



## Project SWAN Safe Water and Nutrition

Globally, 780 million people are still without access to an “improved drinking water source”<sup>1</sup>. Although “access to safe drinking water” achieved its MDG target (Target 7: halving the proportion of people without sustainable access to safe drinking water and basic sanitation) in 2010, “improved drinking water sources” may not always provide water which is safe to drink. To supply “safe drinking water”, challenges still remain in developing countries.

A number of problems in community-managed safe drinking water supplies have been identified: improper facility design, improper treatment (use of chemicals) and operations to remove contaminants, poor performance of water committees, low community participation including low demand for safe drinking water, unaffordable water fees, and lack of follow-up support (spare parts, training and external technical assistance). These result in failure to meet WHO microbiological and chemical standards, and in an unsustainable water supply.

Together with the supply of safe drinking water, mothers’ food hygiene and safety practices and child feeding practices greatly impact children’s health in developing countries. The WHO estimates that waterborne and foodborne diarrhoeal diseases cause about 1.9 million children’s deaths each year<sup>2</sup>. Diarrhoea remains the second leading cause of death among children under five<sup>3</sup>. Furthermore, diarrhoea is a major cause of child undernutrition. Repeated diarrhoea episodes decrease nutrient absorption and in turn lead to worsening nutritional status<sup>3</sup>. Children suffering from undernutrition are more likely to suffer from diarrhea<sup>4</sup>.

For tackling safe water supply issues in developing countries, improvement of water quality alone would not be a complete solution for local communities. Through the appropriate operations of WTF and safe water supplies, community members are able to drink safe water and to use it for cooking in the home. Ensuring food hygiene and safety in the home links the prevention of diarrhea with undernutrition of family members. All of the above have

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<sup>1</sup> UNICEF/WHO, 2012, Progress on drinking water and sanitation 2012 update

<sup>2</sup> <http://www.who.int/foodsafety/en/>

<sup>3</sup> UNICEF/WHO, 2009, Diarrhoea: Why children are still dying and what can be done

<sup>4</sup> WHO, 2011, World health statistics 2011

always been closely related with people's health. Building up the capacity of local personnel and utilizing available community assets are important underlying factors for ensuring project sustainability.

ILSI Japan CHP began Project SWAN in 2001. Project SWAN features a unique concept, combining the water sector and the health/nutrition sector into one project, taking a cross-sector approach. Project SWAN aims to establish a sustainable safe drinking water supply and health communication model in rural areas through a community participation approach. Following three components are identified as important to accomplish: i) enhancing the knowledge of drinking water, food hygiene and nutrition at the household level, ii) optimizing the operation of water treatment facilities (WTF) and supplies of safe water, iii) establishing effective management systems which enable the sustainability of community level activities. Project SWAN combines a technical program with an IEC (Information, Education and Communication) program in the minds of the community even though these are completely different areas of expertise. The technical program works to improve water quality by rehabilitating existing community-managed piped water supply systems and by providing technical training about the operation of WTF, and the IEC program works to improve community members' knowledge of and behavior toward drinking water, food hygiene and nutrition.

ILSI Japan CHP expects the Project SWAN to accelerate the health gains of rural populations through safe drinking water supplies, food hygiene and safety, and nutrition-related behavioral changes.

Project SWAN initiated in Vietnam since 2001 and now involved Indonesia.

**Activity up-to-date**

Vietnam SWAN2: IEC implemented in communes

Indonesia: A running start

**Achievements to date**

Vietnam SWAN1

Vietnam SWAN2

Indonesia