# Access to Safe Water for the Bottom of Pyramid: Strategies for Disseminating Technology Research Benefits

# Organised by The Development Alternatives Group

In collaboration with the

Department of Science and Technology, Gol

and

UK Department for International Development

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National Institute of Advanced Science, Bangalore

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## BACKGROUND

Access to clean water is the foundation of development. Food, health, hygiene, habitat, education, employability, productivity are all dependent upon access to water. Without clean water, none of these is possible and poverty is inevitable. Over the years, India has made improvements to both the availability and quality of municipal drinking water systems. However the exponentially growing population has stressed existing water systems and resources. The pressures of urbanization have stretched government solutions. Rural areas are still left out. Many water sources are contaminated with both bio and chemical pollutants, and over 21% of the country's diseases are water-related. Nanotechnology has a large scope in terms of taking ameliorative action in this scenario.

The Department for International Development (DFID) leads the UK Government's fight against global poverty. To take this agenda forward DFID is establishing a research programme to help engage with those new and emerging technologies with the potential to impact on poverty in a way that enables developing countries to take advantage of what they have to offer.

Through this research, the Development Alternatives group (DA) seeks to identify key challenges and barriers that may reduce the impact of Nanotechnologies for providing clean drinking water reaching the underprivileged in developing countries, its possible environmental implications and remedial measures.

#### WHY THIS WORKSHOP

The workshop will primarily be a sharing and learning event on the current concepts and literature on nanotechnologies for water purification in India and the world. The purpose of the workshop is to initiate dialogue with the participants to:

- A. Arrive at a consensus on market and policy barriers affecting large scale roll out of nanotechnologies in the water sector to the bottom of pyramid market in India
- B. Prioritise Action and Initiatives to promote nanotechnologies in the water sector while attaining poverty alleviation and MDGs in India

## **KEY QUESTIONS**

- A. What parameters enhance the acceptability of a technology?
- **B.** What are the main barriers/ gaps / challenges that impede widespread market dissemination of nanotechnologies in the water sector?
- C. What market drivers can fast track acceptance of nanotechnologies in the water sector?







 Perceived roles of different stakeholders – public and private sectors, and Donors

# **EXPECTED OUTCOMES**

The primary expected outcomes of the workshop will be:

- A. Prioritized list of nanotechnologies in water sector
- B. Prioritized list of key market barriers/ gaps for nanotechnologies in water sector
- C. Prioritized action and initiatives to achieve large spread roll out of water nanotechnologies in the market.
- Enlightened group of stakeholders private sector, public sector and donors

#### **ABOUT DST**

Department of Science & Technology (DST) was established in May 1971, with the objective of promoting new areas of Science & Technology and to play the role of a nodal department for organising, coordinating and promoting S&T activities in the country. DST, in October 2001, launched the Nano Science and Technology Initiative (NSTI). Currently, the Department of Science and Technology is the nodal agency for implementing the Nano Mission, launched by the Government of India in May 2007 following the NSTI. The Nano Mission is an umbrella programme for capacity building which envisages the overall development of this field of research in the country and to tap some of its applied potential for nation's development.

#### ABOUT DFID

DFID is the part of the UK government that manages Britain's aid to poor countries and works to get rid of extreme poverty. DFID is working to reach the Millennium Development Goals (MDGs), the international targets agreed by the United Nations (UN) to halve world poverty by 2015. DFID works with governments of developing countries as well as charities, businesses and international bodies, including the World Bank, UN agencies and the European Commission. All our partners share our ambition to achieve the MDGs.

#### ABOUT DEVELOPMENT ALTERNATIVES GROUP

The Development Alternatives Group, often referred to as DA Group, comprises of the Society for Development Alternatives (DA), Technology and Action for Rural Advancement (TARA), and its social enterprises. Established in 1982, with the overall mandate of creating sustainable livelihoods in large numbers, the DA Group activities broadly cover the three primary areas that underline any form of sustainable development process: the design and large-scale dissemination of appropriate technologies, rationale environmental management systems, and equitable people oriented institutions and policies.



