de paltas [Chile: the world's third largest avocado exporter]', *Chile Riego*, no. 14 (June), Santiago : CNR, 39.

[Google Scholar](#)

Comisión Nacional de Riego (CNR) (2003b) ' PROVALTT Petorca - La Ligua', *Chile Riego*, no. 14 (June), Santiago : CNR, 30–31.

[Google Scholar](#)

Crespo, C. (2002) *Water Privatisation, Policies and Conflicts in Bolivia: The Water War in Cochabamba (1999-2000)*, unpubl. Ph.D. thesis, School of the Built Environment, Oxford Brookes University, Oxford , UK .

[Google Scholar](#)

Demeritt, D. (2001) ' Being constructive about nature', in N. Castree & B. Braun, (eds.), *Social Nature: Theory, Practice, and Politics*, Oxford : Blackwell, 22–40.

[Google Scholar](#)

Dirección General de Aguas (DGA) (1996a) *Determinación de la disponibilidad de recursos hídricos para constituir nuevos derechos de aprovechamiento de aguas subterráneas en el sector del acuífero del valle de Petorca, Provincia de Petorca, Comuna de Petorca, V Región* [Assessment of the availability of water resources to grant new groundwater rights in the aquifer of Petorca valley, Petorca Province, Petorca District, Fifth Region], Technical Brief no. 13 (October), Santiago: Ministry of Public Infrastructure, Transport and Telecommunications, Government of Chile.

[Google Scholar](#)

Dirección General de Aguas (DGA) (1996b) *Determinación de la disponibilidad de recursos hídricos para constituir nuevos derechos de aprovechamiento de aguas subterráneas en el sector del acuífero del valle de La Ligua, Provincia de Petorca, V Región* [Assessment of the availability of water resources to grant new ground-water rights in the aquifer of La Ligua valley, Petorca Province, Fifth Region], Technical Brief no. 13 (October), Santiago: Ministry of Public Infrastructure, Transport and Telecommunications, Government of Chile.

[Google Scholar](#)

Dirección General de Aguas (DGA) (2002) ' Evaluación de los recursos hídricos, Cuenca del Río Ligua, V Región [Evaluation of water resources, La Ligua River Basin, Fifth Region]', Technical Report (May) 2 vols., Santiago: Ministry of Public Infrastructure, Transport and Telecommunications, Government of Chile.

[Google Scholar](#)

Escobar, A. (1999) 'After nature: Steps to an antiessentialist political ecology', *Current Anthropology*, 40(1), 1-30.

[Web of Science®](#) | [Google Scholar](#)

Gandy, M. (1997) 'The making of a regulatory crisis: Restructuring of New York City's water supply', *Transactions of the Institute of British Geographers, N.S.*, 22(3), 338-58.

[Web of Science®](#) | [Google Scholar](#)

Gazmuri, R. (1994) 'Chile's market-oriented water policy: Institutional aspects and achievements', in G. Moigne, K.W. Easter, W.J. Ochs & S. Giltner, (eds.), *Water Policy and Water Markets*, World Bank Technical Paper no. 249, Washington, D.C. : World Bank, 65-78.

[Google Scholar](#)

Gazmuri, R. & Rosegrant, M. (1996) 'Chilean water policy: The role of water rights, institutions and markets', *Water Resources Development*, 12(1), 33-48.

[Google Scholar](#)

Grant, R. (n.d.) 'A future for tradable water rights', Briefing Paper, The Free Market Foundation, [<http://www.fremarketfoundation.com>], last accessed September 2004.

[Google Scholar](#)

Greenberg, J. & Park, T. (1994) 'Political ecology', *Journal of Political Ecology*, 1, 1-12.

[Google Scholar](#)

Gregory, D. (2001) '(Post)colonialism and the production of nature', in N. Castree & B. Braun, (eds.), *Social Nature: Theory, Practice, and Politics*, Oxford : Blackwell, 84-111.

[Google Scholar](#)

Gualterio, H. & Curihuinca, J. (2000) *Zonificación agroclimática: V Región* [Classification of climatic and agricultural zones: Fifth Region], Santiago : Dirección Meteorológica de Chile.

[Google Scholar](#)

R. Gwynne & C. Meneses, (eds.) (1994) *Climate Change and Sustainable Development in the Norte Chico, Chile: Land, Water and the Commercialisation of Agriculture*, Occasional Publication no. 34, Edgbaston : University of Birmingham School of Geography.

[Google Scholar](#)

Haddad, B. (2000) *Rivers of Gold: Designing Markets to Allocate Water in California*, Washington , D.C./Covelo : Island Press.

[Google Scholar](#)

Harvey, D. (1996) *Justice, Nature and the Geography of Difference*, Oxford : Blackwell.

[Web of Science®](#) | [Google Scholar](#)

Hearne R. & Easter, K. (1995) *Water Allocation and Water Markets: An Analysis of Gains-from-Trade in Chile*, World Bank Technical Paper no. 315, Washington , D.C. : World Bank.

[Google Scholar](#)

Hearne, R. & Trava, J. (1997) *Water Markets in Mexico: Opportunities and Constraints*, Environmental Economics Programme Discussion Paper no. 97-01, London : International Institute for Environment and Development.

[Google Scholar](#)

Hofshi, R. (2002) ' The Chilean avocado industry: An overview', *AvoResearch*, 2(1), Irvine : California Avocado Commission.

[Google Scholar](#)

Instituto de Desarrollo Agropecuario (INDAP) (2003) *Catastro de obras de captación de aguas subterráneas de propiedad de pequeños productores agrícolas cuyos derechos de aprovechamiento no se encuentren inscritos y/o regularizados en la cuenca hidrográfica del Río La Ligua* [Survey of infrastructure for extracting groundwater resources and the legal status of the water rights among small agricultural producers in La Ligua River Basin] (database), Santiago: INDAP.

[Google Scholar](#)

Instituto Geográfico Militar (IGM) (1984) *Mapa Hidrográfico de Chile* [Map of Hydrological Basins of Chile], Santiago : IGM.

[Google Scholar](#)

Instituto Nacional de Estadísticas (INE) (1997) *VI Censo Nacional Agropecuario* [Sixth National Agricultural Census], Santiago : INE.

[Google Scholar](#)

R. Johnston, D. Gregory, G. Pratt, M. Watts & D. Smith, (eds.) (2000) *The Dictionary of Human Geography*, 4th edition, Oxford : Blackwell.

[Google Scholar](#)

Kay, C. & Silva, P. (1992) *Development and Social Change in the Chilean Countryside: From the Pre-Land Reform Period to the Democratic Transition*, Amsterdam : Centre for Latin American Research and Documentation.

[Google Scholar](#)

Keil, R., Bell, D., Penz, P. & Fawcett, L. (1998) 'Editors' introduction: Perspectives on global political ecology', in R. Keil, D. Bell, P. Penz & L. Fawcett, (eds.), *Political Ecology: Global and Local*, London : Routledge, 1-16.

[Web of Science®](#) | [Google Scholar](#)

Laurie, N. & Marvin, S. (1999) 'Globalisation, neoliberalism and negotiated development in the Andes: Water projects and regional identity in Cochabamba, Bolivia', *Environment and Planning A*, 31(8), 1401-415.

[Web of Science®](#) | [Google Scholar](#)

Mönckeberg, M. (2001) *El Saqueo de los Grupos Económicos al Estado Chileno* [The Plundering of the State by Chile's Powerful Economic Groups], Santiago : Ediciones B.

[Web of Science®](#) | [Google Scholar](#)

Muchnik, E., Luraschi, M. & Maldini, F. (1997) *Comercialización de los Derechos de Aguas en Chile* [Water Rights Markets in Chile], Santiago : United Nations Economic Commission for Latin America and the Caribbean.

[Google Scholar](#)

Nickson, A. & Vargas, C. (2002) 'The limitations of water regulation: The failure of the Cochabamba concession in Bolivia' *Bulletin of Latin American Research*, 21(1), 99-120.

[Google Scholar](#)

Niemeyer, H. & Cereceda, P. (1984) *Geografía de Chile: Hidrología* [Geography of Chile: Hydrology], Vol. VIII, Santiago : IGM.

[Google Scholar](#)

Oficina de Estudios y Políticas Agrarias (ODEPA) y Centro de Información de Recursos Naturales (CIREN) (2002) *Catastro Frutícola - V Region* [Fruit Production Survey - Fifth Region], Santiago : ODEPA/CIREN.

[Google Scholar](#)

Pepper, D. (1996) *Modern Environmentalism: An Introduction*, London : Routledge.

[Google Scholar](#)

Ríos, M. & Quiroz, J. (1995) *The Market for Water Rights in Chile: Major Issues*, World Bank Technical Paper no. 285, Washington , D.C. : World Bank.

[Google Scholar](#)

Rocheleau, D. (1995) 'Maps, numbers, text and context: Mixing methods in feminist political ecology', *Professional Geographer*, 47(4), 458-66.

[Web of Science®](#) | [Google Scholar](#)

Sheridan, T. (1995) 'Arizona: The political ecology of a desert state', *Journal of Political Ecology*, 2, 41-57.

[Google Scholar](#)

Simpson, L. & Ringskog, K. (1998) *Water Markets in the Americas*, Directions in Development Series, Washington , D.C. : World Bank.

[Google Scholar](#)

Swyngedouw, E. (1995) 'The contradictions of urban water provision: A study of Guayaquil, Ecuador', *Third World Planning Review*, 17(4), 387-405.

[Web of Science®](#) | [Google Scholar](#)

Swyngedouw, E. (1997) 'Power, nature and the city. The conquest of water and the political ecology of urbanization in Guayaquil, Ecuador: 1880-1990', *Environment and Planning A*, 29(2), 311-32.

[Web of Science®](#) | [Google Scholar](#)

Swyngedouw, E. (1999) ' Modernity and hybridity: Nature, *Regeneracionismo*, and the Production of the Spanish Waterscape, 1890-1930', *Annals of the Association of American Geographers*, 89(3), 443-65.

[Web of Science®](#) | [Google Scholar](#)

Thiesenhusen, W. (1995) *Broken Promises: Agrarian Reform and the Latin American Campesino*, Boulder and San Francisco : Westview Press.

[Web of Science®](#) | [Google Scholar](#)

Thobani, M. (1995) *Tradable Property Rights to Water: How to Improve Water Use and Resolve Water Conflicts*, Finance & Private Sector Development Note no. 34, Washington, D.C.: WorldBank, also available at <http://rru.worldbank.org/Documents/PublicPolicyJournal/034thoban.pdf>.

[Google Scholar](#)

Trawick, P. (2003) 'Against the privatization of water: An indigenous model for improving existing laws and successfully governing the commons', *World Development*, 31(6), 977-96.

[Web of Science®](#) | [Google Scholar](#)

World Bank (1993) *Water Resources Management: A World Bank Policy Paper*, Washington , D.C. : World Bank.

[Google Scholar](#)

World Meteorological Organization (WMO) (1992) *International Conference on Water and the Environment: Development Issues for the 21st Century: The Dublin Statement and Report of the Conference*, Geneva : WMO.

[Google Scholar](#)

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