

# Water Safety Plans Deliver...

## ...Improved Health, Changed Behaviour

Nowahatti, BANGLADESH

### CONSUMERS / HOUSEHOLDS

Safer water, leading to:

- Better health
- Higher productivity
- Less expenditure on clinics and medicines
- Children miss school less; improved education outcomes
- Better knowledge about safe water practices, particularly household water treatment and storage
- Increased confidence in the water supply system



## ...Community Empowerment

Amarapuri, NEPAL

### COMMUNITIES

- Better knowledge about safe water processes; improved community sanitation and hygiene
- Stronger sense of ownership; partnership in monitoring, review and improvement
- Confidence to participate in water supply decision-making and deal with other stakeholders, particularly local government
- Poverty reduction through improved community health

Badal Muslim never thought much about how clean his family's water was. Their tube well was not maintained, and their frequent illnesses were a financial burden. Children missed school; adults were often too sick to work properly. But when a water safety plan programme was launched, Badal was trained in the importance of safe water and how water can become unsafe, as well as how to repair and maintain tube wells. Badal has now cleaned up the area around his well, and repaired the platform. He often stands there in the morning, suggesting that people clean their hands and pots before taking water, and cover the vessels as they carry them home. His proactivity has seen big improvements in water safety in his village, and much less sickness in his family.



Amarapuri's water supply serves 1530 households, and is managed by a Water Users' Group. In 2010, a water safety plan was developed, and the users' group quickly realised what a powerful tool this could be. They used the process to improve water supply management, operations and quality. Consumer satisfaction has increased, and the local health officer considers Amarapuri to be "waterborne disease-free". Members of the users' group hold regular workshops for local people on safe water storage and handling. The users' group was very active in making Amarapuri Open Defecation Free (ODF). It manages the water supply confidently, and is respected in the community.

# Connecting and Getting More Information

WSP Portal: [www.wsportal.org/ibis/water-safety-portal/eng/home](http://www.wsportal.org/ibis/water-safety-portal/eng/home)

WSP manuals and technical and health information:

[www.who.int/water\\_sanitation\\_health](http://www.who.int/water_sanitation_health)

Asia-Pacific Water Safety Plan Network: [www.wsportal.org/asiapacific](http://www.wsportal.org/asiapacific)

WSP Road Map: [www.who.int/water\\_sanitation\\_health/dwq/thinkbig\\_small.pdf](http://www.who.int/water_sanitation_health/dwq/thinkbig_small.pdf)



## Your Next Step

### WATER SUPPLIERS

Review the references above and contact your government or WHO to learn more and start developing water safety plans. Excellent training programmes are available.

Water safety plans are a powerful tool to improve the management and quality of your water supply.

### GOVERNMENT AGENCIES AND DONORS

As policy-makers and financiers, review the WHO/IWA Road map to support country-level implementation of water safety plans. Water safety plans will enhance the effectiveness of WASH investments and support, and ensure your money is spent where it is most urgently needed.

### CONSUMER GROUPS

Demand improvements in water quality, and use the water safety plan resources above to identify and communicate the most serious hazards and associated risks.

Clear expression of problems and confidence in suggesting solutions is a strong driver for change.

### HEALTH PROVIDERS

Use the water safety plan materials to help you in awareness-raising and surveillance, both to support communities and to influence your ministry. Your role in surveillance is a core component of water safety planning, and helps ensure that improvements in water quality are sustainable.

### I/NGOs

You may be supporting any of the groups above, and can encourage them to use water safety plans as a way of achieving their goals. The process of developing water safety plans brings together many stakeholders and contributes in multi-dimensional ways to better water services and better health.

### ACADEMIC INSTITUTIONS

Ensure that water safety plans become standard practice by including them in your curricula, providing training as part of continuing professional development and continuing to research their impacts. Curricula and training materials are already available, and more are being developed. This will ensure that the water sector is characterized by analytical risk-based thinking to improve drinking water quality and health.

With the Sustainable Development Goals focusing more on improving the quality, as well as accessibility, of drinking water (both in and outside the home), water safety planning will become even more important.



Regional Office for South-East Asia



World Health Organisation – South-East Asia Regional Office (SEARO)

Indraprastha Estate, Mahatma Gandhi Marg, New Delhi 110 002, India

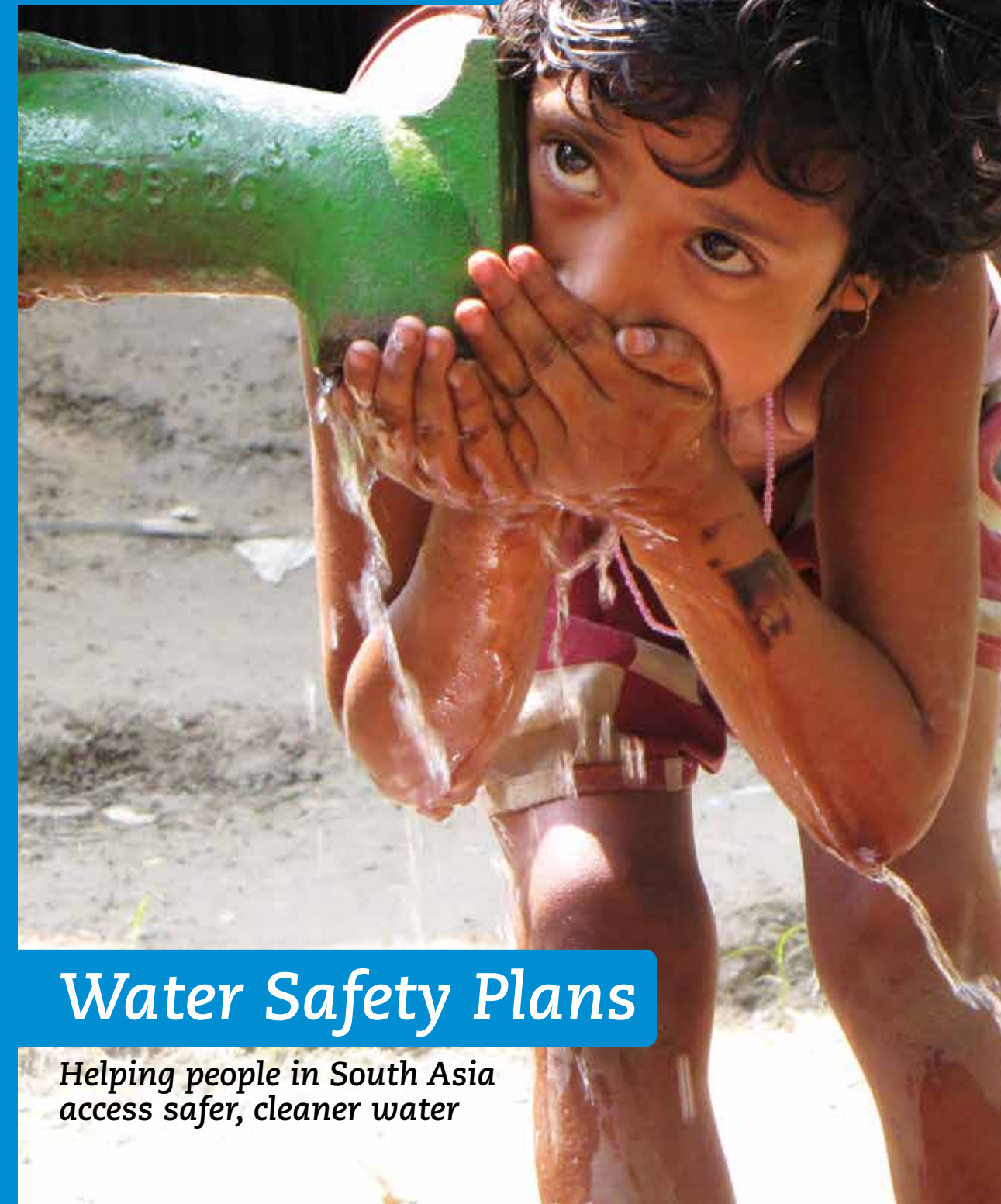
Web: [www.searo.who.int](http://www.searo.who.int) Phone: +91 11 2337 0804

© 2015



World Health Organization

Regional Office for South-East Asia



# Water Safety Plans

Helping people in South Asia access safer, cleaner water



# Water Safety Plans Defined

Around the world, 750 million people still lack access to safe water. Even in highly industrialised countries, there are sometimes major problems with drinking water quality. A water distribution system is very efficient at moving pathogens to large numbers of people! Traditional ways of ensuring water quality can be problematic.

A **water safety plan** delivers safer water to consumers by identifying potential risks in the water supply system all the way from the source to the point of use, and dealing with them before they become problems.

It does this by:

- Identifying hazardous events and assessing their risks from catchment to customer;
- Prioritising the risks, and then focusing on the highest risks;
- Providing a tool to manage the risks, using barriers to stop contamination of water.



Developing a **water safety plan** involves bringing together an interdisciplinary group of professionals, technicians and stakeholders, who get to know the water system thoroughly, and work out reliable, realistic and responsible ways to make sure the system works as it should. A good **water safety plan** will ensure that processes are in place to:

- Prevent contamination at the source;
- Remove or reduce contamination by treatment;
- Prevent re-contamination in distribution and handling.

**Water safety plans** can be developed for all contexts, from small, simple village water systems to large, complex metropolitan systems. The risk management approach is accessible for professionals and technicians from the health and water supply sectors, and for I/NGO staff, lay people and community members. In fact, the process of working together is a strong feature of water safety planning, and one of its key benefits.

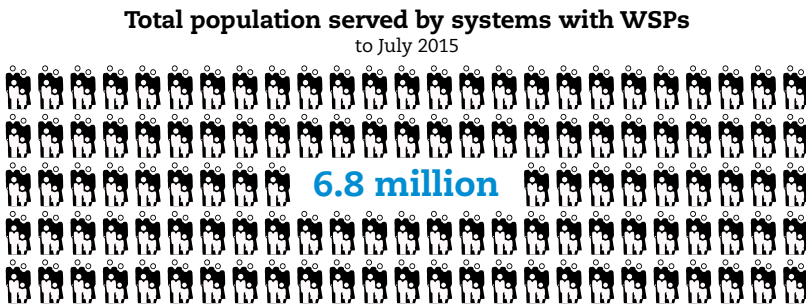
# Water Safety Plans Developed

## WHERE:

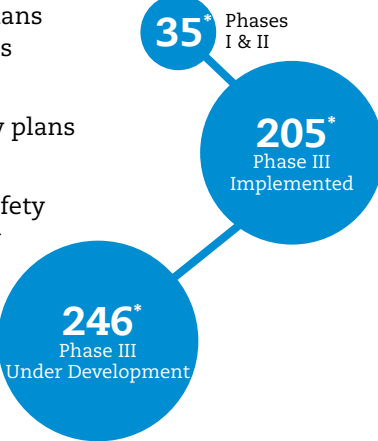
- Intensive support:** Bangladesh, Bhutan, India, Indonesia, Myanmar, Nepal, Sri Lanka, Timor-Leste
- Less intensive support:** Democratic People's Republic of Korea, Maldives, Thailand

## PHASES:

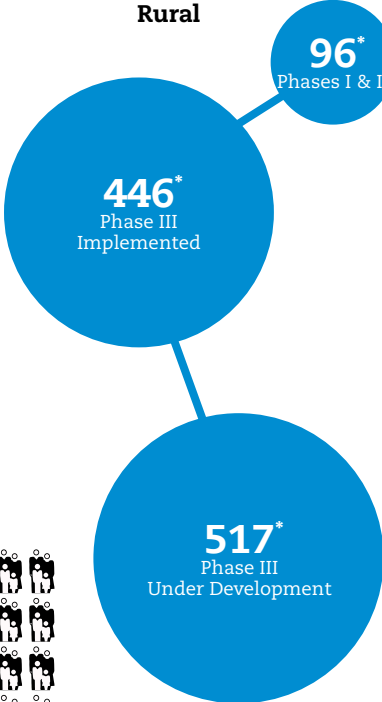
- Phase I, 2005–2009:** Piloting water safety plans and setting foundations
- Phase II, 2010–2011:** Scaling up water safety plans
- Phase III, 2011–2016:** Consolidating water safety plans for sustainability



WSPs Developed Urban  
35\* Phases I & II



WSPs Developed Rural  
96\* Phases I & II



\*Figures are cumulative, showing total numbers of water safety plans at the end of each phase.

# Water Safety Plans Deliver...

## ...Better Business for Water Suppliers

Management and staff better understand the water supply system. They

- clarify their roles and tasks required
- develop standard operating procedures and monitoring plans.

This leads to:

- more effective use of limited resources
- reduced operational costs
- improved communication and coordination with stakeholders
- greater confidence in the quality of water provided.

Water safety plans have informed Nagpur Municipal Corporation and Orange City Water (operators of the system) of the main risks to water quality, enabling them to upgrade water quality protection. **Standard operating procedures** have been developed, and systematic training has resulted in an **informed, dynamic staff** with a commitment to improve performance. **Water service revenues** are being allocated to maintenance and investment in water and sanitation services, giving stability to future funding. The water safety plan works with the non-revenue water project to create a **more cost-effective** water supply.



## ...Local to National Scale-up

Clearer risk-based targeting and justification of investment

- Observed improvements in water supply performance give confidence to multi-lateral and bi-lateral donors
- Anticipates and helps drive future risk-based regulatory agenda, including development of water quality standards and auditing of water supply services
- Greater confidence in the continuous and sustainable delivery of safe water

The water safety plan process in the small town of Tsirang highlighted deficiencies in practice that the Government quickly recognized were applicable across the country. A comprehensive response brought about district and national improvements in operational practice. **The OPEC Fund for International Development** recognized that water safety plans were a systematic way to achieve sustainable change, and funded projects in three districts. Other water suppliers developed strong water safety plans in order to compete for further support. This has the potential to improve water quality across Bhutan.