

## Practitioner Input Form

Submitted: 15/02/2005

Input Record Number	024
Name	Jan van Wonderen
Contact Information	<a href="mailto:Jan.wanwonderen@mottmac.com">Jan.wanwonderen@mottmac.com</a>
Organisation(s) Involved	Mott MacDonald; Birmingham University; State and Rural Universities of Pernambuco, Brazil
Geographic Area	Pesquera Municipality, Pernambuco State, North-East Brazil, DFID KaR Project 8333, <i>Sustainable Use of Groundwater Resources in the Semi-Arid Ribbon Valleys of North-east Brazil</i>
Dates	November 2003 to December 2005
Communities Involved	Rural communities in three pilot study area located in Pesqueira Municipality, Pernambuco State and also the Xukuru indigenous population.
Duties and Responsibilities/ Purpose of Project	Capacity building of local communities to achieve sustainable use of groundwater resources for agricultural and domestic use. Long-term sustainable use of the resource through local management by the end-users. Duties include the development of guidelines for sustainable resource management, development of a framework for participation and education, development of a strategy for communication, and guidance on data collection strategies.
Context of Intervention	Focus is on rural population with different social and socio-economic backgrounds. There is clear focus on equitable use and access to sources of water for domestic, animal and agricultural use. Local participation in, and responsibility for, the management of groundwater resources will lead to both better understanding of resource availability under strongly varying climatic conditions, and a more secure availability of water (as opposed to take what you can when it is available). Priorities in terms of water use allocation need to be established, also in the context on national policy on water use and management.

## Practitioner Reflective Case Study

Input Record Number	024 RCS Jan van Wonderen
Not yet received.	

Practitioner Input – Part II

Input Record Number	024II Jan van Wonderen
<p>9) The project is ongoing and as such, experience is still being gained. In our view the approach to this type of project should involve a very strong participatory element at both community level and at various levels of municipal and state/federal government. We have experienced that through livelihood surveys and themed workshops, enthusiasm and understanding is being developed amongst the rural communities. Workshops have been led by representatives from the rural communities, and we believe that this creates a feeling of ownership of the activities that are aimed to lead to a more sustainable approach to water management and to poverty alleviation. We also feel that a strong focus on environmental education at both junior and senior levels, particularly related to various aspects of water availability, use and management, will result in better understanding and communication about relevant issues amongst the rural communities.</p> <p>10) It is our intention to use the Water Poverty Index as a means of measuring improvements. In relation to the current project, it is too early to form a clear opinion on this matter.</p> <p>11) We believe that involvement of local people and particularly the young, school-going, members of the rural communities in the monitoring of rainfall, groundwater levels and water use will lead to a better appreciation of water related issues and the role of water in the wider environment. We think that the young will carry important messages to their parents and relatives, and we see this as a powerful way of disseminating knowledge and a possible way of encouraging the uptake of new ideas by community members. We feel that through education, an appreciation will be established of the need for monitoring and its value to better manage the scarce water resources. Young people will form the backbone of the communities in the future and generally are more open-minded with regards to new approaches. It is through their links with the adult members of the communities that we see an effective way of communicating ideas and approaches.</p> <p>12) Communication amongst practitioners and access to information are key to improving the success of pr-poor interventions. Web technology is a possible access to knowledge and experience, although it does require a well coordinated base..</p> <p>13) Adger W N, (2003a). ‘Social Capital, Collective Action, and Adaptation to Climate Change’. <u>Economic Geography</u> <b>79</b>(4): pp. 387-404.</p> <p>Adger W N, (2003b). ‘Building Resilience to Promote Sustainability – An Agenda for Coping with Globalisation and Promoting Justice’. <u>IHDP Update</u>: 1-3.</p>	

Adger W N, Brown K, et al. (2003). 'Governance for Sustainability: Towards a 'Thick' Analysis of Environmental Decision-Making. Environment and Planning A **35**: 1095-1110.

Adger W N, (2000). 'Social and Ecological Resilience: Are They Related? Progress in Human Geography **24**(3): pp. 347-364.

Agrawal A, (2002). Common Resource and Institutional Sustainability. The Drama of the Commons. Ostrom E, Dietz T, Dolsaket N, al. Washington DC, National Academy Press: pp. 41-85

Baland J M, and Platteau J P, (1996). Halting Degradation of Natural Resources: Is There a Role for Rural Communities? Oxford, Oxford University Press.

Barden P and Dayton-Johnson J, (2002). Unequal Irrigators: Heterogeneity and Commons Management in Large-Scale Multivariate Research. The Drama if the Commons. Ostrom E, Dietz T, Dolsaket N al. Washington DC, National Academy Press: pp. 87-112.

Berkes F, Colding J, et al. (2003). Navigating Social-Ecological Systems. Cambridge, Cambridge University Press.

Ellis F, (1993). Peasant Economics. Cambridge, Cambridge University Press.

Glantz M H, (1996). Drought Follows the Plow: Cultivating Marginal Areas. Climate Variability, Climate Change and Social Vulnerability in the Semi-Arid Tropics. Ribot J C, Magalhaes A R, and Panagides S S. Cambridge, Cambridge University Press: pp. 125-128.

Gaese H, (2003). Degradation Factors in a Risk-Prone Area: The Semi-Arid North-east of Brazil. Global Change and Regional Impacts: Water Availability and Vulnerability of Eco-Systems and Society in the Semi-Arid North-east of Brazil. Gauser T, Krol M, Frischkorn H, and Araujo J C D. Berlin, Springer: pp. 125-133.

Glantz M H, (1994). Drought, Desertification and Food Production. Drought Follows the Plow. Glantz M H. Cambridge, Cambridge University Press: pp. 9-30.

Leach M, Mearns R, et al. (1999). 'Environmental Entitlements: Dynamics and Institutions in Community-Based Natural Resource Management. World Development **27**(2): pp. 225-247.

Leach M, Mearns R, et al. (1997). 'Challenges to Community-Based Sustainable Development: Dynamics, Entitlements, Institutions'. IDS Bulletin **28**(4): pp. 4-14.

Lemos M C, Finan T J, et al. (2002). 'The Use of Seasonal Climate Forecasting in Policy-Making : Lessons from North-east Brazil'. Climate Change **55**: pp. 479-501.

McMichael A J, Butler C D, et al. (2003). 'New Visions for Addressing Sustainability'. Science **302**: pp 1919-1920.

North D C, (1990). Institutions, Institutional Change and Economic Performance. Cambridge, Cambridge University Press.

Ostrom E, Gardner R, et al. (1997). Rules, Games and Common-Pool Resources. Ann Arbor, The University of Michigan Press.

Ribot J C, Najam A, et al. (1996). Climate Variation, Vulnerability and Sustainable Development in the Semi-Arid Tropics. Climate Variability, Climate Change and Social Vulnerability in the Semi-Arid Tropics. Ribot J C, Magalhaes A R, Panagides S S. Cambridge, Cambridge University Press: pp. 13-51.

Schlager E, (1997). Fisher's Institutional Responses to Common-Pool Resource Dilemmas. Rules, Games and Common-Pool Resources. Ostrom E, Gardner R and Walker J, The University of Michigan Press: pp. 247-266.

Sullivan C A, Meigh J R, et al. (2003). 'The Water Poverty Index: Development and Application at the Community Scale'. Natural Resources Forum **27**: pp. 189-199.

Sullivan C, (2002). 'Calculating a Water Poverty Index'. World Development **30**(7): pp. 1195-1210.

Tompkins E L and Adger W N, (2003). 'Building Resilience to Climate Change through Adaptive Management of Natural Resources'. Tyndall Cen.