

**TITLE: CAPACITY BUILDING IN DEVELOPING  
COUNTRIES AS THE AFTERMATH OF  
NATURAL DISASTERS**

**SUB-TITLE: SOUTH – SOUTH SUPPORT INITIATIVE**

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## **ABSTRACT**

On 26 December 2004, an earthquake below the Indian Ocean triggered a tsunami that affected among others India, Thailand, Malaysia, Indonesia, Sri Lanka, Seychelles, Maldives, Somalia and Tanzania. Sri Lanka, despite its distance from the quake, was devastated by the disaster – with more than 30 000 people dead and almost three quarters of its coastline scoured.

The South African Water Sector (SAWS) was to offer assistance to two of these tsunami-stricken countries: Sri Lanka and Maldives. More specifically, the aim was to achieve the following:

- 1) To enable the accelerated and more efficient roll-out of donor funds in tsunami-stricken countries for the obvious benefit of communities which have lost so much;
- 2) Strive to leave behind more effective and efficient water management governance structures in those countries; and
- 3) To build/improve bilateral relations between South Africa and the relevant countries, especially in the area of water management.

It has been our policy throughout the process that we can not and will not prescribe to these countries on how they should progress matters. We have been aiming to share our experience and insights which the SAWS have gained over the past 1, 5 decades during our endeavours to improve our inherited water management problems, inter alia utilising relatively large amounts of donor funds. Our main focus is, and was, on empowering and building capacity.

We should also maybe mention that, whilst the initial objectives of the SAWS reconnaissance teams were strongly focused on the 1st SAWS objective mentioned above, our actual involvement in both countries was very much in respect of the 2nd objective. This shift in focus was requested by the water management sectors of those countries.

As a link to the main theme of the recent 4<sup>th</sup> World water Forum held in Mexico in March 2006 `` Water for Growth and Development ``, it was decided in September 2006 to implement a pilot project at Hambantota (Sri Lanka). The Water for Growth and Development (W4G&D) represents the latest in international best practice and forms the basis of considerable recent breakthroughs and positive development in SAWS.

## **1. INTRODUCTION**

On 26 December 2004, an earthquake below the Indian Ocean triggered a tsunami that affected among others India, Thailand, Malaysia, Indonesia, Sri Lanka, Seychelles, Maldives, Somalia and Tanzania. Sri Lanka was, after Indonesia, the country hardest hit by the tsunami. The Tsunami Support Programme was quickly launched soon after the disaster in order to provide relief to those countries in need of water, supplies and reconstruction and development of their infrastructure.

The areas hardest hit in terms of deaths and displacements from homes were in the northern, eastern and southern provinces. Sri Lanka therefore requires specific professional expertise to assist in the administration of the many ways in which they use water. This includes the use of boreholes and wells, river abstraction, water purification, sewerage effluent treatment, septic tank and dry sanitation systems, as well the rehabilitation of water and sewerage networks.

Presentations on the topic by SAWS (South African Water Sector) culminated in a proposed pilot in Hambantota to demonstrate Water for Growth and Development principles, the correct way of implementing coordinated and integrated planning to focus resources to priority needs for growth and development in accordance with international best practice. SAWS is a loose association of water sector organisations which responded to the Minister's of Water Affairs and Forestry call for interested parties to sponsor human resources to the joint disaster relief programme from South Africa.

## **2. INTERNATIONAL APPROACH TO WATER FOR GROWTH AND DEVELOPMENT**

Water has always played, and continues to play, a central role in human societies. Water is a source of life, livelihoods and prosperity. It is an input to almost all production, in agriculture, industry, energy, transport, by healthy people in healthy ecosystems. Water is also a cause of death, devastation and poverty. It is a force for destruction, catastrophically through drought, flood, landslides and epidemic, as well as progressively through erosion, inundation, desertification, contamination and disease. This destructive aspect of water, as a consequence of its extraordinary power, mobility, indispensability and unpredictability, is arguably unique

Water is an essential ingredient to secure growth and development resulting in economic prosperity. Water for growth and development means that water and related services are a part of the equation of economic, social and environmental development and are essential ingredients of national strategic macro-economic decision-making.

International experience and benchmarks indicate that an improvement in water supply, sanitation and in water resource management boosts a country's economic growth and greatly contributes towards poverty eradication.

Are investments in water management and development a cause of growth, a prerequisite to growth, or a consequence of growth? In different countries, and even in the same country at different locations and points in time, the answers to all of these questions may be yes. Water provides a range of productive opportunities, so investments in water for agriculture, hydropower and industry, for example, can be seen as drivers of growth. Water management and development can also serve to

protect societies from the destructive impacts of water, and meet basic human needs – serving as a prerequisite for growth. And effective water management can be seen as a consequence of growth where broader progress in governance, institutions and capacity have led to superior performance in developing and managing water infrastructure and institutions

There are various international studies that demonstrate the importance of considering WfGD as a key ingredient in economic growth:

- According to the Chinese government, water pollution cost the country 1.3% of GDP in the 1990's. A 0.3% increase in investment in household access to safe water is associated with a 1% increase in GDP.
- In India, a country characterized by its monsoon - extreme intra-annual rainfall variability, initial investments in water infrastructure had massive regional impacts with large multiplier effects on the economy. There are also direct correlations between investments in irrigation and significant declines in poverty – irrigated districts average 25% poverty rates against 70% poverty rates in unirrigated districts, and irrigation is broadly credited with sustaining the green revolution in India. The benefits of improved water resources management and institutions are similarly significant. In Tamil Nadu, for example, robust management institutions that would allow a “flexible allocation” of water between rural and urban uses could increase the state’s agricultural production by 20% in 20 years, relative to fixed allocations. De-linking the economy from the monsoon, however, with a combination of infrastructure, water management and economic diversification, has long been a recognized challenge. India’s Finance Minister said in the 1980s “every one of my budgets was largely a gamble on rain.”
- The Kenyan government has indicated that the 1997-98 floods cost the country 11% of GDP, while the 1999-2000 drought cost the country 16% of GDP. This translates to a direct long-term fiscal liability of 2.4% GDP per annum.
- Ethiopia has less than 1% of the reservoir water storage capacity per capita of North America to manage that variability. Economy-wide models incorporating hydrological variability show that projections of average annual GDP growth rates in Ethiopia drop by as much as 38% as a consequence of this variability. In Ethiopia, so sensitive is economic growth to hydrological variability that even a single drought event within a twelve year period (the historical average is every 3-5 years) will diminish average growth rates across the entire 12-year period by 10%. The effects of hydrological variability emanate from the direct impacts of rainfall on the landscape, agricultural output, water-intensive industry and power production. Because Ethiopia lacks the water resources infrastructure and institutions to mitigate hydrological variability directly, and it lacks the market infrastructure that could mitigate the economic impacts of variability by facilitating agricultural trade between affected (deficit) and unaffected (surplus) regions of the country, impacts are transmitted and amplified through input, price and income effects onto the broader economy. The overall impact is that Ethiopia’s economic growth is tied tightly to the rains.
- As a final illustration, a study commissioned by the governments of Norway and Sweden found that poor countries with improved access to clean water

and sanitation services enjoyed an annual average growth of 3.7%, while other poor countries with the same per capita income but without improved access to clean water and sanitation services had an average annual growth of 0.1%.

From the above it is clear that water is a strong driver to secure economic growth and development.

### **3. WATER FOR GROWTH AND DEVELOPMENT IN SRI LANKA**

An informal think tank has been established comprising specially selected key individuals in the fields of integrated water resource and water demand management, planning, policy and strategy. The group meets fairly regularly to deliberate on various aspects of integrated water resource management and additional interest group on this topic has also been formalised by the Institute for Engineers in Sri Lanka.

The two main contributions of the SAWS programme to support the Sri Lanka water sector after the tsunami have been to serve as an instrument to realign the water sector for the challenges it has to face, and help equip it to have the necessary communication tools to achieve the results in an effective manner. A Memorandum of Understanding has been drawn up to officially link South Africa and Sri Lanka with each other in a mutually beneficial manner for both water sectors in future.

A cabinet paper has also been drafted for use by the Minister in Sri Lanka, towards having the goals of the Sector Wide Approach Programme and Water for Growth and Development formalised in Sri Lankan legislation.

The vision that evolved was to have a water sector model for integrated management of water resources, that replicates, eventually country wide, the practices of farmer families who are successful in water management at the household level. In Kapukinissa several families are part of an official pilot, with the wider community gradually adopting their model and adjacent communities being encouraged to do the same across Hambantota, until other provinces can also be part of the success witnessed on this pilot.

The project will have to be actively supported for several years with managerial skills and money before it will have sustainable momentum. A donor or financier needs to urgently be found to sustain the initiative, for which SAWS has provided seed capital to date, until it can sustain itself. The projected period for which support will be needed is likely to be about seven years, but at least four years.

### **4. CONCLUSIONS**

After many years of discussion, research and advocacy through large international water forums and national dialogues, most countries in the world have adopted water policies that promote more holistic and integrated approaches to water management to meet such challenges.

### *From Integrated Water Resource Management to Water for Growth and Development*

It is a comprehensive approach to improve the planning , conservation, development and management of water, forest,land and aquatic resources within a river basin context. It aims to maximise economic benefits and social welfare of water in an equitable manner , withut compromising the sustainability of vital environmental systems. It also considers water quantity and quality issues together, as well as the conjuctive managemnt of rivers, lakes and ground waters. In many developing countries, these are still handled by different agencies who conduct their work independently. This certainly needs to change to create efficiencies and effectiveness in the sector.

In response to the needs of many developing countries, there is a need for water investments to be made as a medium-term strategy.

Under such support, the following aspects will need to be addressed :

1. Rural water services livelihoods among rural communities
2. Urban water services growth in cities
3. Integrated Water Resource Management / Water for Growth and Development.

When addressed, these aspects will aim to provide safe drinking water and improved sanitation, better irrigation and drainage services and reduced flood risk for millions of the economically disadvantaged in developing countries.

### **5.REFERENCES AND ACKNOWLEDGEMENTS**

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