

Further Readings

1. Quality of Potable Water

The population increase has caused severe strain to water resources, and this effect cannot be underestimated. There is rising demand for water for irrigated agriculture, domestic consumption and industry are forcing stiff competition over the allocation of scarce water resources among both areas and types of use. Safe water is a fundamental factor in human health. Safe water and sanitation shape health through potable water supply and hygiene. Environmental security depends on human ability to build and maintain drainage and water pollution, manage droughts and floods. India ranks a lowly 133rd out of 180 nations in water availability per person per year. It ranks third list in water quality, and this poor rating also reflects its lack of commitment towards improving the situation. With 86% of diseases in the country, being a direct or indirect result of poor quality of drinking water, diseases such as jaundice, typhoid and diarrhoea are major killers. There is also great inequity in the distribution of water. Contamination from naturally occurring chemicals in groundwater and from industrial and agricultural waste is a serious problem, particularly in developing countries.

Reference: Bansil, P. C. 2004. 'Quality of Potable Water', in *Water Management in India*. pp.261-308. New Delhi: Concept Publishing Company.

2. WHO Country Cooperation Strategy (2006-2011)- India

The country cooperation strategy report presents the medium term country specific vision of WHO along its commitments of the organisation-wide strategy. Both internal and external consultations have been take into account in the preparation of this document. India has the double burden of both old and contemporary diseases, while the former is a part of India's unfinished agenda in health, the latter comprises non communicable diseases that cause preventable morbidity and premature mortality. The four major objectives outlined in the report are (i) to reduce the burden of emerging diseases by building capacities, (ii) to strengthen maternal and juvenile health infrastructure and prevention schemes, (iii) to enhance quality and quantity of human resources in the health sector.

Reference: WHO (World Health Organization). 2006. 'WHO Country Cooperation Strategy (2006-2011)- India'. New Delhi: WHO.

3. Effects of Chemicals on Human Health

This paper elucidates on the effect of chemicals such as benzene, zinc and aluminium on human health. Important sources of benzene include cigarette smoke and industrial activity. Some common health effects of benzene is bone marrow depression, leukopenia, leukaemia, etc. Zinc deficiency in humans cause several health complications, viz. growth stunting, decreased fetal growth and impaired neuropsychological functions among children.

Reference: Dass, Sujata K. 2003. 'Effects of Chemicals on Human Health', in *Community Participation in Health Management*, pp. 140-193. New Delhi: Isha Books.

4. Arsenic Morbidity in West Bengal: Some Social Issues and Concerns

The paper tackles the issue of Arsenic contamination in groundwater in vulnerable areas in West Bengal and the dangers and other social issues it gives rise to. Around 50 million people are exposed to the risk of drinking arsenic-contaminated water, covering an area of 38, 865 sq. Km. The paper explains that despite the wide prevalence of arsenic morbidity, knowledge of the health effects of arsenic is still not known. The social outcomes of arsenic based morbidity are several- wives are sent back to parental homes, unmarried girls find it very difficult to acquire a partner and affected patients face the possibility of excommunication in society. The paper is qualitative in a nature and uses multiple data collection techniques. The paper concludes on the note that it names Arsenic as a social hazard, causing not just toxicity to human health, but social dislocation as well. It suggests some policy implications for the West Bengal government to consider on this issue.

Reference: Guha, M., Gupta, K. 2007. 'Arsenic Morbidity in West Bengal: Some Social Issues and Concerns', *Journal of Health and Development*, Vol. 3, No. 1 & 2, pp. 163-177.

5. Waterborne Zoonoses- Identification, Causes and Control

This publication is meant to be a guide to developmental bodies concerned with health and water, and activists involved in wastewater activities. It provides information on zoonotic pathogens, and how it can be prevented (viz. through proper management practices, treatment of animal wastes, runoff management). The publication also speculates on potential future problems with respect to the disease, and whether current solutions will be enough to tackle them, or if new approaches need to be devised.

Reference: Cotruvo, J.A., A. Dufour, G. Rees, J. Bartram, R. Carr, D.O. Cliver, G.F. Craun, R. Fayer and V.P.J. Gannon (eds). 2004. *Waterborne Zoonoses- Identification, Causes and Control*. London: IWA Publishing.

6. Emerging and Resurging Vector-borne Diseases

Quite a few arthropod-borne infections have become important from a public health perspective in the past few decades. These include new diseases such as dengue hemorrhagic fever and old ones like malaria and plague. This has been attributed to ecological changes that favour vector density. Common causes are dam construction, urbanisation and deforestation. Its incidence and geographical presence is wide and increasing. This paper seeks to explain the factors that have caused vector densities and transmission of disease, so that prevention of emergence and resurgence of these diseases can be done effectively.

Reference: Gratz, Norman G. 1999. 'Emerging and Resurging Vector-borne Diseases', *Annual Review of Entomology*, Vol. 44, pp. 51-75.

7. Public Health in Vellore: Experiences with Malaria and Cholera

The chapter looks at the experience of a team from Christian Medical College and Hospital, Vellore, in dealing with the problems of malaria and cholera in the town. The author also tries to locate these happenings in the larger context of changes in the health and welfare sector. The chapter concludes that technological fixes for infectious-diseases problem in Vellore, such as therapeutics and vaccination are necessary, but not sufficient. Where illnesses are the result of widening socio-economic differences, unplanned urbanisation and lack of investment in basic infrastructure for water supply and sanitation, these kinds of solutions will be ineffective.

Reference: Zachariah, Anand. 2001. 'Public Health in Vellore: Experiences with Malaria and Cholera', in Imrana Qadeer, Kasturi Sen, K. R Nayar (eds), *Public Health and the Poverty of Reforms: The South Asian Predicament*, pp.439-448. New Delhi: Sage Publications India Pvt. Ltd.

8. Economic Value of Safe Water for the Infrastructurally Disadvantaged Urban Household: A Case Study in Delhi, India

Thanks to rapid urbanisation that has taken place over the last five decades, not to mention population growth, water bodies in Delhi have felt the pressure and the effects of changing human activity. This paper critically analyses the water as an economic resource from the perspective of a low-income urban household that has infrastructural shortcomings, through a primary survey. It also examines several issues pertaining the water quality, quantity and access. The paper uses a contingent valuation approach to estimate the average household demand for water. The results are evaluated in terms of health benefits as a result of safe water.

Reference: Dasgupta, Purnamita and Rajib Dasgupta. 2004, 'Economic Value of Safe Water for the Infrastructurally Disadvantaged Urban Household: A Case Study in Delhi, India', *Water Resources Research*, Vol. 40, No.11, pp. 10.

9. Thresholds of Morbidity Among Women in a Peri-urban Community of Maharashtra, India: Conceptual and Methodological Issues

Data on perceived morbidity is often an indicator of women's health in the larger setting of gender and health systems, though this data does not coincide with clinical morbidity. This paper uses multiple sources of data of perceived morbidity among women from a peri-urban area in the state of Maharashtra in India, and examines thresholds for articulating illness and health concerns. The women surveyed were all married and between the ages of 15 and 49, and were subjected to Focus Group Discussions, general narratives and open-ended questions. As a result of data collection, collation and analysis, the paper presents four different thresholds relating to situational, agency, prototypical and dimensional aspects of women's reporting of morbidity.

Reference: Kielmann, Karina and Margaret Bentley. 2003. 'Thresholds of Morbidity among Women in a Peri-urban Community of Maharashtra, India: Conceptual and Methodological Issues', *Journal of Health Psychology*, Vol. 8, No. 5, pp. 525-538.

10. A Decade After Cairo: Women's Health in a Free Market Economy

The paper examines the status of women's health a decade after the 1994 UN Conference in Cairo on Population and Development. The general consensus was that after a decade, the Programme of Action was still far from being implemented. While a lack of political will and funding are major reasons, they are not the only ones. Other factors that are listed are: rising fundamentalism, neo-Malthusian thinking, neo-liberal economic and health policies. The paper goes into a detailed discourse tracing the causes of developmental goals not being met, and concludes that networks and alliances at the regional and trans-national levels are key.

Reference: Nair, Sumati and Preeti Kirbat with Sarah Sexton. 2004. 'A Decade after Cairo: Women's Health in a Free Market Economy', Corner House Briefing Paper 31, June 2004. Dorset: The Corner House. (Available online at <http://www.thecornerhouse.org.uk/resource/decade-after-cairo>).

11. An Analysis of Gender-Water Nexus in Rural Bangladesh

Presenting a comprehensive analysis of the gender-water nexus in rural Bangladesh, drawing from extensive surveys, focus group discussions and interviews with key informants, across seven locations. Findings are classified according to: household water management, health, irrigation water management and water related vulnerability. Water for household use is attended to by women and children, who are plagued by a whole set of physical, psychological and social problems. Water collection is also determined by class, water source and other factors. Water-borne diseases are common in rural Bangladesh, and improper storage of water, poorly maintained tube wells and arsenic in water are threats to health. In addition to health issues, there is a social stigma of women detected with arsenic. Agricultural management is interlinked with ownership of farmland, over which women have little control. Deprivation of this nature is due to lack of education, empowerment, access to resources and institutionalised support. The article also suggests a range of policy interventions to address these issues.

Reference: Faisal, I. M. and M.R. Kabir. 2005. 'An Analysis of Gender-Water Nexus in Rural Bangladesh', *Journal of Developing Societies*, Vol. 21, No. 1-2, pp. 175-194.

12. Women and Natural Resource Management: Illustrations from India and Nepal

This article draws on case studies of rural women in India and Nepal working in agriculture, water livestock, forestry and fishery. The case studies have used personal interview techniques, focus group discussions and have been carried out on the lines of participatory research. The article reports that women are way ahead of men in their involvement in the management of natural resources. The article further recommends that policy makers must be equipped with a deeper understanding of the gender dynamics in natural resource management.

Reference: Upadhyay, Bhawana. 2005. 'Women and Natural Resource Management: Illustrations from India and Nepal', *Natural Resources Forum*, Vol. 29, No. 3, pp. 224-232.

13. Women and Community Water Supply Programmes: An Analysis from a Socio-Cultural Perspective

Community water supply programmes often aim to achieve the goal of 'safe water' for all members of the community, and aim to be gender inclusive. Often these programmes are conceived at an macro level and local socio-cultural dynamics are hardly given a thought. The paper analyses the influence of social and cultural mores on community programmes and assesses their effectiveness. The article also prescribes some guidelines on design and implementation of these programmes. The conclusion is that local social and cultural conditions shape programme implementation. It emphasises that socio-cultural factors must be included in designing and implementing community water supply programmes.

Reference: Singh, Nandita , Gunnar Jacks and Prosun Bhattacharya. 2005. 'Women and Community Water Supply Programmes: An Analysis from a Socio-Cultural Perspective', *Natural Resources Forum*, Vol. 29, No. 3, pp. 213-223. Available online at <http://onlinelibrary.wiley.com/doi/10.1111/j.1477-8947.2005.00131.x/abstract> (accessed in September 2011).