

Summary

The current development wisdom entails interventions in health, education, income generation and governance as prime leverages of poverty alleviation with safe water and infrastructure sanitation assuming a supportive role. This research explores the alternative philosophy that water and environmental sanitation infrastructure can be the principal catalyst of change, alleviating poverty most effectively and at affordable costs. The research aims to 1) evaluate the impacts of water and sanitation on health, education, income, housing and human development indices and 2) assess the resource potential of the communities for water and sanitation and the subsequent investments in improving their housing stock.

Interviews were conducted in 700 houses with the help of teams in five Indian slums and two townships in South Africa, choosing both the serviced and non-serviced settlements. The evidence from the house interviews was supported with qualitative evidence from group discussion and secondary data sources. The main findings are:

- *Water and sanitation have a positive impact on health, education, income and housing as demonstrated in both the Indian and South African settlements.*
- *Apart from physical comforts there is a significant impact on other factors such as freeing of people's time, improved social standing and safety*
- *Communities have highlighted the benefits of individual services in the house interviews and group discussions.*
- *Communities are able and willing to contribute to capital and maintenance costs for infrastructure.*
- *Communities have invested in shelter improvement after the provision of infrastructure.*
- *This research demonstrates the 'multiplier effect' of water and sanitation, the communities investing in infrastructure and housing 5 to 85 times the initial government contributions.*
- *There is an improvement in the Human Development and City Development Indices after the provision of services.*

Infrastructure investment is cited as the dominant motivator for housing investments in about two-thirds of the sample in India but only in one-fifth of the sample in South Africa. When measured after ten years in developed slums in India the multiplier, or the ratio of the total investment by the community to the initial state investment, is enormous. In the Indian settlements of Ramdevnagar, Sanjaynagar and Pravinnagar, multipliers were found to be 85, 8.23 and 4.94 respectively. In the South African Township where the government partly funded housing, the multiplier reduces to 1.51.

The WHO/UNICEF (2004) monitoring report acknowledges that without a sharp acceleration in the rate of progress, the world will miss the Millennium Development sanitation target by half a billion people. It is therefore, imperative to shift to alternative paradigms of more sustainable development.