

# Owning the Water Supply

## Bhutan Water Quality Partnership project



Nearly 70% of Bhutanese people live in remote villages and settlements, often several days walk from the nearest road, making it very difficult for them to access safe water. In addition, many rural people are migrating to urban areas in search of work, putting pressure on services and the environment, including the water supply. While diarrhoea is no longer the top killer of children under five years of age, it is still one of the country's top ten diseases.<sup>1</sup>

During the monsoon season, the residents of Balamna village in Haa Town, in the far west of Bhutan, suffer from chronic outbreaks of diarrhoea. The water supply had become contaminated due to a summer settlement that had been built above the village. The village representative, Tshering Dorji, explained: "We didn't realise all the illness was because of poor quality water. But when we went to the basic health unit, doctors told us our water was impure. All the sickness is because of water contamination."

During its tenth five-year plan, the Royal Government of Bhutan recognized that the supply of clean drinking water is one of the highest development priorities, both in relation to achieving the Millennium Development Goals, and also in terms of contributing towards Gross National Happiness. The government's policy is one of decentralization, with the government providing technical support and the community providing the labour.

"We want to make people feel that they own that water supply... the only way we can empower them to look after their own infrastructural facilities is to involve them right from the beginning," says the former Bhutanese Health Minister, Lyonpo Zangley. However, user group committees responsible for the water supply were not working effectively, lacking in skills, resources and appropriate technical support.



*A mother teaches her son about good sanitation and hygiene practices using WSP materials.*

### Project partners:

Royal Government of Bhutan; WHO; Australia Government; United Nations Children's Fund; Netherlands Development Organisation; Asian Development Bank; OPEC Fund for International Development; and local communities.



**World Health Organization**

Regional Office for South-East Asia

In 2005, the Water Quality Partnership (WQP) began implementation in Bhutan and five other countries in the South-East Asia and Western Pacific regions, with the aim of improving drinking water safety. The need for this valuable intervention is self-evident: for example, there are 1.1 million deaths due to diarrhoea annually in the South-East Asia Region. Research has shown that 88% of diarrhoeal diseases can be prevented through safe water, sanitation and good hygiene.<sup>2</sup>

**“ Worldwide, nearly 800 million people still do not have access to an improved water source. Billions lack access to safe water, reliably and continuously delivered in sufficient quantities. These are staggering numbers. ”**

**Dr Margaret Chan, WHO Director-General**

“Protecting water quality from catchment to the consumer is so important in the South-East Asia Region where centralized drinking water systems are becoming more common and population density is increasing,” says Anne Joselin (Unit Manager, Water and Sanitation, Department of Foreign Affairs and Trade, Government of Australia).

In October 2013, the WHO Director-General, Dr Margaret Chan, endorsed the *Budapest Water Summit Declaration*, which states that access to safe drinking water, sanitation and hygiene is fundamental to health, well-being and poverty eradication. Crucially, she recognized that realizing this potential requires collaboration from multiple agencies and different sectors of government, at levels ranging from grassroots demand to commitment by heads of state and government.<sup>3</sup>

The Bhutan Water Quality Partnership (WQP) Project is an exemplary model of such collaboration. The partnership aims to prevent diarrhoeal and other waterborne diseases by strengthening the capacity of local communities to provide safe drinking water. This is achieved through the development of water safety plans (WSPs), and training of government staff and local communities on implementing the plans effectively.

There is a clear and shared vision held by all partners: To provide safe drinking water to all Bhutanese people. The Government provides the political commitment and the infrastructure for the programme through the Ministry of Health and the Ministry of Works and Human Settlement. Local communities are integral to the project, having responsibility for managing water supply in their local area.

**“ The WSP Project in Bhutan is very timely as it is a complete package envisaged to address quality, quantity, and ownership issues with regards to local water supply system. This intervention is therefore expected to further improve the lives of people of Bhutan and help reduce the burden on the national health system, especially on the treatment of waterborne diseases which still tops the list of diseases as reported by the health centres annually. ”**

**Dr Dorji Wangchuk, Director-General,  
Department of Public Health,  
Ministry of Health, Bhutan**



The WHO *Guidelines for drinking water quality* provide the policy framework, and WHO provides technical support and training inputs with dedicated staff and consultants. The programme is financed through a grant from the Australian Government. Recently, the WQP in Bhutan has also attracted investment funding from the OPEC Fund for International Development (OfID) and has started working with the Asian Development Bank (ADB) on future funding for the urban sector. There is coordinated implementation with both SNV (Netherlands Development Organization) and the United Nations Children's Fund (UNICEF): SNV combines its sanitation programme with the WSPs, while UNICEF has been implementing WSPs in local schools. Collaboration with other development projects is imperative in order to ensure consistent messaging and approach, and to avoid duplication.

### WQP objectives in Bhutan:

- To implement WSPs in all 20 districts ('dzongkhag') of Bhutan.
- To develop national awareness and education programmes on the WSPs.



*Local villagers working together mapping the water supply system: the WSP process is all about empowering local communities.*

- To achieve full understanding of WSPs among water users, communities and policy-makers.

For rural WSPs, the partnership incorporates local communities as the key project implementers, the owners of the water. Training programmes include three full days of community interaction, facilitating the local members to understand and take ownership of the water supply scheme and its ongoing maintenance and management. All efforts are focused on ensuring that the local community can play their central role.

### Progress so far...

- Bhutan has conducted training workshops and implemented WSPs in seven urban towns (Phuentsholing, Haa, Gelephu, Punakha, Paro, Wangdue and Damphu) and 50 rural villages, including 10 schools. Nearly 40 people have been trained to build the capacity of water suppliers (local government for urban settings and communities for rural) on how to develop WSPs. These 40 have in turn trained approximately 600 members of WSP teams.
- Drinking water safety for approximately 100 000 people has been improved (Phase II Activity summary report, August 2011).
- A national steering committee for WSPs involving multiple government agencies has been formed.
- A fully customized WSP approach has been developed, including WSP training programmes and training packages/toolkits developed for both urban and rural national trainers.

“ Since it was established in 2005, the WHO and Australian government partnership for water quality and health has helped improve the safety of drinking water for more than six million people in the South-East Asia region. In Bhutan, the partnership has stimulated collaboration among various ministries, international agencies and donors to further invest in water supply infrastructure and management improvements which were identified as problematic during water safety planning process.”

**Dr Poonam Khetrpal Singh, WHO  
Regional Director for South-East Asia**



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*Ugyen Thinley from the rural water supply team (Public Health Engineering Division) talking with local villagers about the importance of community participation in water safety planning.*

Technical staff from WHO and the corresponding Government counterparts have worked closely since 2005 and have developed a relationship of mutual trust and respect, enabling them to effectively plan, implement and monitor the WSP programme together.

The partnership model and implementation has proved effective to date, as evidenced by the project continuation into phase III (2012–16) and the intention to expand WSPs to all districts

in Bhutan. The partnership model has also been extended to five other countries during phase II (Bangladesh, Lao PDR, Nepal, Philippines and Viet Nam) and plans are in place to scale up WSPs in a further six countries in phase III (Cambodia, Indonesia, Mongolia, Myanmar, Pacific Island Countries and Timor-Leste).<sup>4</sup>

- <sup>1</sup> Bhutan: Twin challenges of rural remoteness and creeping urbanization. WHO (SEARO and WPRO)/Australian Government.
- <sup>2</sup> Bhutan case study. Geneva; World Health Organization: 2011.
- <sup>3</sup> WHO Director-General address to Budapest Water Summit ([http://www.who.int/dg/speeches/2013/water\\_sanitation/en/](http://www.who.int/dg/speeches/2013/water_sanitation/en/), accessed 28 January 2015).
- <sup>4</sup> Three-minute film presenting the Asia Pacific WSP Network, including footage from Bhutan (<http://www.wspportal.org/asiapacific>, accessed 28 January 2015).

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#### **Partnerships, Interagency Coordination & Resource Mobilization**

World Health Organization  
Regional Office for South-East Asia  
World Health House, Indraprastha Estate,  
Mahatma Gandhi Marg, New Delhi 110 002, India  
Tel: +91-11-23309434 (direct), 23370804 (Ext. 26434)  
[www.searo.who.int/entity/partnerships/en/](http://www.searo.who.int/entity/partnerships/en/)  
Email: [sepir@who.int](mailto:sepir@who.int)



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