



Deutscher Tropentag, October 8-10, 2003, Göttingen

“Technological and Institutional Innovations
for Sustainable Rural Development”

Public Health and Social Implications of Water-Related Innovations

HANS-JOCHEN DIESFELD

Deutsche Gesellschaft für Tropenmedizin und Internationale Gesundheit, Germany

Abstract

Water and Health: Both words stand for extremely complex and inter-related systems. The interrelationship between freshwater ecosystems and human ecosystems, and the problem of safeguarding the health of the two systems will be discussed.

Public Health describes health as a public good and human right, and in the context of this paper ecological, political, technical, managerial social and cultural determinants in relation to water and health of the community at large.

Water-related Innovations refer to domestic water supply, water for agriculture, animal husbandry and food production, but also to disease prevention and control, sanitation, urbanisation, mining, industrialisation and energy production but also to disaster prevention and management — and their effects on health.

Users of freshwater resources, once they are scarce, are competing both at local as well as higher economic and political levels. Increases in population and population density mean an increasing demand on water and more waste water and ecosystem pollution. Innovations with respect to water supply, with all good intentions to improve quality and/or quantity of water for human consumption, may have unexpected effects on health.

The integral role of water in the process of development and poverty reduction has been recognised over the last two decades, with several international agreements specifying targets on water supply and sanitation, dating back to the UNICEF 1980 International Water Supply and Sanitation Decade (IWSSD). Only recently in 2003, UNESCO published a joint report by 23 UN-agencies concerned with fresh water (UN-World Water Development Report, 2003), in which all aspects of “Water for People and Life” have been addressed and the role of water for poverty reduction, better health and economic growth has been acknowledged.

Keywords: Water related innovations, water consumption, water demand