

Final Thematic Paper
on
Water and Sanitation Sector
(Thematic Paper no. 2)

Joint Evaluation of the Ghana – Denmark
Development Co-operation
from 1990 to 2006

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Submitted by

Particip GmbH
Your Partner in Change
Merzhauser Straße 183
D - 79100 Freiburg
Germany
Tel.: +49 (0)761 790 740
Fax: +49 (0)761 790 7940



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List of acronyms

AAK DA	Abora Asebu Kwamankese (AAK) District Assembly
CB	Capacity-building
CBRDP	Community-Based Rural Development Programme
CD	Capacity Development
CHRAJ	Commission on Human Rights and Administrative Justice
CIDA	Canadian International Development Agency
CONIWAS	Coalition of NGOs in the Water and Sanitation Sector
CWSA	Community Water and Sanitation Agency
DA(s)	District Assembly (ies)
Danida	Danish International Development Assistance
DCD	District Co-ordinating Director
DCE	District Chief Executive
DFID	Department for International Development Co-operation
DFO	District Finance Officer
DKK	Danish Kroner
DP	Development Partner
DSS	Decision Support System
DWD	District Works Department
DWSP	District Water and Sanitation Plan
DWST	District Water and Sanitation Team
EC	European Commission
EHA	Environmental Health Agent
EHO	Environmental Health Officer
EHU	Environmental Health Unit
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
EQ	Evaluation Question
ESA	External Support Agency
GDP	Gross Domestic Product
GES	Ghana Education Service
GG	Good Governance
GGHR	Good Governance and Human Rights
GHS	Ghana Health Service
GNI	Gross National Income
GOG	Government of Ghana
GPRS	Ghana Poverty Reduction Strategy
GPRS II	Growth and Poverty Reduction Strategy
HIV/AIDS	Human immunodeficiency virus/Acquired immune deficiency syndrome
HR	Human Rights
HSD	Hydrological Services Department (of MoWRWH)
IMF	International Monetary Fund
IWRM	Integrated Water Resource Management
KEEA DA	Komenda Edina Eguafo Abirem District Assembly

Kfw	Kreditanstalt für Wiederaufbau
KNUST	Kwame Nkrumah University of Science and Technology
KVIP	Kumasi Ventilated Improved Pit latrine
MDBS	Multi Donor Budget Support
MDG	Millennium Development Goals
MFA	Ministry of Foreign Affairs
MoLGRDE	Ministry of Local Government and Rural Development
MoFEP	Ministry of Finance and Economic Planning
MoWH	Ministry of Works and Housing
MTEF	Medium-Term Expenditure Framework
MoWRWH	Ministry of Water Resources Works and Housing
NCWSP	National Community Water and Sanitation Programme
NDAP	National Decentralisation Action Plan
NDPC	National Development Planning Commission
NEPAD	New Partnership for Africa Development
NGO	Non Governmental Organisation
NJMA	New Juaben Municipal Assembly
NWP	National Water Policy
O & M	Operations and Maintenance
ODA	Overseas Development Assistance
OECD/DAC	Organisation for Economic Co-operation and Development
PHC	Primary Health Care
PMMS	Programme Monitoring and Management Support
PO	Partner Organisation
PRSP	Poverty Reduction Strategy Paper
PS	Private Sector
RCC	Regional Co-ordinating Council
RDE	Royal Danish Embassy
RG	Reference Group
SCBC	Sector Capacity-building Component
SHE	School Health Education
SHEC	School Health Education Component
SHEP	School Health Education Programme
SPS	Sector Programme Support
SWAp	Sector Wide Approach
TA	Technical Assistance
TOR	Terms of Reference
TP	Thematic Paper
TREND	Training Research and Networking for Development
Watsan	Water & Sanitation
WB	World Bank
WHO	World Health Organisation
WRC	Water Resources Commission
WRIS	Water Resources Information System
WRMA	Water Resource Management Account
WSDB	Water and Sanitation Development Board
WSS	Water and Sanitation Sector
WSSPS	Water and Sanitation Sector Programme Support

Summary

The Government of Denmark has directly supported water supply and sanitation in Ghana since 1993, and water resources management since 1997. Over that period a total amount of DKK 991.02 million has been committed to the sector through different programme and project support, of which 75.4% has already been expended. The Volta Project was the first programme initiated that was eventually merged into a Phase I of a Sector Programme Support (SPS) to water supply and sanitation implemented during the period from 1998 to December 2003. The Water Supply and Sanitation Sector Programme Support Phase II (WSSPSII) started in January 2004 with the overall objective of contributing to a sustainable reduction of poverty through improved water supply, sanitation and hygiene education as well as increased knowledge and better use of the water resources in Ghana. This support is expected to end in 2008.

The Danish-funded programmes clearly support Ghana's policies, strategies and programmes from the GPRS, which builds on international development targets such as the MDGs and the Johannesburg Declaration. The programmes contribute to the achievement of these goals and are, as such, relevant. The Government's objectives are ambitious and many of the policies still need to be made operational. Implementation modalities by Danida are intended to strengthen the decentralisation process.

Water supply in the rural communities which Danida focuses on has progressed steadily. However, the level of investment required to ensure the meeting of the country targets is far higher than the total investment in the sector. Thus while for its own specific intervention Danida may be considered effective, the **effectiveness** in tackling the overall water and sanitation problems is very limited. Danida's support has been acknowledged at all levels to be effective in its delivery mechanisms, and implementation has followed agreed paths.

In terms of **capacity-building**, Danida has been instrumental in supporting the establishment of the Water Directorate which is gradually asserting its influence on the different players in the sector. The long awaited sector policy that recently came into effect has only materialised as a result of the unflinching support received from Danida who have provided not only all the funding needed in the process chain for policy development but also have supported the establishment of the Water Directorate. Delivery of support for the development of capacities within the various WRIS institutions as well as WRC and institutional capacity-building of the CWSA has been very effective and the enhanced performance of these institutions has to a very large extent been due to Danida.

Effectiveness in respect of cross-cutting issues has been mixed as the strategies have in some cases not evolved into action plans and activities at project level, and in particular promotion of good governance and human rights is very modest in the programming in the sector. However, gender, HIV/AIDS and to a lesser extent environment are clearly mainstreamed into the sector programme support.

In Danida's Sector Programme Support (SPS) there is, as yet, limited activity-based budgeting and cost analysis, which is a prerequisite for monitoring effectiveness and efficiency through unit costs. So assessment of **efficiency** has been constrained. Nonetheless, qualitative assessments were made of the efficiency of delivery.

Support by Danida in the sector is considered highly efficient. The development of sector-wide monitoring framework and support through the PMMS component provides a good basis for improved efficiency. Implementing partners interviewed at various levels were almost unanimous in appreciating Danida's highly efficient mode of support compared with some other sector donors. Support in terms of the capacity-building and training usually provided as an integral part of Danida interventions assures the higher efficiency. Flexibil-

ity in the disbursement mechanisms allows for more efficient implementation of projects. Budget allocations are made on the basis of agreed proposals and accounting for disbursement is also efficient.

Investment in the WSS on the whole falls below what is needed to achieve set targets. The bulk of investments come from development partners (DPs). Danida and other DPs, have been instrumental in increasing the capacity at all levels in the WSS sector from MoWRWH to the communities.

In specific communities the **impact** of water supply is quite apparent, ranging from reduced time spent in fetching water to eradication or reduced incidence of water-borne diseases. However, the resurgence of some water-borne diseases in Ghana recently is a pointer to less than desired impact in water supply.

The communities support WATSAN committees, and Danida has with success been active in creating and supporting community-level WSS organisations. But their **sustainability** is in some cases a cause for concern.

Danida has introduced conceptual innovations, for example in IWRM and the SHEP component, but there is a need to develop innovative concepts or a new approach to household sanitation in rural areas. In a number of areas, continued support is required to define sustainable systems that can function without full external financial support.

With respect to IWRM, sustainability is currently assured with the creation of the WRMA and greater capacity within the institutions.

Promoting harmonised practices is considered a prerequisite for a strategic, cost-efficient and effective management of development resources for poverty reduction. In the WSS sector, such practices have been implemented only to a limited extent, although it is reported that there is a degree of co-ordination between the development partners in the sector. As a co-leader with DFID of the water and sanitation sector group, Danida is promoting coherence and better harmonisation, even though this is far from being achieved.

Decentralisation is at the centre of Danida intervention. Decentralisation is a high priority for government but actual practice lags behind due to a lack of funding and a shortage of qualified staff. However, district assemblies are the delivering authorities for water and sanitation, and Danida is supporting the process at an accelerated rate.

Procurement procedures for local goods and services are well aligned to national procurement rules.

Overall, the Danish support to the Water and Sanitation Sector in Ghana has been consistent with national policy, many policy and institutional development issues have been addressed, and the rate of implementation has increased. In the WSS, Danida has shown itself to be a flexible and reliable partner, providing significant support not only in the provision of water facilities but also in commitment to capacity-building in the sector. Danish support has made significant contributions to access to clean water (and to a lesser extent sanitation). Danida is a pace setter in the implementation of decentralised water supply and private sector involvement in the construction of water and sanitation facilities. In terms of Integrated Water Management, the Danish support remains to date the only significant investment in that direction

Some conclusions and *recommendations* emanating from the study include the following:

- Government investment in the sector remains very low. The 5% level of investment is inconsistent with the oft-stated government position of water and sanitation being a priority sector. *A refocusing and prioritisation of water and sanitation as a means to poverty reduction is required from GoG.*

- Decentralised implementation of water delivery is inevitable for effectiveness but the current capacities at DA level presents a major challenge for delivery. *However, a clearly thought out capacity-building programme for District Works Departments (DWD) and the other technical agencies should be designed as part of total decentralised delivery through the DAs. A programme of reorientation of key DA personnel such as the DCD, the DFOs and the Planning Officers is needed.*
- CWSA is playing a more facilitating role in the implementation of programmes in the sector. However, this is sometimes frustrated by the lack of completely harmonised approaches in the sector by external support agencies. *Harmonisation of approaches across the sector should be promoted as it would assist the effectiveness of CWSA in playing a more facilitative role. GoG (the Water Directorate) needs to take leadership in this area.*
- With the setting up of the Water Directorate, the approval of the National Water Policy and the steps being taken towards clarifying the policy framework and implementation strategies, a better co-ordinated sector is expected. This will provide opportunities for more sector-wide support. *Effort should now be channelled into accelerated implementation of the national water policy. Danida should provide support for the roll-out of the policy. The Water Directorate should provide leadership in developing a SWAp in the sector based on that policy*
- Sanitation coverage is very low throughout Ghana and disposal of solid waste remains a tremendous challenge to all DAs in Ghana. Danida's investment in the sector does not reflect its commitment to health targets. *A national policy framework is needed for the implementation of interventions in environmental sanitation and innovative concepts for household sanitation in particular should be developed. Having been subsumed under the water sector, sanitation receives less than adequate attention and funding, and it is recommended that in future programmes, sanitation be considered on its own merit and treated as a sector*
- The relationship between water and sanitation provision is currently not systematically studied in Ghana. The expected impacts are all based on as yet untested assumptions. *There is a need to investigate how the overall health objective can be achieved through an integrated approach to WSS.*
- The model of support to the Water Directorate and also the WRC, in which the establishment of the Water Resource Management Account has increased sustainability, is a worthy example of how institutional strengthening of public bodies could improve performance and create synergies in the sector. *Lessons learnt from the support to WRC and the establishment of the WRMA should be applied to helping the Policy Directorate of MoLGRDE create an innovative funding mechanism to sustain it.*
- CONIWAS has the potential to help promote the optimal contribution of NGOs to sector development. The organisation could also play a role in checking the increasing incidence of non-compliance with the National Community Water and Sanitation Programme by NGOs. However with limited resources from member contributions and the PMMS, CONIWAS is unlikely to meet its expected mandate. *Core funding for the coalition is needed. Sector-wide programme support should include the NGO sector as an important ally in the achievement of the sector target. Other donors should also be encouraged to provide funding for the coalition.*
- GGHR as cross-cutting issues are not specifically targeted in programming. They are only assumed to be effected through decentralisation and other delivery mechanisms. *The increasing importance of accountability and good governance in general requires that specific indicators be developed and measured during implementation.*

1 Introduction

The Government of Denmark has directly supported water supply and sanitation in Ghana since 1993, and water resources management since 1997. Over that period a total amount of DKK 991.02m has been committed to the sector through different programme and project support, of which 75.4% has already been spent.¹ The Volta Project, the first programme initiated, was eventually merged into a Phase I of a Sector Programme Support (SPS) to water supply and sanitation implemented during the period 1998 to December 2003. The Water Supply and Sanitation Sector Programme Support Phase II (WSSPSII) started in January 2004 with the overall objective of contributing to a sustainable reduction in poverty levels through improved water supply, sanitation and hygiene education as well as increased knowledge and better use of water resources in Ghana. This support is expected to end in 2008.

Table 1: Summary of Danida commitments in the Water and Sanitation Sector 1993 - 2008

Name of Programme	Period	Appropriations DKKm	Expenditure DKKm
Volta Project	1993-2003	370.9	297.02
Water Resources Institutional Support	1997-2002	51.5	51.93
Water Sector Programme Support I	1997-2003	193.6	175.9
Water Sector Programme Support II	2004-2008	371.1	218
Support to interim capacity-building in CWSA	1997-1998	3.92	4.17
Total		991.02	747.02

Source: Danish Ministry of Foreign Affairs / NDPC; Final Report. Pre-Study of Ghana Country Evaluation, May 2007

Several sector-wide as well as component-specific studies and evaluations were carried out during the period of the interventions. This report examines perceptions of the impact of Danida's interventions in the water sector since 1993 and is drawn from the studies mentioned, existing documents, key informant interviews, community meetings and field observations carried out between 7 July and 12 September 2007. The list of persons met during the period is provided in Annex 8.1

2 Framework of support to the sector

2.1 Government's sectoral policies

2.1.1 The development policy framework

The Government of Ghana's development policy is underpinned by decentralised governance as enunciated in Chapter 20 of the 1992 Constitution, which indicates that "(1) Ghana shall have a system of local government and administration which shall, as far as practicable, be decentralised." Subsequent Acts of Parliament have translated this requirement into structures and regulatory frameworks that support implementation of the decentralisation policy².

¹ See Annex for Overview of Development Partners' Support to the Water and Sanitation Sector in Ghana

² The promulgation of the Local Government Act (1993) Act 462, Act 463, National Development Planning Commission Act (1994) Act 479, National Development Planning systems Act 1994 Act 480 and other legis-

Poverty reduction is also a major development objective in Ghana. In this vein, various policy initiatives have been developed in the last decade to address poverty as the main thrust of the general development agenda. First, there was the Ghana-Vision 2020, with its first medium plan of 1997-2000. This was followed by the Ghana Poverty Reduction Strategy (2003 – 2005) – GPRS I and the current Growth and Poverty Strategy (2006-2009) – GPRS II. In all these documents water is an important developmental issue that features as a key focus for poverty reduction.

In Ghana Vision 2020, water is considered as “essential to human life and the search for good quality water supplies ... a fundamental part of human existence.” The policy programme objectives developed under the programme included:

- i. providing basic water and sanitation services to rural communities
- ii. ensuring sustainability of facilities for water production and sewerage maintenance
- iii. improving health through the drastic reduction and ultimate eradication of water-borne diseases³

Ghana’s Poverty Reduction Strategy (GPRS) 2003-2005 - An Agenda for Growth and Prosperity - was published on 19 February 2003. One of the assumptions is that increasing access to potable water and sanitation is a key condition for improving health and sustained poverty reduction. Ghana subscribes to the Millennium Development Goals (MDGs), including (Target 10): “Reduce by half the proportion of people without access to safe drinking water” by 2015. Targets for sanitation derive from the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg.⁴ Strategies for providing safe water focus on improving access in rural, peri-urban and un-reached poor urban areas. The emphasis was on:

- i. safe water in rural districts;
- ii. effective management of urban water systems;
- iii. safe liquid and solid waste management; and
- iv. capacity-building for environmental sanitation.

The GPRS II represents comprehensive policies to support growth aimed in general at accelerating Ghana’s growth into a middle-income economy by 2015 - The GPRS II states that: “Improving access to potable water and sanitation is critical to achieving favourable health outcomes, which in turn facilitate economic growth and sustained poverty reduction. In particular improvement in access to safe water enhances school attendance, reduces women’s workload and frees them to participate effectively in economic empowerment and governance activities. On the other hand, adequate sewerage and sanitation facilities are important for environmental cleanliness and prevention of many infectious diseases such as diarrhoea and dysentery”⁵. Thus, the main strategies for the Water and Sanitation Sector in the GPRS II are:

- i. accelerate the provision of safe water in rural and urban areas;
- ii. accelerate provision of adequate sanitation; *and*

lative instrument has given meaning to the decentralised governance envisaged.

³ Government of Ghana, National Development Planning Commission, ‘Ghana-Vision 2020; The First Medium-Term Development Plan (1997 – 2000). Accra, July 1997.

⁴ Udenrigsministeriet / Danida: Johannesburg-handlingsplan. November 2004.

⁵ Government of Ghana, National Development Planning Commission; Growth and Poverty Strategy GPRS II, (2006-2009) – Accra, November 2005

iii. improve environmental sanitation

Thus, in the general development framework of Ghana water and sanitation is a key focus for which development assistance has been channelled

The magnitude of the investments required to provide safe water and improved sanitation facilities for rural communes and small towns was determined in the Strategic Investment Plan 2005 – 2015 (SIP), published in August 2004 by MoWRWH.

2.1.2 Water Sector Policy initiatives

The Water and Sanitation Sector (WSS) has undergone several reforms since the beginning of the 1980s, when the Government of Ghana introduced a number of policy reforms that were specially intended to improve efficiency in rural, urban and irrigation water as well as to attain some measure of environmental protection and conservation. The most significant of these reforms though have focused much more on improving water supply to rural Ghana.

In the early 1990s the Government of Ghana undertook an extensive review of national rural water supply and sanitation sector policies, strategies and programmes culminating into the adoption of a Rural Water Supply and Sanitation Sector Strategy and Action Plan (at the Kokrobite Conference, in February 1991). The highlights of the strategy, which became the bedrock of the intervention strategy in the sector, included the following:

- community management of services, implying ownership and control, as a central element of the strategy;
- a central role by District Assemblies in supporting community management;
- a key role by government in promoting service provision;
- a role for the formal and informal private sector in provision of goods and services;
- ensuring equity and widespread coverage through targeted subsidies supporting basic service levels;
- a demand-driven programme, with self-selection and clear commitment by communities to enhance sustainability; *and*
- a special focus on women as users of water as well as planners, operators and managers of community level systems.

Subsequently, the National Community Water and Sanitation Program was launched 1994 to provide the framework for intervention in the sector. The key targets of this programme were to:

1. reduce the population without access to safe water by 50% by 2015;
2. provide a minimum of 20 litres of water per day to each individual in the Community;
3. ensure that the walking distance to a water facility is no more than 500 metres from the furthest house in the community;
4. guarantee that water points (borehole or pipe system) serve no more than 300 persons and 150 persons for a hand-dug well;
5. ensure that ownership and management of the water system is exercised by the Community through established structures;
6. provide all year round potable water from the facility;
7. provide that an average of 8 persons would use one household latrine and, for institutional latrines, an average of 50 persons per squat hole.

The over-riding strategy of the NCWSP was its demand-driven approach, requiring communities to initiate demand for the facilities of their choice, based on their ability to contribute to the capital cost and the maintenance of these facilities. (The demand driven approach in terms of number of water supply facilities determined by the contribution was theoretically followed in Volta Region in 1993-97. In practice the number of facilities was determined based on criteria 4 above, and the contribution was written off by the contractor who was supposed to receive the contribution direct from the beneficiaries) The approach is to ensure that beneficiary communities commit themselves to full ownership and management of facilities and assure the sustainability of the facilities delivered. This approach is in line with the decentralisation policy of Ghana which makes the District Assemblies by law the responsible agents for local development.

Box 1 *Water and sanitation sector: National targets and goals*

From the various policy documents the following targets for water and sanitation are identified as the national priority:

The NCWSP and Vision 2020 – which aimed to extend the coverage of sustainable rural water and sanitation to 85% of the rural population by 2009 (GoG / CWSA, 2004 draft, SIP).

The GPRS for 2003-5 – which aimed to reduce the national incidence of poverty from 39.5% for 2000 to 32% in 2005. This translates into a goal for the rural population with access to safe water from 40% in 2000 to 54% in 2005, a rural population with access to household latrines up from 15% in 2000 to 25% in 2005, and the population with unsafe methods of disposal of solid waste (dumping) falling from 91% in 2000 to 75% in 2005 (GoG, 2003, GPRS, Vol. 1, p112).

GPRS II 2006 -2009 – no specific targets are set here but acceleration of supply of water and sanitation facilities, especially to guinea worm infested areas, and management of on-going investments in the sector are mentioned (GoG 2005, GPRS II, p129)

MDGs – To reduce poverty and hunger in half by 2015 and hence increase the percentage of the rural population with access to (i) potable water to 70.6%, and (ii) sanitation to 64.6% (GoG / CWSA, 2004, SIP).

SIP – The sector investment plan for 2004-2015 estimates that that USD 756m will be required over the eleven-year implementation period (2005 - 2015) to finance the SIP and provide coverage for 85 per cent of the population in Ghana's rural communities and small towns.

Source: GoG / CWSA, 2004, SIP, <http://www.cwsagh.org/new/sip.cfm>

2.1.3 National Water Policy

A key challenge in the sector had been the absence of a comprehensive water policy focusing on all aspects of water resources management. A National Water Policy has however been recently approved by Cabinet after a long-drawn-out process that has spanned five years. The development of the national policy started in 2002 when the Water Resources Commission (WRC), following a series of broad consultations, drafted a policy for water resources management, under the auspices of the Ministry of Water Resources, Works and Housing. With the establishment of the Water Directorate in the MoWRWH, a wider consultative process was initiated in 2004 to update the policy. As part of the process, policies specific to urban water supply and community water and sanitation services were developed and incorporated into the draft. The process was also enhanced by applying Strategic Environmental Assessment to ensure that the policy appropriately addresses the environmental sustainability constraints of proposed government policy measures covering natural resources and socio-cultural, economic and institutional issues. However, the draft policy (completed in 2005) was not approved until mid-2007.

The Policy highlights issues that are consistent with the GPRS, MDGs and NEPAD short term action plan, as well as the Africa Water Vision 2025. The policy is also set within Ghana's commitment to international obligations and protocols and to the broad guiding principles of water management. It is hoped that the new National Water Policy will provide the framework for the sustainable development of Ghana's water resources. The Policy is

targeted on all water users, water managers and practitioners, investors, decision-makers and policy makers within central Governmental and decentralised (District Assemblies) structures, non-governmental organisations and international agencies. The policy also recognises the various cross-sectoral issues related to water use and the links to other relevant sectoral policies such as those on sanitation, agriculture, transport, energy, and so on.

The overall goal of the NWP is “to achieve sustainable development, management and use of Ghana’s water resources to improve health and livelihoods, reduce vulnerability while assuring good governance for present and future generations” – in line with the GPRS II broader objectives. The NWP builds on earlier policies and programmes including the NCWSP. The policy is a significant step forward towards, but does not yet constitute a national sector framework (NSF).⁶ The segregation of responsibilities for urban and rural water, sanitation and sewerage presents a major challenge for the MoWRWH (and the MoLGRDE which is in charge of sanitation) to combine the three sub-sectors of water resources management, urban and rural WSS into a NSF. In general, the NWP considers water as a right of all people; economic aspects of service delivery are not emphasised.

2.1.4 Institutional framework for Water and Sanitation Sector

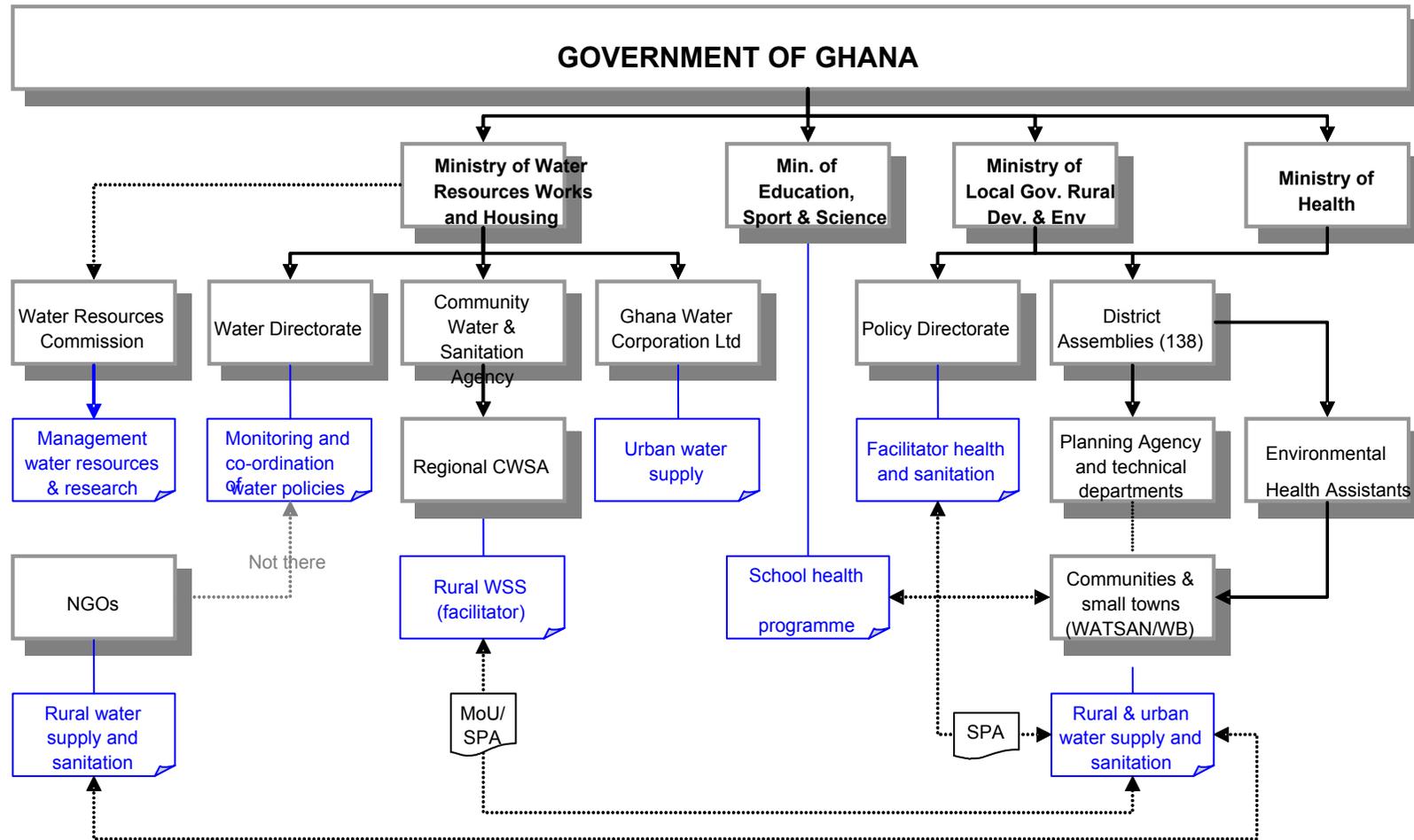
Figure 1 gives a general overview of the key players in the sector. The responsibility for the WSS sector rests with the Ministry of Water Resources, Works and Housing (MoWRWH). The Ministry of Water Resources, Works and Housing (MoWRWH) is the key ministry of the water sector.⁷ It has the authoritative function of initiating and formulating policies, co-ordination of budgeting, monitoring and evaluation to ensure the efficiency and performance of its specific sector. The mission of the MoWRWH with regard to the water sector is to formulate and implement policies and programmes for the provision of safe drinking water, and the development of infrastructure facilities in the area of water and flood control systems, sanitation, drainage and coastal protection of works, operational hydrology, all for the benefit and improvement of all people living in Ghana. The ministry’s main set objectives are to:

- ensure efficient management of water resources;
- provide adequate flood control systems, safe sanitation facilities, drainage systems and adequate safe shelter;
- formulate, implement, monitor and evaluate policies that will enhance the provision of potable water, shelter and the related infrastructure facilities and services;
- promote and facilitate private sector participation in housing delivery, potable water supply, flood control systems and coastal protection works;
- provide, maintain and protect public property and infrastructure;
- establish an effective database for efficient planning and service delivery;
- improve human resources development and build institutional and managerial capacity;

⁶ Defined as an established or emerging set of objectives, strategies, policies, activity programmes and activity elements within a sector.

⁷ This section is based on the WSSPSII Programme Document.

Figure 1: Institutions involved in the Water and Sanitation Sector in Ghana



Source: Ghana Country Report (draft): Evaluation of Danish Support to Water Supply and Sanitation October 2005 Danida File no. 104.A.1.e.36

- improve collaboration and co-ordination with local, sub-regional and international agencies for the provision of potable water and adequate and decent shelter for people of Ghana;

Since April 2003 a Water Directorate has been established within the MoWRWH with the responsibility for overall sector co-ordination, monitoring and policy-making. It is also tasked with co-ordinating sector activities with other ministries, most notably the Ministry of Local Government, Rural Development and Environment (MoLGRDE). The establishment of the directorate and its increasing influence in the water sector in general has been boosted mainly from support by DPs, in particular Danida which has “been the single most consistent and persistent development partner in ensuring that the ministry carries through the establishment of the Water Directorate. In addition, Danida has been the main financier of the processes (especially the development of the NWP) for which the Directorate has played a major role”. Support to the directorate is provided under the PMMS component of the WSSPS II.

The *Ghana Water Company Ltd. (GWCL)* is responsible for the urban water sector. GWCL operates 82 systems. In 1998, the Community Water and Sanitation Agency (CWSA) was carved out of the then Ghana Water and Sewage Company (GWSC) to focus on water supply to rural areas, while the GWCL concentrated on urban water supply

The *Community Water and Sanitation Agency (CWSA)* is an executing agency under MoWRWH established with the objective of facilitating provision of safe water and related sanitation services to rural communities and small towns.⁸ The Community Water and Sanitation Agency (CWSA) is charged with implementation of the National Community Water and Sanitation Programme (NCWSP – 1994) in the rural areas. CWSA, which has received substantial support from Danida and other development partners, has offices in all ten regions of Ghana.

The *Water Resources Commission (WRC)* was established with the mandate to regulate and manage Ghana’s water resources and to co-ordinate government policies in relation to them. Further, the WRC has to take practical steps to ensure that Ghana adopts an integrated, cross-sectoral, river-basin-anchored approach to water resources management. WRC has received support from Danida since 2001.

The *Ministry of Local Government and Rural Development and Environment (MoLGRDE)* is the principal institution overseeing the management of human settlements in Ghana. MoLGRDE is responsible for environmental sanitation, in the same manner as MoWRWH is responsible for water. The draft document by MoLGRDE “Strategic Framework for the Development of Capacity for Environmental Health and Management in Ghana” aims to set out a framework to guide the development of such capacity within the local government system so as to enable government to deliver on its environmental and health policies. Since the transfer of responsibility for Environmental Health and Sanitation from the Ministry of Health in 1995, and the promulgation of the Environmental Sanitation Policy in May 1999, the MoLGRDE has addressed the following principal areas of concern:

- the establishment of an institutional framework with clearly defined roles and linkages to support implementation of the environmental sanitation policy;
- the establishment of technical capacity within MoLGRDE to orient and support the District Assemblies in the provision of environmental sanitation services;
- the development of skilled professional and sub-professional human resources for the sanitation sub-sector;

⁸ The Community Water and Sanitation Act, 1998.

- the development of capacity in the assemblies to manage environmental sanitation;
- the strengthening of the Civil Society's role in environmental sanitation;
- increasing private sector participation in environmental sanitation service delivery and, wherever possible, cost recovery directly from service beneficiaries.

The *Policy Directorate of MoLGRDE* deals with environmental health and sanitation issues. Within the Directorate, there is a small unit specialised in this field.

Through Regional Co-ordinating Councils (RCCs), the MoLGRDE gives guidance to 138 District Assemblies (DA). District Assemblies are the principal units of local government. Districts are the 'delivering authority' responsible for environment and public sanitation, including water and sanitation. A DA is headed by a District Chief Executive (DCE). Planning is shared with the RCCs. Unit committees with both elected and appointed members form the lowest level of the structure. In 1998, the government of Ghana initiated a comprehensive local government reform and decentralisation programme, intended to transfer functions, resources and competences from central to local government. The District Assemblies Common Fund (DACF) is derived from central government revenues. The Constitution states that not less than 5% of total national revenues must be disbursed to the assemblies. In a move to promote decentralisation, parliament has recently increased the allocation to 7.5%.

The *School Health Education Programme* (SHEP) was initiated in 1992 under the Ministry of Education, Youth and Sports (MEYS) and Ministry of Health (MoH). The programme is now under the *Director General of Ghana Education Service* (GES), with the mandate to maintain a pleasant healthy environment and effectively teach healthy behaviour and skills at public schools. SHEP has a national office located within the premises of GES, and regional offices each with one district SHEP co-ordinator.

2.2 Danida's sectoral policies

Denmark is politically committed to support attainment of the Millennium Development Goals by 2015 and the targets set at the Johannesburg World Summit on Sustainable Development. In Johannesburg specific targets for sanitation and Integrated Water Resources Management were added to the existing water supply target⁹. The general policy of the Danish Government in Water and Sanitation emphasises strong water governance at the lowest appropriate management level and a demand-responsive approach in the design of programmes. Gender is a cross-cutting theme in all Danish sector programmes and even more emphasised in the water sector. The focus is on mainstreaming gender concerns by developing replicable strategies for enhancing gender sensitive approaches and empowering women to ensure equitable access to water resources, water services and improved sanitation, as well as equitable participation in the governance of the water sector. Danish assistance seeks to empower the local and emerging private sector involved in studies, training, awareness campaigns, education, design, supervision, construction, quality control, maintenance, operation and installation of equipment.

The GPRS I provided an overall framework for the Ghana government's economic policy and for multilateral and bilateral development assistance to Ghana. Development partners were expected to provide a major part of the funds (80%) for implementation of the GPRS, including investment in the WSS sector. At present two modalities for external funding are in place: one is earmarking of funds for sector programmes and projects; the other is the

9 Royal Danish Ministry of Foreign Affairs: Denmark's Development Co-operation in Water and Sanitation, 2004

Multi Donor Budget Support (MDBS).¹⁰ In early 2003 nine multilateral and bilateral development partners, including Denmark, agreed to provide co-ordinated support to Ghana's budget and to adopt the GPRS as the future framework for support.¹¹

In the Strategy for the Danish Development Co-operation with Ghana 2004-2008 the GPRS is explicitly adopted as the common framework for co-operation. Promoting harmonised practices is considered a prerequisite for strategic, cost-efficient and effective management of development resources for poverty reduction.

Danish assistance has in general been aimed at supporting the government in creating an enabling environment for sector activities by:

- developing an enhanced sector policy,
- improving monitoring and co-ordination activities,
- improving the human resources basis, *and*
- strengthening the Civil Society in the sector.

With the increasing move towards sector budget support in water it is anticipated that this approach will be further strengthened in the water and sanitation sector. In addition, in Danida's programmes poverty reduction is achieved through enhanced poverty targeting and mainstreaming in sector support programmes (SPSs). A clear stand is taken in sector programming on the rights of the poor to access to basic services. SPSs are paying greater attention to sustainable livelihoods, participation, gender and environmental concerns and, not least, to identification of options for improving living conditions for the poor.

The following box summarises Danida's overall strategy for support to water and sanitation over the past 15 years of assistance.

Box 2: Danida strategy for water supply and sanitation

"The implementation strategy adopted by Danida has been one of incremental decentralisation which can be summed up as follows:

1993 – 1997	project focus – external managers (International TA), local co-managers (CWSA)
1998 – 2004	local lead players (CWSA), external advisors (International TA)
2004 – 2008	District Assembly leadership, CWSA facilitators, short term International TA

Source: Regional Director CWSA, Aug. 2007

3 Programmes narrative 1990-1998

3.1 Rural Drinking Water Supply and Sanitation Project in Volta Region Phase 1 (1993 – 1997)

Danida's first intervention in the water sector in Ghana was developed in the Volta region in 1992/3, and was based on the Rural Water Supply and Sanitation Sector Strategy and Action Plan. Focusing on the Volta region, Danida piloted its intervention in the sector based on a pure project approach, in which supplementary staff to CWSA was hired directly under the project management consultant – I. Kryger A/S or Kampsax-Kryger. The Volta Project represents the most significant intervention of Danida in the water and sanitation sector in the period from 1990 to 1997.

The development objective of the project was to "contribute to better living conditions for the target population in the project area ...through the provision of reliable and easily ac-

10 Framework Memorandum Between the Government of Ghana and Development Partners for Mini-Consultative Group Meeting, 24 March 2003, Accra, Ghana. Final Draft.

11 <http://www.dfid.gov.uk/countries/africa/ghana.asp>. Country Profiles: Africa.

cessible sources of safe drinking water which are managed and sustained by the communities".¹² The project anticipated that better living "conditions will be further enhanced by a reduction in water and excreta related diseases through health education and household adoption of improved latrines" in the Volta Region. The project comprised the construction and rehabilitation of water systems for an estimated 195,000 village dwellers and subsidised production of 200 latrine slabs to selected communities in five of the 12 districts of the Volta Region. Training in operation and maintenance of water facilities formed an important capacity-building aspect of the project to underline the concept of community management and eventual sustainability of the facilities.

The project was structured in three phases, the first of which lasted four years and was expected to be completed by December 1997 at an estimated cost of DKK 115.72 million. The project was managed through a CWSA regional project office at Ho and offices in the district manned by personnel hired by the project and also seconded from some decentralised agencies, such as the Environmental Health Unit of the Ministry of Health and the Department of Community Development. Five out of the 12 districts of the Volta region were targeted during this phase of the project, namely, Ho, Hohoe, Adidome, Akatsi and Sogakope.

During the implementation of this project, towards the end of the first phase, a more sector-wide-focused project was designed and the Volta Project was eventually merged into the sector support programme in 1998 and rest of the project phases continued from there. The assessment of the performance of phase 1 therefore became part of the appraisal for the development of the sector-wide intervention (WSSPS I).

Technically, the first phase of the Volta project only represented a preparatory phase of a long and continuous intervention by Danida in the WSS sector in the Volta region. In that regard, the project was never considered as being "completed" as such but only dovetailed into the next phase.

Table 2: Assessment of relevance, efficiency, effectiveness, impact and sustainability of Danida support to water and sanitation from 1993 - 1997 – mainly based on existing documentation

Criterion	Assessment
Relevance	The project was designed along the lines of the then developed Kokrobite Declarations 1991 and was therefore fully aligned with the existing government policy. In adopting and building on strategies already developed by KfW and UNDP in their support for rural water supply in the Volta region, this project was well harmonised with other initiatives. With respect to Danida's strategy the intervention was in conformity with the four axes of poverty alleviation, private sector support, environmental protection and decentralisation and democratisation, set as the objectives for support to Ghana ¹³
Efficiency	"This phase of the project received all the funding needed for implementation and was not bogged by administrative difficulties", was the assessment of the current regional extension services specialist of CWSA – a consequence of the direct project approach
Effectiveness	Improved water supplies in the villages are often not working. Hand-pumps in particular have been observed to be broken. Centralised maintenance systems put in place by GWSC have failed. The reasons for failure were described by the Joint Project Review. ¹⁴ Basically they revolve around the low efficiency of a centralised public sector ap-

¹² Danida, January 1993; Project Document of the Rural Drinking Water Supply and Sanitation Project in Volta Region, Ghana. Ref. no. 104.Ghana.18

¹³ Danida: Ghana Country Strategy, (1993 -1997), March 1994

¹⁴ Danida: Joint Project Review - VRWSSP. Ghana. May 1995

Criterion	Assessment
	proach to maintenance leading to user dissatisfaction and non-payment. ¹⁵ Hygiene education was integrated into the process of mobilising and training communities to manage their water supply and sanitation facilities in order to better ensure that the health aspects of water and sanitation are given a high profile throughout the Project cycle. Yet the effectiveness of this strategy was very low, as adoption of hygiene practices was considered to have been very slow ¹⁶ .
Impact	The specific impacts of this phase of the project are difficult to isolate as it was merely a phase of a continuous engagement. Capacity-building at all levels was the main challenge during this phase (CWSA staff, hired staff, private sector, DWST, PO's). Furthermore, many manuals and guidelines were developed, and applied in the other regions during the following phase WSSPS I.
Sustainability	Sustainability was problematic under Volta Phase I, especially because the shift towards community contribution and payment for the facilities was resisted by communities given that they had been used to a system of non-payment for facilities in previous interventions by government and other donors. Operation and Maintenance (O&M) of installed facilities was at risk of being undermined. This risk was acknowledged from the very beginning of the programme and was expected to be overcome gradually with better education and community engagement. Given that in most cases the number of facilities provided in each community was one per 300 persons, there tended to be more than one facility in a community and therefore, there was little motivation to take action on breakdowns as long as there were other point sources still functioning.
Cross-cutting Issues	Gender issues, especially women's participation in the management of the water facilities at community level, was considered paramount in implementation of the Volta project and WATSAN committees had women deliberately selected as members. In addition, at management level it was considered that community animation and extension would be better enhanced if led by females, and an effort was made to ensure that at least 50% of the software staff was female.
Coherence, Co-ordination, Complementarity	The initiation of Volta Phase I coincided with a period of much discussion on water sector policy direction, with few results in terms of sector direction. Nonetheless, the project rehabilitated some of the wells and boreholes constructed under the UNDP project and built on structures developed under the KfW project.
Issues of Procedures, Administration and Management	A three-tier structure for O&M was developed with the District Assemblies as the fulcrum. At community level, WATSAN committees were established and provided training in facility maintenance. This structure is still in place. Using a gradualist approach, the project progressed from the capital district of the region and spread to four other districts during the period.
Global Assessment	This project was the springboard for Danida's intervention in the water and sanitation sector and informed the structuring of subsequent projects in the sector in other regions.

3.2 Lessons learnt

Before the end of the Volta project Phase 1, it had become apparent that the pure project approach (in practice supply-driven although in theory demand-driven) to implementing water and sanitation facilities, while ensuring quick delivery of service, did not enhance ownership at district and community levels. The operation of the project unit and the establishment of project offices at district level manned by seconded staff who received remuneration direct from the project, fuelled a sense of 'us and them' - a legacy which to date still affects the District Assemblies' perception of the DWSTs and the mentality of some members of the DWSTs. It was instructive to note during field visits to the Volta Region that the signs indicating the offices of the DWSTs still maintain the inscriptions erected during Volta Project Phase 1 which places implementation of the project within the

¹⁵ GWSC, CWSD/ Danida Volta region Community water and sanitation programme (1997 – 2003) Appraisal report Ghana Volume 2.

¹⁶ Danida: Joint Project Review - VRWSSP. Ghana. May 1995

ambit of the consultants - Carl bro, rather than the District Assembly. Integrating the project into the mainstream sector support programme has not as yet completely enhanced a sense of ownership of the projects at District level.

Another lesson learnt was the misperception of dug wells as being the solution for point sources in the five districts included in the first phase. Only after one to two years of fighting to obtain successful dug wells in a number of communities located within the very unfavourable Dahomeyan Gneissic rocks, the focus was shifted to drilling of boreholes in the hard rock.

A third lesson learnt was that many gravity-piped water schemes were actually providing insufficient amounts of water in the dry season. Accordingly, that type of scheme was to be avoided in the following phase unless the capacity of the source in the dry season was documented to be satisfactory.



4 The programmes 1998-2008

4.1 Water and Sanitation Sector Programme Support (WSSPS I) 1998-2003

Since 1998, Danida has implemented two major sector programme support (SPS). The first phase ended in 2003 and a second is running until the end of 2008. The first phase of the SPS, i.e. the Water and Sanitation Sector Programme Support Phase I (WSSPS I), had the development objective of:

...provision of reliable and easily accessible sources of safe drinking water which are managed and owned by the communities; and

...a reduction in water and excreta related diseases through adoption of hygiene practices and adoption of improved sanitary installations.

This programme was implemented from 1998 with a one-year extension until the end of 2003. During this period Danida played a major role in WSS developments. Components funded by Danida covered almost all aspects of rural WSS, including support for the development of the national policy. Danida also supported the Water Resources Commission, Phase I (2001-2002) and various capacity-building elements. During WSSPS I, close to one million people received access to clean drinking water. 13,750 household latrines were constructed plus 1,074 institutional latrines.¹⁷

When it was launched, the WSSPS I consisted of three main components (see also **Error! Reference source not found.**), namely:

- Rural water supply and sanitation in three regions (TA-input from Carl Bro Int to Volta Region, and from Cowiconsult to the Greater Accra and Eastern Regions)
- Sector Capacity-building for public and private stakeholders in the sector (TA-input from PEMconsult)
- Water Resources Management comprising strengthening of Water Resources Information Services (WRIS) and of the Water Resources Commission (WRC) established in 1998 (TA input from NIRAS in co-operation with Hedeselskabet and with Danish Meteorological Institute)

Later, in 2001 a small towns water and sanitation programme was added to the W&S component. (TA-input from COWIconsult)

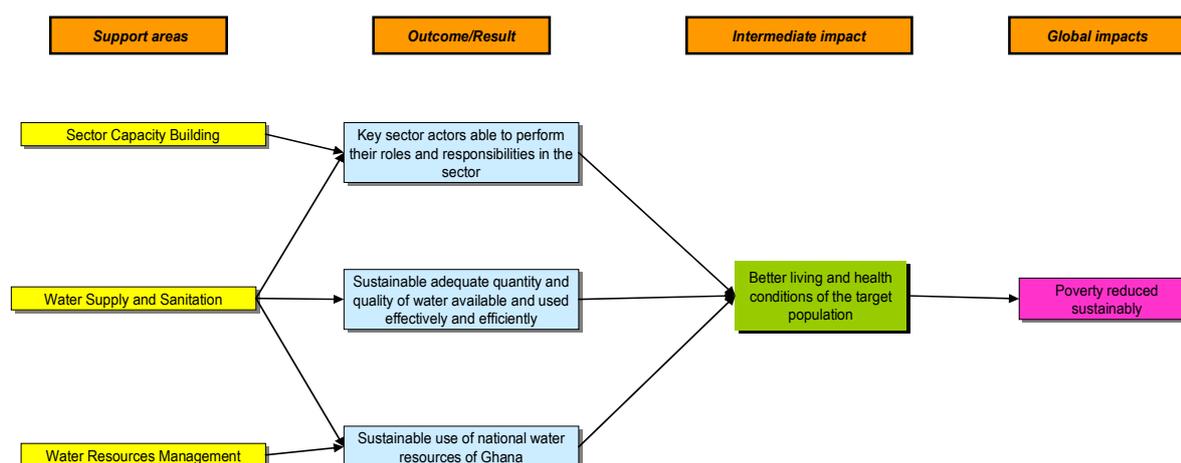
¹⁷ Danida / Royal Danish Ministry of Foreign Affairs: Ghana Country Report (draft) Evaluation of Danish Support to Water Supply and Sanitation October 2005. Danida File no. 104.A.1.e.36

Box 3: Components of WSSPS I

Component	Description
Support to Sector Capacity-building	Human resources development and institutional development within CWSA and Ministry of Works and Housing. Capacity-building within the administrative bodies of the districts and for the private sector.
Water Supply and Sanitation	Phase 2 of the Rural Water Supply and Sanitation Component in Volta Region which commenced in 1993. Rural Water Supply and Sanitation Components in Eastern and Greater Accra Regions which started in January 1999. Water Supply and Sanitation for Small Towns in the Greater Accra Region, a new component approved by the ASRA 2001. The component commenced in March 2002.
Water Resources Management	Strengthening the Water Resources Information System, Meteorological Services Department (MSD), Hydrological Services Department (HSD), and the Water Research Institute (WRI). Support to the Water Resources Commission (WRC), initiated as a new activity in February 2001.

Source: Danida; WSSP I Components Description Documents, 2004

Figure 2: Water and Sanitation Sector Support 1998-2003: Overview (impact diagram)



The total allocation of funds for projects and programmes provided by Danida under WSSPS I was DKK 408m, corresponding to an estimated 30% of all funds committed during this period for the rural WSS sector in Ghana. 55% of the budget was allocated to implementation of water points, community mobilisation and capacity-building of community organisations (including O&M). The next important budget item was technical assistance, which took 28% of the programme budget¹⁸. A summary of achievements is presented in

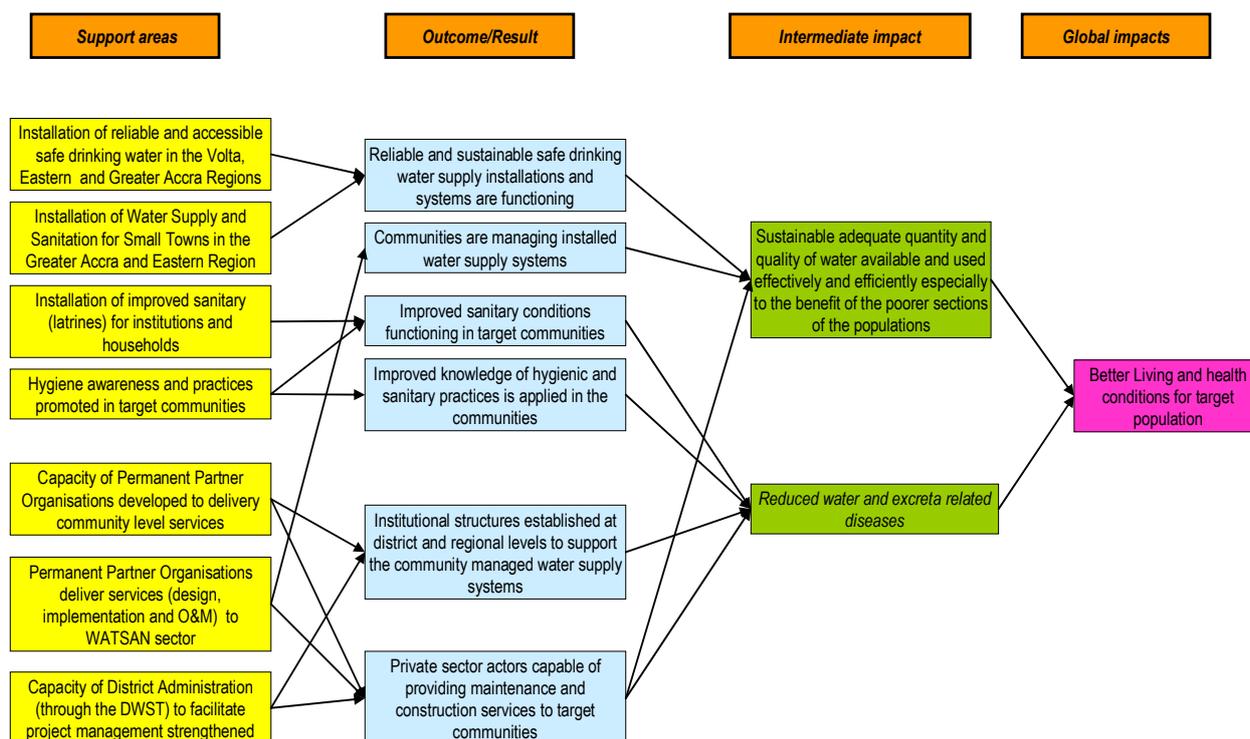
18 ibid

the WSPS I Programme Completion Report.¹⁹ The WSPS I was initially planned to end in 2002 but was, through the ASR 2001, extended to the end of 2003.

4.1.1 Water Supply and Sanitation Component

The component focused on the Eastern and Greater Accra Regions and Phase 2 of the Volta project and the objectives were common to all regions, as summarised in the impact diagram.

Figure 3: Water and Sanitation Sector Support 1998-2003: Water supply and sanitation (impact diagram)



The following tables provide summaries of the background of the WSSPS I components (Table 4) and their achievements (Table 5).

19 Republic of Ghana / Kingdom of Denmark: Water Sector Programme Support. Phase 1(WSPS 1). Programme Completion Report. March 2005.

Table 3: WSSPS I: Summary of Water Supply and Sanitation Component plans

	Volta Phase II	Eastern Re- gion	Greater Accra	Small Towns (GAR and ER)
Proposed Start/ Close	Sept 97/Dec 02	Jan 99 /Dec 02	Jan 99/Dec 02	Jan 02 /Dec 03
Actual Start / Close	Sept 97 /Dec 03	Jan 99 /Dec 03	Jan 99/Dec 03	Jan 02 /Dec 03
Planned Budget	234.6	64.4	47.4	14.75 ²⁰
Disbursed	180.2	61.86	46.5	16.76

Sources: Danida; WSSPS I Component Completion Reports, March 2005

Table 4: WSSPS I: Summary of Water Supply and Sanitation Component achievements

	Volta Phase II	Eastern Re- gion	Greater Accra	Small Towns (GAR and ER)
Achievements				
Water supply	478,411 households in 12 districts provided with improved water supply	432 communities in 11 districts provided with improved water supply	139 communities and 9 institutions provided with improved water supply	One small town piped system installed in GAR by end 2003
Sanitation	7828 household latrines subsidised.	4500 household latrines and 235 institutional latrines constructed	2446 household latrines constructed.	235 households in two towns in GAR and three towns in ER have access to improved sanitation facilities
Capacity-building	<p>Increasing women ordinary and executive membership</p> <p>Capacity of districts built to manage contracts up to the tune of USD 100,000</p> <p>Many private contractors and consultants trained now working also in others regions</p>	<p>474 Watsan Committee members trained in O&M</p> <p>DWSTs and core staff of 11 districts provided various skills</p> <p>Several POs, NGOs, local artisans trained in construction, O&M,</p> <p>20 area mechanics provided with tools for installation and maintenance of hand pumps</p>	<p>144 Watsan committee members trained in O&M</p> <p>DWSTs and core staff of 11 districts provided various skills</p> <p>Several POs, NGOs, local artisans trained in construction, O&M,</p> <p>8 area mechanics provided with tools for installation and maintenance of hand pumps</p>	<p>Transfer of skills to consultants more successful than for RWSTs and DWSTs</p>

Sources: Danida; WSSPS I Component Completion Reports, March 2005

²⁰ The budget was revised in March 2003 during the 2003 ASR when it became obvious that the component could not spend the allocated budget in 9 months. The original budget was DKK 32.99 million

In all the completion reports, the implementation of the water supply and capacity-building measures was considered satisfactory. The small town project, however, faced a number of challenges relating to community selection such that implementation of the component was very much delayed. In the event some small towns in the Eastern Region had to be included to obtain the number of communities needed to implement the project. On the other hand, implementation of the improved hygiene awareness and practices was considered less satisfactory across all regions.

An underlying principle of the NCWSP is the emphasis on community ownership and management (COM). This principle has been pursued vigorously in all the different programmes. With the communities having responsibility for the operation and maintenance of the water facilities, most (80% for the Volta Region²¹) of the facilities were functioning and being used (this rather high figure is mainly due to a combination of a completed rectification programme for all reported malfunctioning facilities, the focus on training in O&M, and the establishment of a decentralised O&M monitoring programme for the whole region)

Construction of household latrines was subsidised during this phase. The assumption in the provision of the subsidies for household latrines was that beneficiaries would acquire the habit of improved sanitation practice and, with a general reduction in poverty, the community members would opt to construct their own household latrines. By the end of the WSSPS I many households had expressed the desire to have their own latrines but only on the basis of continued subsidies. Neither the shift in sanitary attitudes nor change in their economic conditions was strong enough to persuade the local people to commit resources to constructing their own household latrines. Institutional latrines provided for schools and clinics were being used. However, maintenance of these was problematic because many of the institutions did not have the management capacity or an adequate maintenance culture to maintain the facilities on their own.

Effective community participation in the planning, implementation and management of the water and sanitation facilities ensures sustainability. The Water and Sanitation Development Boards (WSDB) and Water and Sanitation (WATSAN) Committees are seen as the critical organisational bodies to ensure such sustainability, and the sub-component therefore laid emphasis on their strengthening as a key activity.

4.1.2 Sector Capacity-building Component (SCBC)

The development objective of the Capacity-building Component was designed to assist the Government of Ghana in making "key sector actors able to perform their roles and responsibilities in the sector".

The Component comprised institutional development and capacity-building targeted at stakeholders and key actors in the Water Supply and Sanitation Sector. It provided support at three different levels:

- i. the sector policy making and monitoring level – targeted at MoWRWH,
- ii. the sector development facilitating level, - targeting CWSA, *and*
- iii. the sector development executing level - the Districts, NGOs and the private sector.

The Component had two sub-components with six immediate objectives, as follows:

²¹ CWSA; Volta Region CWSP Phase II Component Completion Report, March 2005. p4

Sub-component 1 – Sector Policy making and monitoring level

Line ministry's role in sector policy formulation and monitoring is established and recognised.

Sub-component 2 - Sector development: (i) the facilitating level

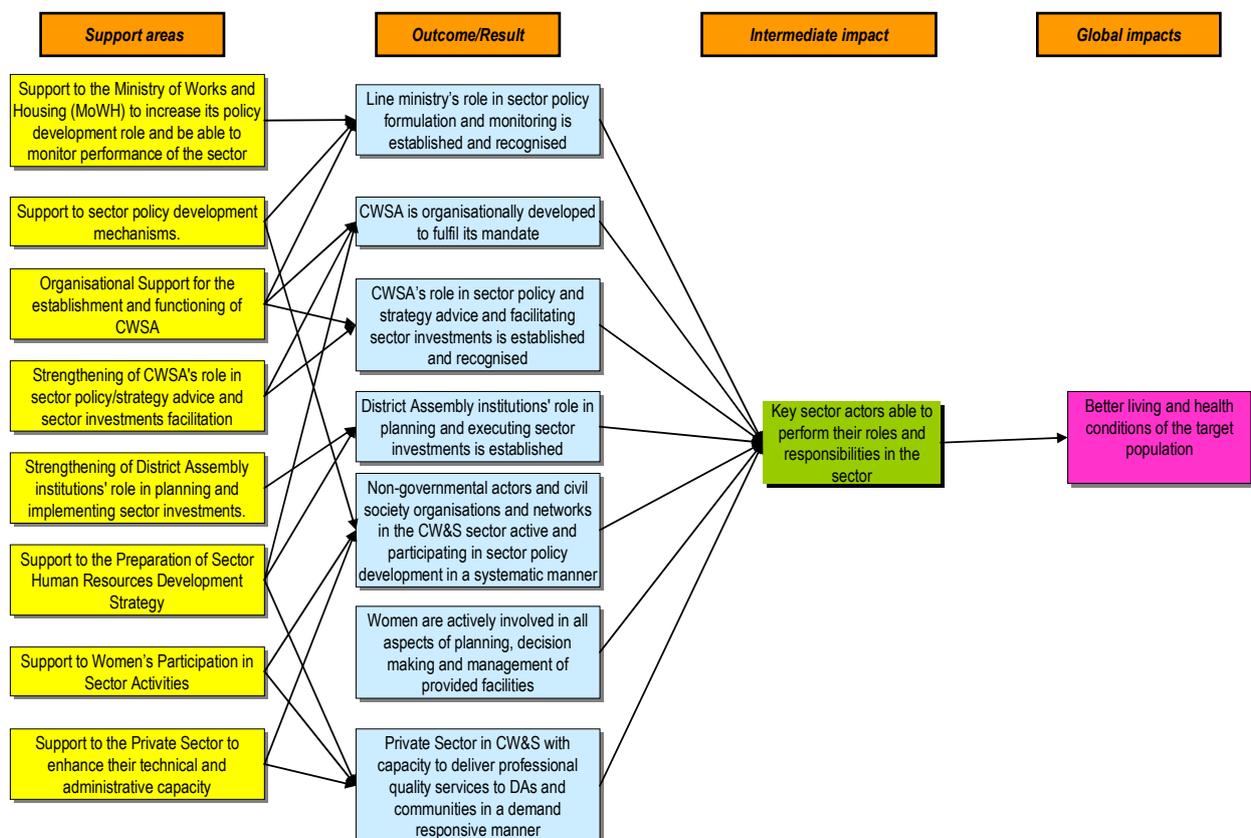
1. CWSA is organisationally fully developed to fulfil its mandate.
2. CWSA's role in advising on sector policy and strategy advice and on facilitating sector investments is established and recognised.
3. Non-governmental actors and Civil Society organisations and networks in the CW&S sector active and participating in sector policy development in a systematic manner.

Sub-component 2 – Sector development: (ii) the executing level

1. District Assembly institutions' role in planning and executing sector investment is established.
2. Private Sector in CW&S with capacity to deliver professional quality services to DAs and communities in a demand responsive manner.

The following figure depicts the expected outputs and impact of the Sector Capacity-building Component.

Figure 4: Impact diagram of the Sector Capacity-building Component of WSSPS I



The immediate target groups for capacity-building activities were government staff at central, regional and district levels with a view to improve their performance as service provid-

ers in terms of facilitating local level capacity-building and empowerment among direct users of water supply and sanitation facilities, NGOs and the private sector.

Under sub-component 2 a wide range of management tools was developed to help firmly establish systems within the newly established CWSA as a functioning organisation. These tools include, among other things, a corporate plan and mechanisms for regular update, job descriptions, a corporate training plan, and a computerised financial accounting and management system. The Component also assisted CWSA in developing and implementing tools and methodologies for fulfilling the mandate of the organisation as prescribed by the GoG. These include, among other things, a national monitoring system; a gender policy and strategy; an approach to assisting DAs in planning community water and sanitation development activities; a national private-sector-driven storage and distribution system for hand pump spare parts; a policy and implementation guidelines for small towns' water supply; an approach for training the various actors in small towns' water supply; and two studies on key issues in the national community water and sanitation strategy. A Sector Investment Plan was also developed under this component.

Support was also given to CWSA through the SCBC for the construction of a new Head Office and of the new office of the RWST in Greater Accra Region and in Eastern Region; and also to the first phase of capacity-building at RCC, DA and RWST levels in Central Region with a view to including the region in WSSPS II.

To strengthen the private sector, support was provided for training in business management to 61 persons, O&M training related to Small Towns' Water Supply to 1,200 WSDB persons (WSDB members, operators, technical managers and accountants), while M.Sc. Scholarships were made available to 18 students at Kwame Nkrumah University of Science and Technology (KNUST). In addition, support was also provided for the formation of a coalition of NGOs in the sector and this was launched by the Minister of MoWH in 2003. A national spare parts network system was initiated (co-funded by KfW) in October 2000 through a private company, FAM. Spares for four types of hand pump were initially supplied through the company. Two central warehouses and nine wholesale warehouses were set up by November 2003, covering all regions except Eastern Region. This involved the establishment of network and capacity-building for management and monitoring. A publicity campaign was used to make people aware (CWSA, Danida, KfW, 2004, handpump spare parts distribution review). Mixed views on effectiveness of outputs, varying from "yes people now know where they can get spare parts", to "there is no effective link from the central warehouses to the districts" were reported²².

At district level toolkits were developed and staff trained in their use, to enhance the district based planning capacity; O&M training was provided to 210 DWST staff members (3 persons per district – 72 districts have a small town system), and to approximately 25 CWSA staff (2 from each of the 10 RWST and 5 from Ho).

Even though capacity-building was singled out as a specific component of the WSSPS I, all the other components appropriately had capacity development woven inextricably into them. An evaluation in 2004 of the outcomes and outputs of the capacity-building in the water sector and decentralisation conducted²³ provides a useful snapshot of the capacity-building elements incorporated into all the different components of the programme (see next table). Generally, the SCBC provided capacity through human resource development, organisational strengthening and systems development at all levels from the national, through regional and district to the local WATSAN committee level.

²² Danida, Capacity Development Output Evaluation Step 4: Draft Evaluation Report, Dec 2004.

²³ *ibid*

Table 5: Overview of capacity-building interventions in the Water and Sanitation Sector

	(1993 – 1998)	SPS Phase I (1997 – 2003)	SPS Phase II (2003-2008)
Sector capacity-building, policy, monitoring and management support	Capacity-building for CWSA staff, hired staff, private sector, DWST, PO's. Development of guidelines and training manuals used in other phases.	<i>Sector Capacity-building Component</i> Support to: MoWH CWSA The Districts, NGOs & private sector	<i>Policy, Monitoring and Management Support:</i> Support to: MoWRWH MoLGRDE CWSA NGOs and Civil Society Organisations
District based and small town programmes	District water supply and sanitation - Volta region (from 1993)	Volta Region Phase II (1997-2003)	<i>District based water and sanitation component:</i> Districts have adequate capacity for sustainable water and sanitation planning, implementation and operation and maintenance'. Capacity-building is at the following levels: Regional District Community Private sector Covers <u>rural and small towns</u> water supply and sanitation in the regions of: Volta Region Greater Accra Region Eastern Region Central Region
		Greater Accra Region Phase I (1999-2003)	
		Eastern region Phase I (1999-2003)	
		Small towns phase I (2002-3)	
Water Resources Management	Water resources management (from 1997)	<i>Water resources information systems:</i> 1 – Strengthening of Water Resources Information Services (WRIS) 2A – Meteorological Services Department (MSD) [under Ministry of Communications] 2B – AESC (Architectural and Engineering Services Corporation) Hydrology Division [under MoWH] 2C – Institute of Aquatic Biology [water quality] 2D – Water Resources Research Institute (WRI) [groundwater] [under the Ministry of Environment, Science and Technology]	<i>Integrated water resource management component</i> 'Capacity of WRC and collaboration with the Water Research Institutions further enhanced in fulfilling the mandated role that aims at promoting integrated water resources management with a focus on demand and abstraction regulation, pollution monitoring and water resource assessment activities for effective planning at basin level'

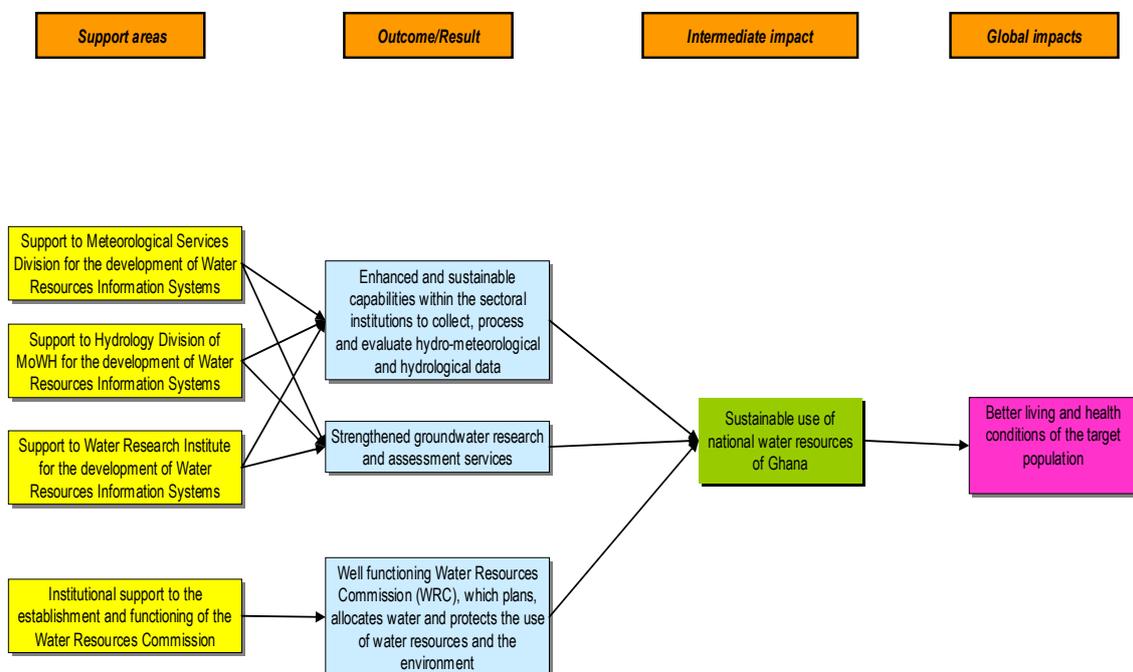
	(1993 – 1998)	SPS Phase I (1997 – 2003)	SPS Phase II (2003-2008)
		Support to the Water Resources Commission (2001-3) [Under the MoWH]	
School hygiene education		Note: SHE (see at right) was during the phase I projects (phase II for Volta) previously incorporated into the regional programmes.	School hygiene education (SHE) component 'Increase capacity of SHEP (National School Health Education Programme) to supervise hygiene education in GES (Ghana Education Service) schools and promote hygienic practices'

Source: Danida, Capacity Development Output Evaluation Step 4: Draft Evaluation Report, Dec 2004

4.1.3 Water Resources Management Component

This component was to enhance the development of Water Resources Information systems within the selected WRIS institutions, namely: Ghana Meteorological Agency (which was then known as Meteorological Service Department), the Hydrological Services Department of the MoWRWH and the Water Research Institute. In addition, support was provided in the establishment of the Water Resources Commission. The development objective of this component was “Sustainable use of the National Water Resources supported through improved water resources information and assessment services.”

Figure 5: Impact diagram of the Water Resource Management Component of WSSPS I



Danida supplied equipment and funded studies by these institutions and provided technical assistance in the collection, collation, analysis and storage of water resources information needed for the sustainable management of Ghana's water resources. The thrust of the support to the water management component is depicted in the impact diagram.

4.1.3.1 Water Research Institute

Support to WRI was in two parts: one concerned ground water resources assessment and the other improvements to water quality monitoring. The support to the WRI was provided to:

- undertake selected groundwater research and assessment programmes and disseminate the results obtained;
- maintain a groundwater monitoring network satisfying the basic needs of the country for groundwater data after expiration of the project period;
- maintain well-equipped laboratories in Accra and Tamale;
- improve the capability of WRI to collect, store and process groundwater data and to perform groundwater resources assessments;
- improve the capability for water quality monitoring;
- improve the ability of WRI to collect, process, store and disseminate water quality results of the laboratory;
- improve communication between WRI, the other sectoral institutions and the end-users.

At the end of the project both components of the support were considered to have been successful. In the completion reports it was indicated that severe constraints due both to the lack of funding of recurrent costs expected from GoG and to manpower shortages caused substantial delays in activity implementation. A Joint Danish-Ghanaian Technical Review Team mission in October 2000 made recommendations modifying the scope of work for programme after which there was steady progress. This effort, as well as the allocation at WRI of temporary staff to alleviate manpower shortage, has brought some substantial results, but nevertheless the project has been unable to fulfil all expectations.

Some project accomplishments were:

- hydrogeological maps produced for 8 out of 10 regions, digital maps and Arc View-GIS software, and thematic maps produced for the 10 regions;
- establishment of a computerised national borehole database;
- improved borehole siting methods and techniques introduced, specifically covering unfavourable crystalline and consolidated sedimentary formations;
- laboratories in Accra and Tamale rehabilitated and new equipment installed;
- new analytical methods established for analysis of standard water quality (major cations and anions), heavy metals as well as organic pollutants (total hydrocarbon content) and micro-pollutants (chlorinated pesticides, Polycyclic Aromatic Hydrocarbons, PAHs and Polychlorinated Biphenyls, PCBs) in samples of water, sediment and biological material;
- staff trained in various methods and techniques, and also in the use of data storage and interpretation software (training provided both in-country and in Denmark);
- capability and capacity of the laboratories improved, enabling them to perform a variety of analyses and assessments for external customers (drinking water, waste

water, borehole water, surface water) following operational conditions as outlined in the international standard IS 17025;

- communication with other sectoral institutions and end users improved, both through own initiatives and initiatives taken by the Water Resources Commission.

The positive outcome of the project is thus the establishment of a sound basis for improved water resources information services, once regular samples for national monitoring of water quality are taken by co-operating institutions. Efficiency and effectiveness in the early phases of the project (years one and two) were low and caused by budgetary constraints. However, later phases were of acceptable effectiveness. Extension of the original project period by one year and significantly increased efficiency allowed project activities to be performed on time.

In the wake of the Danida support the WRI has highly qualified staff, fully trained in modern methods and tools within their field of activities, as well as the equipment required for the various activities and for providing core WRI services. The WRI will be able to provide qualified inputs and services to all who need their services. However, the provision of appropriate services depends to a large extent on GoG's capacity to ensure the provision of recurrent budgets for salaries and operational costs, and WRI's capacity to provide adequate cost recovery for maintenance of equipment and the groundwater monitoring network through increased income-generating activities.

Box 4: Perceived impact of Danish intervention on WRI

The project manager for the groundwater component of the support to WRI succinctly described the impact of the project on the institute as follows: "In fact what the project has done is to improve our ability and enhanced our research work and so when it comes to ground water research we are number 1 in the sub-region. We have the largest hydrological database in the in the country... due to our position now some projects depend on us to provide consultancy services, e.g. the HAP project with CIDA, inventories for AFD and siting of boreholes for CWSA in the Central and Volta Regions".

Source: Dr Dapaah Siakwan, WRI, Sept. 2007

4.1.3.2 Hydrological Services Department

The project started in August 1997 with the aim of establishing a well-functioning, modest hydrometric network in Ghana operated by the Hydrological Services Department (HSD). At the end of the project the HSD operates a network of 73 discharge stations, 5 lake stations and 55 river level stations. All stations are equipped with staff gauges and a gauge reader, and at 72 locations automatic water level recorders have been installed (or will be installed in the very near future).

The station network is operated through the 7 HSD regional offices. On a monthly basis, monitoring results – water levels and current meter gaugings – are submitted from the regions to head office. At head office, water level and discharge data are stored in a central database with the hydrological software HYDATA as the management tool. In the database, historical time series have been entered covering the period 1961 until now.

Various items of project equipment, vehicles, and training have been provided. The equipment provided covers traditional hydrological field equipment such as current meters, winches, water level recorders, levelling instruments, boats, workshop tools such as generators and drilling machines, as along with office equipment such as computers, software, furniture, photocopiers, air conditioners, and so forth. The training provided was delivered through a Danish external consultant and through in-house training provided by senior staff of the department. However, funds for long-term training abroad were also provided by the project; these funds resulted in training for 2 technicians and 3 hydrologists in Nairobi, Kenya, and one hydrologist in Sweden.

Box 5: Perceived impact of Danish intervention on HSD

Danida is the only Development Partner which has supported the Department ...”the offshoot of this project is that now funding from GoG is continuing to support the operation; even though not adding on to the equipment, funds are made available to maintain them, albeit releases are usually delayed” .

Source: Ag. Director, HSD, Sept 2007

4.1.3.3 Ghana Meteorological Agency

The main focus of the project was on enhancing the capacity of the agency to collect and disseminate reliable meteorological data. The project helped equip 318 meteo-stations across the country. Further training was provided to the observers (refresher) and as on-the-job training to the technicians in preventive maintenance. Over the project period various initiatives were taken to improve data handling and processing, one being the setting-up of a station archive in which all stations are mapped and relevant data on the stations stored and updated. Further problems relating to the database were addressed, including the keying-in of backlog as well as new data and implementation of a new climatological database ('clidata', a Czech system supported by WMO). Additional computers were procured to improve data handling.

The project assisted the department in its institutional reform with TA input, mainly through engagement of a local consultant to guide MSD through the process of institutional strengthening with a view to transforming the department into an agency relying less on government allocations and increasingly on revenue generated from providing valuable services to its clients and users. To improve the public awareness of MSD and its services, a website (www.meteo.gov.gh) was created for the agency under the project.

Training was carried out both internally and externally, about 100 staff members having been trained in various fields. In general it can be said that without the WRIS project it would have been difficult for the agency to operate. This in turn would have meant that important data for the water sector would not have been available.

4.1.3.4 Water Resources Commission

Summing up the achievement of the sub-component, the project completion report considered performance as satisfactory and enumerated a number of outputs and outcomes achieved under the project. The highlights included the following:

- The WRC and its Secretariat moved from being a young entity to its present image of a fully- functioning organisation with basin-based (support) offices added on.
- A system of water use regulations and procedures for the issuance of rights to water abstractions by means of permits (licences) were developed by the WRC and passed by Parliament at the end of 2001 (LI 1692). This regulation is currently being implemented.
- A draft national water policy which focuses on an integrated approach to water resources management was developed. This draft became the spring board for developing the current national policy recently approved by Cabinet.
- Two river basins (Densu and part of White Volta) were selected as pilots to test capacity-building, participation and public awareness strategies, regulations and water resources planning within a decentralised administrative framework, with the river basin as the planning unit. The Densu Basin Board has been established, and that for the White Volta is being formulated.

- A “first-stage” Decision Support System (DSS) has been developed as a tool for water resources assessment and planning purposes and water allocation, initially at basin (Densu) level.
- Public awareness and educational activities have been instituted, often in collaboration with NGO initiatives. A series of radio programmes addressing specific IWRM issues targeted on both the general public and district assembly staff, have been organised by WRC. A Communication Strategy for WRC has also been developed to guide these activities during the second component period.

Box 6: Perception of impact of WSSPS I on WRC.

A general conclusion on the implementation of the WRIS component of WSSPS I was offered by the WRC Executive Secretary, when he indicated that “for the five years of the water resources information services (WRIS) project it stayed been on track, and particularly targeted the capacity of data providers and re-search institutions for improved data collection networks and assessment techniques. The project was pursued with regard to equipment, processing, storage, retrieval and dissemination to enhance the adequacy, accuracy and regularity of water resource related data and information and all these were to a large extent achieved.”

Source: Personal communication Sept 2007

4.2 Water and Sanitation Sector Programme Support (WSSPS II) 2004-2008

The Danish support to the WSS sector in Ghana continued with the Water and Sanitation Sector Programme Support, Phase II (WSSPS II) running from 2004 until 2008. The budget is DKK 371m. The breakdown of the budget is shown in Table 6.

The development objective of WSSPS II is:

“...to contribute to sustainable reduction of povertythrough improved water supply, sanitation and hygiene education as well as increased knowledge, and better use of the water resources in Ghana”.

Whereas the WSSPS II is a continuation of Phase I, there are important strategic implementation differences between the current programme and its predecessor.

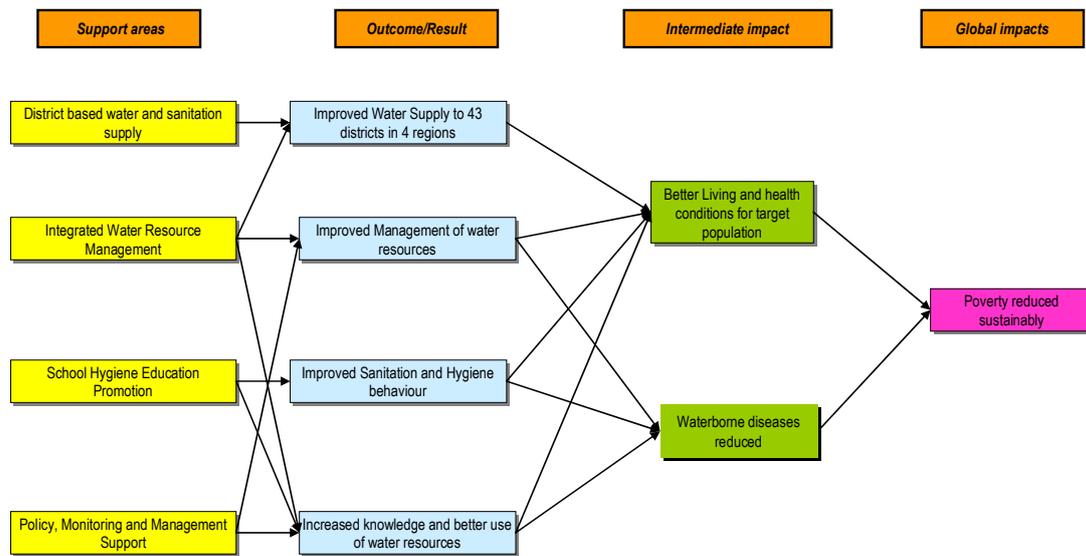
A major shift in the WSSPSII is that it is designed to support a more district-based implementation of water supply and sanitation provisions, based on a decentralised modality for poverty targeting and district water and sanitation development plans, and with a view to allowing joint implementation with other development partners. Support is provided to counterpart institutions in planning, prioritising and implementation at appropriate levels. In addition, support provided for integrated water resource management is channelled through the Water Resources Commission - which works with the specific WRIS institution as needed - rather than directly to the WRIS institution as in Phase I. The hygiene education component is also merged into the School Hygiene Education Programme implemented by the Ghana Education Service (GES). Capacity strengthening is provided through the Water Directorate of the MoWRWH as the co-ordinating agency for the water sector.

WSSPS II has four components:

- District-based Water and Sanitation (DBWS) - TA-input from COWIconsult
- Integrated Water Resources Management (IWRM) - TA-input from NIRAS
- School Hygiene Education; (SHEP) - TA-input from a Danida-employed adviser
- Policy, Monitoring and Management Support (PMMS) - TA-input from PEMconsult

A general overview of the WSSPS II is provided in the following figure.

Figure 6: Water and Sanitation Sector Support 2004-2008: Overview (impact diagram)



Overall co-ordination and supervision of WSSPS II is the responsibility a National Steering Committee consisting of representatives of the MoWRWH, MoLGRDE, Ministry of Education, Youth and Sports, National Development Planning Commission (NDPC), Ministry of Finance and Economic Planning (MoFEP), Royal Danish Embassy (RDE) and key counterparts such as WRC, CWSA and GES. Other stakeholders, including donor organisations, may be co-opted into the WSSPS Steering Committee, should joint implementation be decided upon.

Figure 7 Organigramme WSSPS II

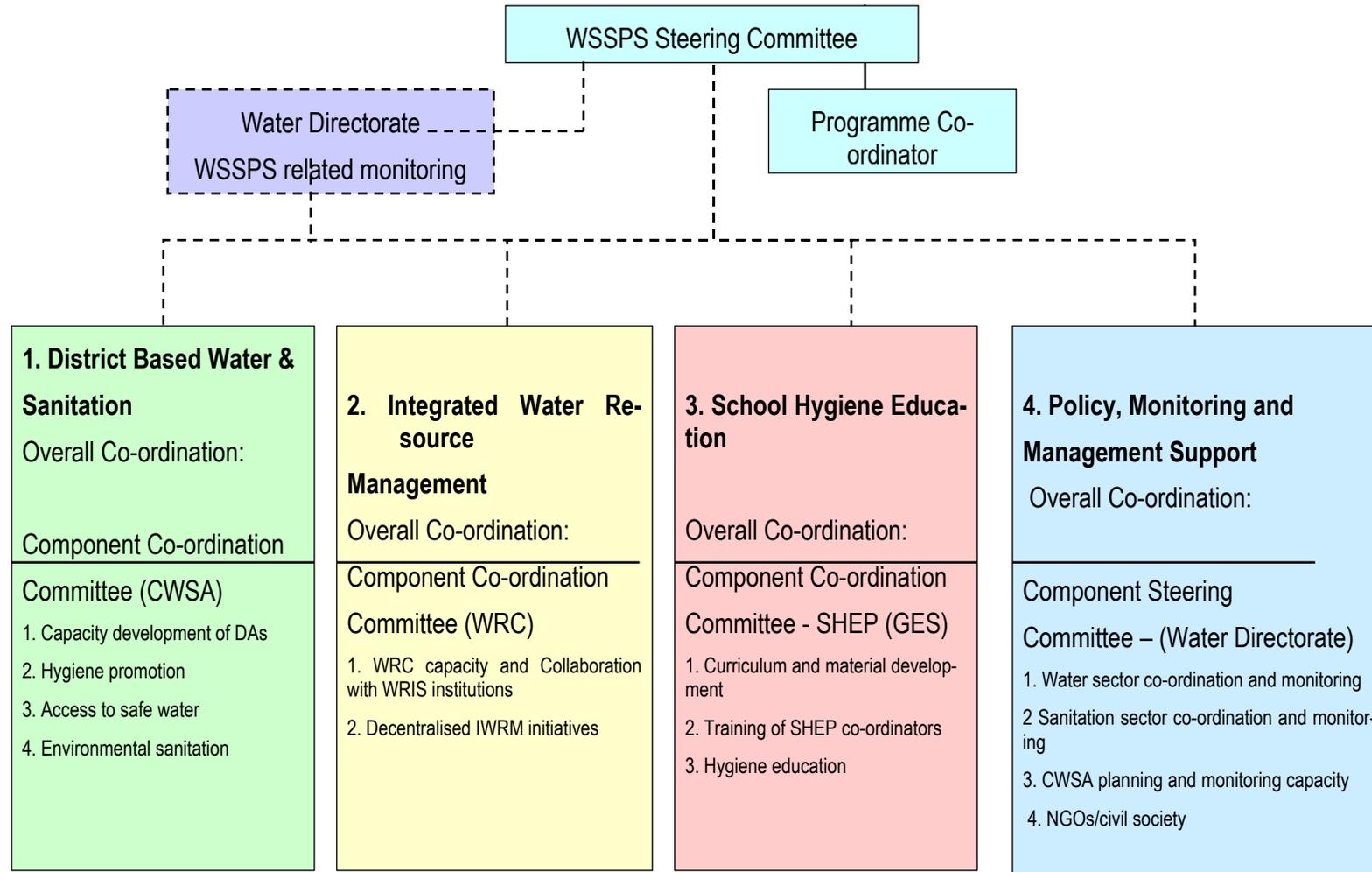


Table 6: WSSPS II Budget for 2004-2008 ('000 DKK)

	2004	2005	2006	2007	2008	Total
Component 1: District-based W&S						271.695
District capacity-building	3.900	3.400	870	870	870	9.910
Community mobilisation/training	2.330	2.350	3.820	4.240	3.900	16.650
Water supply installations	20.800	18.100	27.000	27.800	25.800	119.500
Environmental sanitation	4.000	6.900	13.600	17.340	15.740	57.760
CWSA related costs	4.250	2.250	2.250	2.255	2.255	13.260
TA, international/national	9.480	9.480	9.380	7.460	7.460	43.270
Various expenses	2.070	620	200	150	150	3.190
Contingencies						8.280
Component 2: IWRM						22.195
WRC capacity-building & WRIS col- laboration	2.185	1.685	1.365	1.095	1.037	7.367
Decentralised IWRM	1.455	1.390	830	620	450	4.745
WRC administration expenditure	185	180	165	165	155	835
TA, international	2.220	2.220	1.080	960	420	6.900
Various expenses	400	400	200	100	100	1.200
Contingencies						1.150
Component 3: School Hygiene Edu- cation						16.193
SHEP HO activities	430	1.155	675	655	675	3.590
District based activities	20	1.125	1.125	1.125	1.125	4.520
Investments and operational costs	965	1.045	285	200	110	2.605
TA, short-term, international/national	225	240	360	510	315	1.650
International, long term adviser	900	900	900			2.700
Component audits	100	100	100	100	100	500
Contingencies						628
Component 4: PMMS						22.225
Support to MWH	950	600	450	400	350	2.750
Support to MLGRD	650	500	450	450	350	2.400
Support to CWSA	700	700	650	500	450	3.000
Support to NGOs and civil society organisations	300	300	300	300	300	1.500
Investments and operational costs	1.060	360	360	360	335	2.475
TA, international/national	2.224	2.324	1.384	1.384	1.284	8.600
Component audits	100	100	100	100	100	500
Contingencies						1.000
Monitoring, reviews, training, re- search etc.						18.100
Reviews, monitoring	1.000	1.500	1.500	1.500	1.500	7.000
Fellowships, research, training	1.600	1.600	1.600	1.600	1.600	8.000
Preparation of possible phase 3				500	1.600	2.100
Audits, programme co-ordination	200	200	200	200	200	1.000
Budget support, co-funding, SEA						10.000
Contribution to RDE expenses	875	875	875	875	875	10.675
TOTAL						371.083

Source: Danida WSSPS II Project Document, 2004

4.2.1 District-based Water and Sanitation

A major focus of the programme is district-based water supply and sanitation. It includes water supply for rural communities and small towns, school and public latrines, environmental sanitation in selected small towns, and water resources for productive purposes in selected communities in 43 districts in Volta, Eastern, Greater Accra and Central Regions.

The verifiable indicators for this component are:

- the proportion of households without access to safe drinking water halved by 2015;
- the proportion of households without access to appropriate sanitary facilities halved by 2015;
- the majority of schools in the districts provided with latrines, hand washing facilities and hygiene education by 2008;
- the proportion of poor farmers with access to small-scale productive water increased by 15% by 2008.

The component is implemented by District Assemblies with assistance from CWSA, with district capacity-built up to sustain district-based water and sanitation planning and implementation. The water facilities include boreholes and hand-dug wells fitted with hand pumps in the rural areas. The small towns water supply programme initiated under WSSPS I as a separate component has been merged into district-based water and sanitation (DBWS). Water systems with mechanised boreholes or treated surface water (using simple technologies) are applied in the small towns water supply programme. Connection to existing GWCL pipelines is an option of last resort in the case of the small towns programme.

The sanitation facilities include institutional latrines (for schools and other public facilities such as clinics) and environmental sanitation in selected small towns. A marked difference between Phase I and Phase II with respect to sanitation is that in WSPS II Danida does not offer direct subsidy to households to construct individual toilets, but instead has adopted a different strategy such as the promotion of a Total Sanitation Concept and Social marketing model, which has been adapted by the yet-to-be-approved Environmental Sanitation Policy as strategic options. The target focus group in WSPS II is the next generation, and thus priority is given to school latrines and to SHE. The programme also includes infrastructure to make excess water resources available for small-scale productive purposes

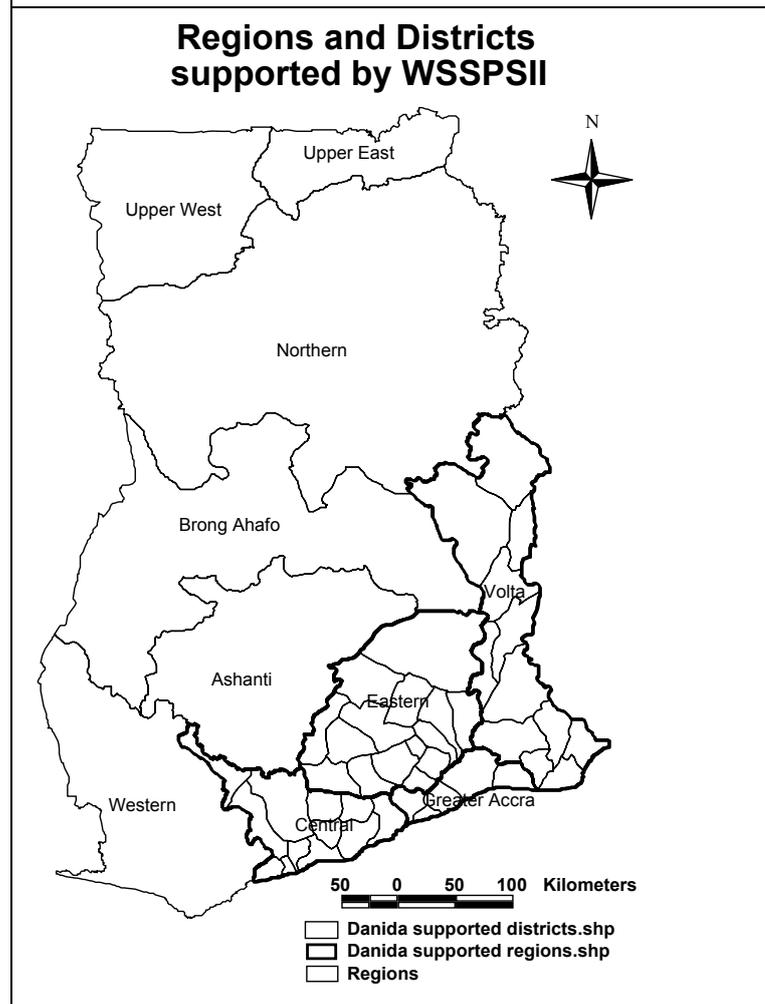
Activities are implemented in selected rural communities in four regions: Central Region (with 16 districts), Greater Accra Region (5 districts), Eastern Region (11 out of 16 districts) and Volta Region (12 districts) (See Map).

The district-based water and sanitation component is implemented by:

- i. CWSA acting as a facilitator, support organisation and overall administrator
- ii. district assemblies managing the implementation of water supply and sanitation and related software activities.
- iii. The sanitation and environmental health unit of the MoLGRDE, acting as support organisation; *and*
- iv. NGOs and the private sector conducting the implementation of W&S including related software activities.

Capacity-building which started during WSSPS I is being continued during WSSPS II. It is the intention to work towards capacity-building for district-based WSS implementation and local water resource planning.

Figure 8: Regions and Districts supported by WSSPS II



4.2.2 Integrated Water Resource Management

The IWRM Component supports the Water Resources Commission to carry out its mandate of management of Ghana's water resources on a sustainable basis, focusing on water abstraction regulation, pollution monitoring and water resources assessment activities, and on its efforts to mainstream IWRM in the country. This is aimed at achieving an efficient and effective management system for the sustainable development of Ghana's water resources. To a large extent the component is designed as a follow-up to the previous assistance rendered to the WRC, and to facilitate consolidation of the results achieved during the first phase.

The immediate objectives of the support are as follows:

- i. capacity of WRC and collaboration with the WRIS institutions further developed; *and*
- ii. a viable and sustainable institutional framework for decentralised IWRM initiatives also further developed.

In implementing the component, the WRC uses the services of the WRIS institutions supported during the WSSPS I, making of the capacities and databases developed. Such engagements are organised through service contracts. In this way the WSSPS II is enhanced.

ing the collaboration among the WRIS institutions and further enhancing their capacity as well.

4.2.3 School Hygiene Education²⁴

The Water and Sanitation Sector Programme Support II (WSSPS II), School Hygiene Education (SHE) component aims at improving behavioural patterns of school children and youth in targeted areas, but with a national focus on school curricula development and teaching materials. This is expected to be reached through improving access by schools under GES to relevant quality education on hygiene education, as well as through improved hygiene education and promotion in schools in Volta, Eastern, Greater Accra and Central Regions.

The SHE component concerns support to enable schools under GES:

1. to update the age-specific and gender sensitive hygiene education curriculum and teaching aids;
2. to increase the capacity of SHEP to supervise hygiene education in GES schools and promote hygienic practices;
3. to develop and produce gender sensitive school hygiene IEC materials;
4. to include hygiene education and promotion in pre-service training; *and*
5. to monitor water, sanitation and hygiene education in the schools.

SHEP District Co-ordinators in Danida target districts are responsible for training of teachers in the revised curriculum, as well as awareness-raising activities in schools with water and sanitation facilities. The hygiene education and promotion component is expected to be based on best practices from previous experiences.

This component is implemented by the National School Health Education Programme (SHEP). SHEP was initiated in 1992 under the Ministry of Education, Youth and Sports (MEYS) and Ministry of Health (MoH) The programme is now under the Director General of GES, with a mandate to maintain a pleasant healthy environment and effectively teach healthy behaviour and practices. A Component Co-ordination Committee comprising GES, SHEP, CWSA, MLGRD, MoH and MoWRWH has responsibility for overseeing overall progress and endorsing annual budgets

Provision of actual facilities such as hand-washing facilities and latrine construction in schools will be included in the district water and sanitation plan, which must be passed by the Regional Approval Committee. Plans and budget for the school health programme relating to component 1 should be incorporated in District plans for approval.

4.2.4 Programme Monitoring and Management Support (PMMS)

The component aims at ensuring that water and sanitation activities are managed in a sustainable manner through use of local human resources and institutions. The component has four main areas of support interventions, namely

- i. support for MoWRWH in respect of institutional strengthening of its emerging Water Directorate;
- ii. support for MoLGRDE's Policy Directorate;
- iii. support for CWSA aimed at strengthening policy analysis, research, monitoring and

²⁴ This section is mainly from the Component Description Document of the SHE Component, Sept 2003

evaluation;

- iv. support for NGOs and Civil Society organisations.

The immediate objectives of the component are that:

1. water supply and sanitation sector institutions at ministerial, inter-ministerial and agency levels should be performing their stipulated roles with respect to policy development and sector co-ordination;
2. adequate mechanisms should be in place for monitoring and evaluation of the effects of current water and sanitation practice in support of policy decisions; *and*
3. NGOs and Civil Society should be actively participating in the dialogue on water and sanitation issues.

The Danida assistance comprises support to capacity development, operational costs and technical assistance. Support is provided for strengthening monitoring and evaluation of water and sanitation issues in relation to the GPRS.

The component is co-ordinated by the Water Directorate of MoWRWH and supported by a Component Steering Committee comprising sector stakeholders that acts as the governing body for the Policy, Monitoring and Management Support Component in approving all major plans and budgets of the component. The component management structure is designed in a manner that will enable other donor organisations to be co-opted.

5 Sectoral Evaluation Questions

This chapter will address each of the identified Evaluation Questions one by one, and provide an overall assessment for each question, if possible related to the DAC evaluation criteria. Sectoral questions focus on core issues, and are complemented by questions relating to cross-cutting issues.

5.1 Relevance of Danida support, alignment, harmonisation and predictability

5.1.1 Question 1: To what extent is Danida support to water and sanitation linked to, aligned with and accountable in relation to Ghana's policies and plans (or sector strategies), harmonised with other DPs, and predictable?

5.1.1.1 Relevance

Water and sanitation as a sector is identified as critical for achievement of the development objectives of the country and access to safe water and sanitation is a key pillar for achievement of the MDGs. Intervention in the sector is therefore of high relevance to the development of Ghana. Danida's country strategy for Ghana complies with the general development framework as enshrined in the GPRS. In the Strategy for the Danish Development Co-operation with Ghana 2004-2008, the GPRS is explicitly adopted as the common framework for co-operation. Earlier interventions like the Volta project were also based on fulfilling the existing national framework. WSSPS II in particular seeks to achieve targets as set in the GPRS II. Development of all the sector programmes has involved high-level participation by Ghanaian and Danida stakeholders in the different consultative processes. The 'pro-poor' strategy of the WSSPS II is in line with MDG targets and GPRS strategies as set out in the joint GoG/Danida statement in the introduction to the WSSPS II programme document.

The implementation of programmes in the sector through the decentralised system is also meant to achieve the GoG development framework as enshrined in the Ghanaian legal

framework. The use of local institutions for the implementation of programmes has also ensured that the programmes have stayed relevant and promoted development of local capacity.

5.1.1.2 Alignment

Except for international consultancy services which are procured according to international procedures, all procurement for goods, works and local consultancy services is currently aligned with national procedure guided by the National Procurement Act. Aid flows, with the exception of technical assistance, are also captured in the national budget, even though the exact amounts are not easy to identify.

Investment Funds are transferred into a joint account in Bank of Ghana in the name of Danida/ MoFEP/ MoWRWH. The MoWRWH releases funds to sector institutions (partner institutions) based on annual budgets and half-yearly work plans approved by the Component Steering Committee. The TA is however paid by Copenhagen.

Capacity-building is provided as part of the aid delivery mechanism and during the team's visit there was continuous mention at all levels of the uniqueness of Danida's focus on institutional capacity development.

5.1.1.3 Harmonisation

The Consultative Group (CG) meeting in November 2005 (as well as the last one held in June 2007) confirmed that harmonisation between the Government and its Development Partners (DPs) is a key to improving international development co-operation in Ghana. To that end the harmonisation matrix, which defines priority actions under the 12 Paris indicators, was validated during the CG. In furtherance of harmonisation, sector groups (SG) have been formed to conduct, among other things, a continuous sector policy dialogue between the DPs and the GoG's sector representatives, to exchange views and report on the performance of the sector, and to improve the harmonisation and alignment of DPs' and Government's procedures, projects, programmes and skills.

In general SGs are working towards co-ordinating their policy matrices and mission schedules with a view to reinforcing GoG's institutionalised planning, budgeting and monitoring systems, to focus on strategic outcomes and to strengthen domestic accountability. Danida is playing an active role in this process and with DFID co-chairs the sector group on water. The expectation is that a single GPRS-based policy matrix will be developed, and disbursements tied to a broadened policy matrix to include social sectors, agriculture, energy, infrastructure and private sector development.

Whereas donor co-ordination is good in the water sector, there are still differences in implementation arrangements and procedures. In particular, the approach to subsidies in sanitation is still an outstanding issue among DPs. Danida is opposed to subsidising household latrines and doubtful about promotion of public latrines. The WSSPS II only supports construction of institutional latrines. However, there is no common agreement among DPs on the withdrawal of subsidies for household latrines or promotion of public latrines. The lack of a policy position on the part of GoG also not help promote a common arrangement.

Similarly, in rural water supply, there is inconsistency between development partners, and between the projects of any one development partner, in the application of the principle of contribution to the capital costs. In the WSSPS II a 5% community contribution is applied (even though this is usually calculated as a flat rate by the MoWRWH). In the KfW-funded schemes a 10% contribution from DAs and communities has been assumed. Danida, in contrast to other development partners, has not made the 5% contribution from communi-

ties a pre-condition for installation of water supply, in spite of that being practised in WSSPS II at CWSA as well as District level.

In their support to CWSA, Danida and IDA have adopted the payment of management fees of 5% of the annual budgeted investment in W&S. Other donors such as CIDA have also expressed their willingness to follow the same route.

A number of initiatives undertaken are also leading to more and more shared analysis. Examples include:

- Danida co-financed Poverty Impact study with CIDA and a study on spare parts with KfW;
- Danida and DFID co-chairing the sector DP group;
- use of Joint POM with World Bank;
- ongoing discussions about pooling TA to the Water Directorate with AFD, EU and WB;
- jointly implementation in the Central Region by Danida and the World Bank of small town piped systems in all districtsDanida;
- the setting up of a strategic partnership with between Danida and DFID for managing DFID funds for the Water and Sanitation Sector (WSS), with a similar arrangement with the Netherlands in preparation. As an example Danida and DFID have co-funded a rural piped water supply system providing water to several communities in the Greater Accra Region.

5.1.1.4 Predictability

Danida's 5-year programming period has given the government a high degree of funding predictability. For the most part Danida is considered a reliable partner in the sector. Of a total appropriation of DKK 619.92m allocated up to the end of WSSPS I, DKK 529.02m (representing 85.3%) was expended²⁵ and midway through WSSPS II 58.7% of the budget commitment had been spent.

5.1.1.5 Conclusions

The Danish-funded programmes clearly supports Ghana's policies, strategies and GPRS programmes, which builds on international development targets such as the MDGs and the Johannesburg Declaration. The programmes contribute to the achievement of these goals and have high relevance to the development of Ghana, and the strategies are well in tune with the national development agenda. Implementation is aligned with the national systems, but better harmonisation and co-ordination is required between the different DPs and GoG in implementation of the programmes.

5.1.2 Question 2: How appropriate was the choice of regions of Danish assistance to the water and sanitation sector?

Water and sanitation coverage across the country is very low, especially for rural communities. Relatively, therefore, support for any of the regions is considered appropriate and would have considerable impact on the lives of the people.

²⁵ Calculated from figures from Danish ministry of Foreign Affairs / NDPC; Final Report. Pre-Study of Ghana Country Evaluation, May 2007 as indicated in Table 1.

5.1.2.1 Criterion A: Quality and comprehensiveness of choice of regions and sectors

No analysis could be found by the evaluation team that highlights specifically why the regions that have received Danida support in the water and sanitation sector were selected. Some interviewees hinted at discussion processes between government officials, MoFEP and RDE staff during which, in a rather informal way, “Ghana was split up between donors”, and the Volta Region was selected for Danish assistance.

5.1.2.2 Criterion B: Level of integration of poverty aspects in regional and sectoral choice

There is no evidence of poverty targeting in the selection of the regions and Danida is not operating in the poorest regions of the country, except for the Central Region which is the poorest in southern Ghana. However at district level selection of target communities incorporates poverty assessments as part of the criteria for selection. Yet, as noted in the 2004 poverty impact study, the criteria for selection of beneficiary communities tends to marginalise the very poor, because the community management criterion requires high level of community mobilisation and strong leadership which the poor communities usually lack²⁶.

5.1.2.3 Criterion C: Consideration of up-scaling potential in regional and sectoral choice (replicability)

Given that no specific criteria for selection of the specific regions have been enunciated, it is impossible to make a judgement based on any specific criteria. However, given that Danida intervention is based to a large extent on the SWAp and in view of the low coverage of water in the rest of the regions, there is every possibility of scaling up and replicating the approaches in other regions. In the light of additional sector and budget support, there is potential for Danish support to spread to other regions in future.

5.1.2.4 Conclusions

The choice of the regions for Danida intervention in WSS does not appear to have been based on any documented analysis. Nonetheless, given the low level of water and sanitation coverage, the selected regions still provide enough opportunity to impact on the poor. Poverty reduction is high on GoG’s agenda, but is not translated into operational terms. Poverty targeting mechanisms are being developed by the NDPC to form a framework for prioritisation of development intervention in the districts and communities. This has however not reached a stage where it is generally applied. Planning within the WSS has still to be fully embedded in national planning, although progress has been made. The Strategic Investment Plan (SIP) cannot function as a master plan, but it provides a significant instrument for planning towards achievement of the MDGs in the rural areas, including small towns.

Danida has been instrumental in promoting a national water policy and in the elaboration of the SIP.

The strategies applied to ensure effective demand, which require mobilisation of community contributions to capital costs, and full community responsibility for operation and maintenance costs, have raised concern about the possibility that poorer communities are not likely to rank highly among those selected to receive improved water supply and sanitation services.

²⁶ Danida; Impact of selected donor support on the poor: the case of the potable water sector in southern Ghana, 2004

5.2 Question 3: To what extent has Danish assistance contributed to improved sustainable access to safe drinking water facilities?

Access to improved and sustainable drinking water remains a challenge in all regions. The NWSCP projected water coverage of 85% by 2015, and in the WSSPSII the target is to halve the number of households without access to potable water by 2015. Estimates of the current level of access are quite conflicting. For instance, whereas the Ghana Statistical Services (GSS) indicates that 74% of all households in Ghana obtain their drinking water from improved water sources²⁷, figures from the MoWRWH rate water coverage for the region as low as only 52% and progress in raising this percentage is slow²⁸. Respective figures from the GSS and CWSA for the regions also differ substantially. The Eastern Region, for instance, is supposed to have 95.3% coverage, but CWSA gives only 49.5% for rural water coverage. Given that the urban population of the region is only a third of the regional total, it is improbable that the difference in the estimates is compensated for by higher urban access.

Be that as it may, the contribution of Danida to improved access to water was greatly extolled during the study. Figures available to the study team indicate that of all improved water facilities in the Volta Region, 89% (see following table) has been installed with the support of Danida. This is hardly surprising, given the long association of Danida with the Volta Region. Ironically, although the Volta Region has the lowest water coverage rate in Ghana (48.6% according to CWSA and 52.1% even by the optimistic estimates of the GSS), the indication is that the level of investment in the water sector by Government and other DPs in the region is very low. (There is evidence that the investment in facilities *per capita* is rather skewed in favour of the southern districts of the region as compared to the northern districts – even though exact figures were not immediately available to the team.)

Table 7: Summary of water facilities in the Volta and Eastern Regions from 1993 – June 2007

Facility	Eastern Region			Volta Region		
	Total	Of which Danida	%	Total	Of which Danida	%
Borehole	1978	927	47%	1053	933	89%
Hand dug wells	271	116	43%	37	37	100%
Pipe Scheme	22	3	14%	137	123	90%
Rain Harvest Scheme	8	8	100%			
Total Number	2279	1054	46%	1227	1093	89%

Source: Data from CWSA Volta and Eastern Regions, Sept 2007

For the Eastern Region the proportion of improved water facilities provided by Danida is estimated at 46% of the regional total. However, the district level variations provide even more interesting insights into the impact on the water sector of Danida interventions. In the Akwapim North District for example, water coverage is currently estimated at 23%, up from 16% in 2001 (an improvement of over two-thirds) when Danida provided support to the district. Danida's contribution to the number of improved water facilities in the district is about

²⁷ Ghana Statistical Services, 2003 Core Welfare Indicators Questionnaire (CIWQ) Survey, Ghana. National Summary.

²⁸ Speech presented by The Ambassador Of Denmark, Mr. Flemming Bjørk Pedersen, on behalf of Development Partners at The Joint Government / Development Partners' Water And Sanitation Sector Review Conference on 13 September 2007

55%, an indication that Danida's support has been responsible for providing 79% of the total increase in access to improved water sources in the district. Similarly, the New Juabeng Municipal Assembly has a rural water coverage of 41.4%, and 90% of the facilities were provided with support from Danida.

Unfavourable hydro-geological conditions in some districts in all three regions, resulting in low success in drilling and hand-dug wells as well as poor water quality, have been a major reason for limited progress in water provision. On the other hand the average success rate of drillings and hand-dug wells in the Eastern Region is above 80% and most facilities provide water all year round. Except where local community regulations apply as part of their own management arrangements, most of the water facilities have water running throughout the day. Generally, distances to water facilities have been kept within the national standard of 300 meters with many households informing the team that they hardly have to cover any significant distance to gain access. However, it has to be mentioned that the number of point sources in most of the beneficiary communities approached under WSSPS I and II is far lower than one per 300 persons because the service level is determined by the demand expressed by the contribution to the investment and not necessarily strictly based on the threshold population.

In terms of water quality, however, apart from chemical testing that is done as part of the initial construction and periodic tests in response to complaints from communities, not much bacteriological testing is carried out on water (bacteriological testing is quite complicated and normally considered to be unnecessary for deep boreholes). Nonetheless CWSA and WRI attest to very high water quality in most of the successful point sources. Innovations for improving quality have been developed, one of which is an iron and manganese removal plant, developed by a member of CWSA and installed in several communities with affected water (high iron/manganese content is due to corrosion of the so-called galvanised pipes in hand pump installations and could be solved by changing to stainless steel pipes, even though they are quite costly compared to galvanised pipes. The problem with the removal plant is the O&M, which is essential for its functionality)

Conclusions

Danida's intervention in the water sector is making significant contribution to improvements in community access to potable water in the different regions. In fact, water coverage in the intervention regions, especially Volta and Eastern regions has improved very substantially with Danish sector programme support. This was acknowledged throughout the evaluation, yet it is clear that the level of investment required to meet the nationwide target of 85% coverage is nowhere near being achieved. In all the districts visited, it was clear that the DAs are not able to provide even the basic operational support required by the DWSTs and EHOs to monitor implementation effectively. No specific budgets are allocated by the DAs for investment in water facilities and most capital investment in water sources is provided by donors.

Table 8: Summary of DAC-criteria assessment of improved sustainable access to safe drinking water facilities

Criterion	Assessment
Relevance	Access to sustainable potable water is a basic human right and thus the relevance of any programme meeting this need cannot be over-emphasised. Using a demand-led approach for selection of beneficiary communities has ensured that communities only apply when they have identified a perceived need for the facility.

Criterion	Assessment
Effectiveness	Most of the targets set for water supply in the different projects have been met. Under the current programme there is every indication of the project targets being met. There is however a need to study further the level of use of other unsafe sources of drinking water in various communities. There were indications during the study that in some communities farmers drink from dug-outs and streams on their farms and also that those who may not be able to afford payment at particular times resort to other water sources.
Efficiency	Efficiency in the delivery of the water supply is quite high as a result of the high calibre of personnel available from the region and districts, and of the developed capability of the private sector. Available local persons and POs (who are not supposed to be involved in routine maintenance unless requested and paid by WATSAN) that carry out routine maintenance of the point sources ensure sustained operation of the water sources. However, lack of spare parts to service the facilities expeditiously increases their down time. Private businessmen are not willing to store parts which do not sell as quickly as they wish, as this locks up their capital. Until a critical mass of facilities is obtained in each region to warrant frequent purchase of parts, this situation will impede operational efficiency.
(Possible) Impact	<p>Improved access to potable water has a direct impact on the health of the people. In many communities there was anecdotal evidence of drastic reductions in water borne diseases and their impact on the economic well-being of the people. Notwithstanding that, it should be noted that in recent times there has been a resurgence of the incidence of guinea worm infestation even in regions where intervention in the water supply has been longstanding.</p> <p>It was confirmed throughout the community interviews that distances to water sources have been reduced which resulted in women having more time for economic activities, and that availability of water and sanitation has led to increased enrolment and punctuality in schools, especially for girls. Most women and girl respondents indicated they now spend less than 30 minutes a day fetching water</p>
(Likely) Sustainability	<p>Several aspects of the implementation strategy of the SPS are aimed at ensuring the sustainability of water facilities. Decentralisation of planning, implementation and management of services by (a) making communities decision-makers and owners and managers of water supply and sanitation facilities, (b) making DAs more autonomous and able to help communities obtain improved services and (c) linking water and sanitation provision into broader district development plans and activities, all help ensure the sustainability of the facilities.</p> <p>However, the continued functioning of the facilities also depends to a large extent on the extent to which DAs supports the DWSTs and EHOs at district level. Currently there is very little evidence of DA capacity to sustain the DWSTs by providing more financial and logistic support. In addition, in many communities the WATSAN committees, which are key to sustainability, do not have sufficiently robust accountability systems and motivation to operate sustainably.</p>
Cross-cutting Issues	<p>Water governance at community level is prominent in the capacity-building aspects of the water supply component of the Danish support. Communities have instituted their varying systems within a general and broad outline provided by CWSA on managing water resources. Payment variations exist in different communities to generate enough funding for O&M.</p> <p>There is a special focus on women as the principal users of water, planners, operators and managers of community-level water systems. There is a policy that at least a third of WATSAN and Water Board membership should be female.</p> <p>Anti-corruption measures have however not been properly articulated for the different levels. In some communities visited by the team, the Water Board had just been replaced after six years of unaccounted stewardship. Several millions of cedis had been unaccounted for, yet there was no system for retrieving the lost funds.</p>
Coherence, Co-ordination, Complementarity	There has been increasing coherence in the water supply sector in the last few years. Danida, DFID, and the World Bank are collaborating to implement water supply systems in many communities using the CWSA as facilitators, avoiding the duplication of effort that characterised past interventions.
Issues of Procedures, Admini-	A demand-driven approach through which communities themselves take the decision to participate by articulating demand and choosing a level of service based on

Criterion	Assessment
stration and Management	<p>their willingness to contribute 5% of the capital costs and pay for the normal operations, maintenance and repair costs of their facilities, is the basis for selection of beneficiaries and for deciding on service level. The possibility of the DAs contributing some 5% to the capital cost is also being considered. It is worthy of note that the 5% contribution to investment is in many cases paid by a supporting society (family members from the community now living in the major cities of Ghana and organised as a supporter society)</p> <p>Contract management through the DAs using the national procurement procedures has required that the capacity of DAs is developed for that purpose. In most regions, contracts within the threshold of the DAs as per the Procurement Act are ably managed by the districts with direct support from the CWSA, while the RCC manages those above the district thresholds.</p>
Global Assessment	<p>The current level of water and sanitation coverage in the Eastern and Volta Regions (and to a lesser extent Greater Accra and Central Regions) can be substantially attributed to Danida's support. Without the component there is little prospect of the beneficiary communities gaining access to safe drinking water or improving their very poor sanitation situation.</p>

5.3 Question 4: To what extent has Danish assistance contributed to increased access to sustainable environmental sanitation facilities in the target regions?

The situation for sanitation is worse than that for water supply. The GSS indicates that nationally 55% of households have access to sanitation facilities, but the figures from the regions point to a far lower presence of sanitation facilities. The Eastern region reports rural sanitation coverage as a mere 11.3%. The Volta and Central Regions also report similarly low figures, while the Abura-Asebu-Kwamankese district in the Central Region reports sanitation coverage of only 13%. Such low coverage and poor hygiene education results in many water-borne diseases, such as guinea worm and diarrhoea.

Notwithstanding the low coverage, Danida's contribution is very significant in terms of the proportion of facilities provided in the various districts (see next table). Almost all the household and institutional latrines that supported through the CWSA/District Assemblies in the Volta Region have been attributable to Danida. In the Eastern Region the situation is no different with 88% of all facilities attributable to Danida support.

There was a change in Danida's support to sanitation as between WSPS I and WSSPS II. In the current programme private latrines are no longer subsidised. Emphasis is now on school hygiene and public latrines

Table 9: Summary of sanitation facilities in the Volta and Eastern Regions from 1993 – June 2007

Facility	Eastern Region			Volta Region		
	Total	Of which Danida	%	Total	Of which Danida	%
Household KVIP	160		0%	-	-	-
Household VIP	5,407	5,007	93%	9,938	9,630	97%
Institutional KVIP	641	453	71%	832	831	100%
Total Number	6,208	5,460	88%	10,770	10,461	97%

Source: Data from CWSA Volta and Eastern Regions, Sept 2007

The sanitation facilities are operational and being used by the various communities. However, in many communities the facilities, especially the school latrines, have also been used by the community in competition with the school children. In such instances the main reason was that there were no other convenient facilities. In a number of communities,

while routine cleaning and maintenance were left for the schools to organise, periodic communal action is mobilised through the school management committees to maintain the facilities (even in instances where the facility is solely used by the school).

The facilities also adequately cater for gender differentiation within the institutions. However, the conditions for ensuring environmental safety in the facilities were not always adequate. In some communities the place was very weedy and no provision was made for waste disposal. Nonetheless, provision for hand-washing has been incorporated into the design of the facilities. Hand-washing after the use of the toilets (especially among school children) was reported to be widespread by community members, EHOs and the DWSTs generally. It was interesting though to notice that even at DAs, many of the DWSTs visited did not have soap for hand-washing in their own toilets!

Conclusions

Sanitation coverage is very low throughout Ghana and disposal of solid waste remains a formidable challenge for all DAs in Ghana. Indeed targets set for the sub-sector are usually very low. For instance, according to the GPRS I, the target for the proportion of the rural population with household latrines was expected to move from 15% to 25% in 2005.

Table 10: Safe Water and Sanitation Targets in GPRS I (percentages)

	2000*	2005
Rural population with access to safe water	40%	54%
Rural population with household latrines	15%	25%
Urban population with access to safe water	70%	78%
Urban population with household latrines	34%	45%
Population with unsafe method of solid waste disposal (dumping)	91%	75%

Source: Danida; Government of Ghana SPS Document WSSPS II Water and Sanitation Sector Programme Support, September 2003, p14.

In the light of such low coverage, the impact of Danida's investment in sanitation, particularly latrines, is clearly limited. A national policy framework is needed for the implementation of interventions in environmental sanitation issues, and innovative concepts for household sanitation in particular need to be developed. The proclaimed strategic orientation of Danida in the CAS has been to "place special priority on promoting sanitation conditions and environmental protection of water resources". The current level of investment in sanitation is mostly unlikely to achieve this.

Table 11: Summary of DAC-criteria assessment of access to sustainable environmental sanitation facilities

Criterion	Assessment
Relevance	The objective of improved sanitary installations (institutional and household latrines) being used and managed by the respective institutions and households is a very relevant one as environmental sanitation and solid waste disposal remain a major challenge for all district assembles and communities.
Effectiveness	All the facilities provided are being used by beneficiaries. However, the issue of cleaning and maintenance of the facilities, especially the institutional latrines, requires more attention. It was observed that many communities have yet to develop support mechanisms for O&M of the facilities in the schools, while the schools have only limited capability to finance any rehabilitation without community support.
Efficiency	Using local artisans trained by the programmes have tended to reduce the cost of construction of the facilities in relative terms.
Impact	The training of many 'latrine artisans' in the districts has left a pool of local expertise available to other projects and individual requests.

Criterion	Assessment
Sustainability	Demand for household latrines remains very high (which contradicts experiences during WSSPS I) even though this may be due to the very high <i>de facto</i> subsidies of close to 70% provided through donor-funded programmes other than Danida's, and which are not sustainable when practised on a wider scale.
Cross-cutting Issues	Due recognition is given to the issue of gender differentiation in the use of public latrines, such that privacy especially for female users is catered for.
Coherence, Co-ordination, Complementarity	While it is recognised that continuous provision of subsidies for household latrines is unsustainable, there is still no agreement as to how to proceed in this regard. There are therefore varied approaches among different development partners, with a few still providing subsidies for household latrines at different rates of contribution by beneficiaries. The situation is not helped by a lack of a clear policy position on this.
Issues of Procedures, Administration and Management	A demand-driven approach and contribution to capital cost both feature in promotion of sanitation facilities. Contracts are managed by the DAs except where the threshold is beyond the authorised limit of the assembly, in which case RWSTs take over.
Global Assessment	Decades of latrine promotion have not resulted in major improvements in mass adoption at local level. It may be useful to reconsider the issue of public latrines at community level combined with private operators and user fees, and with more emphasis on hygiene promotion and hygiene behaviour changes to maximise health benefits.

5.4 Question 5: To what extent has Danish assistance contributed to improved behavioural patterns with respect to use of safe water and sanitary facilities in targeted communities?

The WSSPS II, School Hygiene Education (SHE) component aims at improving the behavioural patterns of school children and youth in targeted areas with regard to hygiene. It is recognised that availability of safe water and sanitation does not automatically lead to improvements in health, but appropriate hygiene behaviour is also needed. Behavioural change is acknowledged to entail a long-term effort and is best achieved when started at a young age. The component therefore targets schools as the main vehicle for hygiene education. Schools can influence behaviour at an early stage, boys and girls are more responsive and are better able to incorporate new ideas as well as make sustained behavioural changes. The component has had a slow start, but since 2006 has made good progress.

Key achievements by the end of 2006 have included the training of School Health Committees in 600 schools by contracted Partner Organisations (POs) under the supervision of SHEP Co-ordinators. Prototypes of IEC materials had been developed and mass production in a collaborative effort with UNICEF initiated. District Action Plans for follow-up campaigns have been prepared by most districts and funds have been disbursed to 43 districts for implementation of hygiene awareness campaigns. The outstanding activities include additional training for 475 school committees, support to SHEP policy development, updating of curricula and conduct of TOT for teacher training, while ongoing general hygiene promotion at District level has the potential for introducing long-term behavioural change.²⁹

Institutional latrines are provided with hand-washing facilities; IEC materials, particularly on hand-washing and appropriate use of latrines, are displayed in some communities; while clinics and schools participating in the programme and SHEP co-ordinators in the districts are part of teams that carry out community animation. These materials have been developed with support from other partners such as USAID and Nestlé (Figure 9).

²⁹ GOG/Danida Review Aide Memoire Sector Review Water Sector Programme Support September 2006

Figure 9: Some IEC materials on school wall in the Eastern Region



At the community level, WATSAN training programmes have incorporated hygiene education as well as HIV/AIDS awareness into leadership training organised periodically for women.

Conclusions

From the field interviews it was apparent that the level of awareness of hygienic behaviour was quite high and communities had instituted different measures to keep water points and latrines hygienic. Yet it is difficult at this stage to assess the level of adoption among the population at large. A specific Knowledge, Attitude and Practice (KAP) study to assess the current level of awareness should be undertaken so as to be able to assess the level of change and the impact of the component in the future.

Table 12: Summary of DAC-criteria assessment of improved hygiene behavioural patterns with respect to use of safe water and sanitary facilities

Criterion	Assessment
Relevance	The relationship between WSS, hygiene behaviour and integrated WRM has been recognised in national plans and policies, but the relationships have not been made operational in terms of rules, regulations and procedures.
Effectiveness	The collaboration between the EHOs, DWSTs and the SHEP co-ordinators in the districts is working effectively in some districts. However, it must be noted that the period of the study (August- September) which is school holiday period, did not allow greater interaction with the pupils to assess effectiveness in the field.
Efficiency	There have been considerable delays in the implementation of the programme especially with respect to the review of the school curriculum, yet considerable training has been conducted. The use of teachers to carry out the training would provide more sustainable capacity within the education sector than the POs currently engaged.
Impact	The focus on school children as agents and drivers of change in behaviour is likely to produce some positive impact in the long term.
Sustainability	The sustainability of the programme however depends on the extent to which the educational system emphasises the need for hygiene education and commits resources to training personnel to teach the requirements. (SHE is to be included in the curriculum/syllabus for education of teachers)
Cross-cutting Issues	The programme emphasises the need to ensure environmental safety as a basic responsibility for all. It has also developed gender-specific messages targeted on youth, women and men. HIV/AIDS awareness is incorporated into training as a cross-cutting issue.

Criterion	Assessment
Coherence, Co-ordination, Complementarity	The incorporation of the programme within the GES hygiene education programme is a useful step in achieving long term attitudinal change. The programme is collaborating with other partners to develop communication materials, enhancing greater synergy.
Global Assessment	This component has yet to make any marked impact. The situation is a product of the lack of any defined policy on environmental sanitation and the content that an awareness campaign would thus have.

5.5 Question 6: To what extent has Danish assistance contributed to improvement of capacity of the community to manage water supply and sanitation systems?

Capacity-building of communities to improve their capabilities for managing water and sanitation facilities has been a major activity throughout all Danida interventions in the water and sanitation sector. The formation of WATSAN committees is a prerequisite for installation of water and sanitation facilities. The different training programmes carried out for WATSAN committee members equip them to mobilise community funds both for the initial payment of capital cost and also for operation and maintenance of the facilities. There is also a focus on environmental management relating to the use of the facilities.

However, the field studies showed that the main focus of Danida-funded activities is construction of water points and that there is relatively little attention to post-installation sustainability. Capacity-building at community level should be more focused on the ability to operate and maintain water installations after construction. It was evident from communities visited that the capability for O&M was not assessed and that activities related to O&M were not monitored. In many communities, local WATSAN members are disconcerted by the lack of appreciation of the volunteerism involved in the management of the community facilities by community members. In many places, committee members have resigned with the result that training is required for newly-recruited members. No such systematic re-training programme exists for new members.

Table 13: Summary of DAC-criteria assessments of improvements in of community capacity to manage water and sanitation systems

Criterion	Assessment
Relevance	Water governance at local level is a critical component of Danida water policy. Similarly, the NWSP and the Water Policy all emphasise the need for users' active involvement in the management of the water facilities.
Effectiveness	Capacity-building activities for local managers of the facilities are carried out as a matter of principle on all programmes. All newly-formed WATSAN groups are trained before they start operations. Leadership training for members, especially women, is undertaken.
Efficiency	Training delivered to communities is conducted professionally. Involvement of the private sector in capacity-building spreads skills locally which could be tapped for use by other programmes. However, more often than not POs tend to be from outside the districts and regions of the programme, because of lack of local competences. The POs are most often owned by powerful individuals based in Accra and enjoying good relations with CWSA. Staff conducting the field work originally lacked experience but were trained through initiatives from Volta I or WSSPS I. Local competence through establishment of new locally based POs could similarly be created if required by the Districts.
Impact	In some communities capacity of locals involved in water management have improved to the extent that they become local experts who are relied upon by near-by communities for simple operation and maintenance.
Sustainability	Accountability systems are very weak among many of the community organisations. In all communities the WATSAN keeps records of receipts and expenditure on the water facilities, but there is very little public accountability to the entire community.

Criterion	Assessment
	Perceptions of corruption in the WATSAN are rife in several communities, leading to distrust of the members by the community and frustration of the members who in turn feel that their efforts are not appreciated. Resignations from WATSAN committees are frequent in many places, leading to loss of the competences and skills of those who are trained
Cross-cutting Issues	Gender roles and responsibilities are major themes in the capacity-building programmes conducted for community members. Environmental management is another area of emphasis throughout the programme.
Coherence, Co-ordination, Complementarity	Community-level management of facilities is adopted by all external support agencies in the sector. Training and capacity-building programmes are usually based on the same or at least similar modules and CWSA co-ordination of these programmes assures that there is coherence in the content of training local communities. Differences in approaches adopted by the external support agencies in the water sector make complete harmonisation of training content currently impossible.
Global Assessment	Communities in general are managing the installed facilities effectively. But lack of continuing support following installation means that there is a gradual loss of the competences and skills needed for the management of the facilities. Provision for re-training and re-tooling will be necessary to equip the communities to manage the facilities better.

5.6 Question 7: To what extent has Danish assistance contributed to water and sanitation being affordable by the poor?

The provision of water is premised on the ability of communities to contribute to the capital cost (not less than 5%) of the facility selected. The mobilisation of such funds has been a source of delay in the start-up of many community projects. Contribution by communities is a national policy and not peculiar to Danida programmes. The idea is to engender community ownership but, as pointed out by the Poverty Impact study, the policy does not necessarily promote ownership and it discriminates against the poor³⁰. According to the CWSA, in communities with water-borne diseases such as guinea worm or bilharzia, the community contribution condition is waived and the water facility installed. In such instances, the DAs provide the community contribution.

At community level, the most common basis for accessing water from installed facilities is a 'pay-as-you-fetch' system, based on a commonly agreed price per measure (mostly an 18-litre bucket). The price per measure varies slightly from community to community but ranges from ¢100 to ¢300. Community discussions suggest that the average amount of water used *per capita* per day is 30 litres – that is a price of ¢167 to ¢ 500 per day. This translates into a range of ¢60,833 to ¢182,500 per person per annum. On the basis of the poor earning ¢2,790,000 per annum and the extremely poor only ¢1,395,000³¹, the poor spend between 2% and 6.5% and the extremely poor 4.4% to 13% of their income on water.

However, no specific tariff differentiation is established to cater for the needs of the very poor. Responses from the communities indicated that the social systems are such as to cater for the needs of the poor. A typical response from most communities was

'... everybody pays but if one day someone does not have enough money to pay for water the household members will provide for their need'.

³⁰ Danida; The impact of selected donor projects on the poor. The case of potable water in Southern Ghana,

³¹ Income poverty calculated on the basis of two-thirds of per capita income (of USD 450 for Ghana) and one-third for the extremely poor. Exchange rate of ¢ 9300 to USD 1 is used.

While it is very likely that some poor may be unable to get as much water as they need because of the pricing, no evidence was available to the evaluation team to confirm this.

Nonetheless, in most cases water vending in the communities was left in the care of some of the most vulnerable (very old men or women, women with physical disability, etc.) as a means of income generation for them.

Conclusions

The current demand-driven policy for community water provision does not allow for adjustment based on a community's population or its ability to pay. The flat percentage for capital cost implies that smaller (and most often poorer) communities pay greater amounts per person than larger communities. In any event, *per capita* cost of water is higher for poorer communities and even though poverty is not always a reason for a community or community members not paying for installation of facilities in a timely manner, inability to pay has been a major reason for implementation delays, further disadvantaging the poor's access to water. A revision of the approach based on population size (or number of households, which is easier to count) will ensure some equity.

Table 14: Summary of DAC-criteria assessment relating to affordability of water and sanitation by the poor

Criterion	Assessment
Relevance	Poverty reduction is the ultimate goal of the MDGs and the GPRS. Intervention in the water and sanitation sector as a whole is supposed to improve living conditions for the poor. Affordability is clearly of relevance if the installed facilities are to achieve this goal.
Effectiveness	No special efforts are made to institute differentiated tariffs at either national or local level to the advantage of the poor. The existing policy for payment actually disadvantages the poor.
Impact	In some instances community members revert to the use of unsafe water sources increasing the risk of infection with water-borne diseases such as guinea worm
Global Assessment	There is no evidence of any changes in approach in favour of the poor, in spite of the 2004 Danida poverty impact study, which concluded that the very poor are disadvantaged by the conditions for provision of the water facilities to communities, and recommended changes. Some local-level arrangements attempt to cater for the needs of the very poor in communities, but the demand-driven approach and the flat-rate community contribution to capital cost, according to the type of facility, is inequitable and disadvantages the poor.

5.7 Question 8: To what extent has Danish assistance in water and sanitation contributed to reduction in gender inequalities?

Generally, mainstreaming of gender equity is accorded high priority in the water and sanitation sector. A gender strategy for the sector prepared in 2001 provides a framework for mainstreaming gender issues. Its content includes guidelines for gender awareness training, ensuring gender-balanced staffing, gender training for community leadership and efforts to promote women's participation at all levels. The two Components of the SPS which involve community-based activities (the DBWSC and SHEC) have both developed guidelines aimed at ensuring gender balance to direct the formation and training of Water and Sanitation Committees (WATSANs), Water and Sanitation Development Boards (WSDBs), and School Health Committees.

Within the DBWSC, gender awareness constitutes a major part of training and extension services delivery at various stages of the project cycle. Each of the four beneficiary regions has designated a gender co-ordinator to facilitate gender mainstreaming and consistently monitor adherence to the established guidelines. Generally DBWSC management and

staff are aware of the gender strategy and consistently make an effort to ensure that gender issues are taken into account systematically, and that barriers to the active participation of women in project implementation are identified and solutions found.

Further issues related to gender equity are discussed under section 5.11

5.8 Question 9: To what extent has Danish assistance contributed to the promotion of sustainable water resource management in Ghana?

The focus of interventions in the WSS in the past had mostly been limited to water supply, with no link to water resources management in the wider sense until support from Danida under WSSPS I (in 1998) to the WRIS institutions and later to WRC created the right opportunities for better linkages³². Ghana's experience with IWRM since then is still evolving, and "lessons learnt" on interpretation of the concept and application of the principles in practice are gradually being put into practice countrywide and introduced in various sector-related policies, plans and programmes. .

Under the WRIS institutional support the capacity of the institutions for data collection and analysis was greatly expanded and a database was developed to enhance both their effective collaboration with each other and service provision to stakeholders in the sector. Thus under WSSPS II these institutions have entered into service contracts with WRC to provide specified services and information that is being used to enhance water resource management.

The support received from Danida enabled the WRC to become a fully functioning organisation, with basin-based (support) offices being added subsequently. This enabled WRC to take the lead in the passage of the necessary legislation on water use regulations and procedures for the issuance of rights to water abstractions by means of permits (licences) passed by Parliament at the end of 2001 (LI 1692). An additional legislation - Regulations governing drilling operations and groundwater development - was prepared and enacted as LI 1827 of 2006.

Two river basins (Densu and White Volta) management Boards have been established, to create public awareness, build capacity, plan and institute a water resources planning system within a decentralised administrative framework with the river basin as the planning unit. A third river basin (Ankobra) is also being developed. A Decision Support System (DSS) is being developed as a tool for water resources assessment and water allocation planning, initially covering the two pilot basins (Densu and White Volta).

An IWRM plan for Densu River Basin has been developed, which now serves as a "blueprint" for further water resource management activities in the basin. During the process of preparing the IWRM plan, tools for implementing Strategic Environmental Assessment (SEA) principles have been introduced and used.

A public awareness and education programme, with varying focus areas according to the segments of the public and district assemblies staff to be addressed, has been developed by WRC and is being implemented. A Communications Strategy for WRC has also been developed to guide these activities in the future.

A key outcome of the Danida support to WRC has been the creation by GoG of the Water Resources Management Account into which water rights fees are paid and which is being used to support the operations of the WRC. The Water Resources Management Accounts (WRMA) has permitted WRC to retain the funds collected to support its budget. By the end

³² Executive Secretary, WRC, pers comm. Sept. 2007

of 2006, the WRC had collected over USD 300,000, making it self-sustaining and able to purchase services from the WRIS agencies.

Conclusions

The Water Resources Commission has, through support from Danida, become increasingly prominent in the management of water resources and in developing systems for decentralised water resource management. Collaboration with the Water Resources Information Services (WRIS) agencies is progressing well and WRC has entered into 3-year service contracts with four agencies. Synergies created among the WRIS institutions in their collaboration are further increasing their capacity to carry out their respective mandates.

Table 15: Summary of DAC-criteria assessment of the promotion of sustainable water resource management in Ghana

Criterion	Assessment
Relevance	Water resources management has been recognised as a necessary step for sustainable water supply in the country. With the creation of the WRC capacity was required to enable it to play its role as required under the Act. Danida's support provided the needed leverage required for the take-off of the WRC. Before the Danida intervention, the WRIS agencies had the technical capacity but the logistics to enable them to perform were not available. Danish support provided the right platform for their functioning
Effectiveness	All reviews on the support to WRC and the WRIS agencies have described the interventions as having been very effective.
Impact	The institutions engaged in water resource management and research have mostly had their capacities sufficiently expanded to enable them to carry out their mandates.
Sustainability	The establishment of the Water Resource Management Account provides for the sustainability of the WRC, with the effect that it is able to engage the WRIS on commercial basis and also ensure their own sustainability.
Cross-cutting Issues	SEA has become an integral part of planning of the management of water resources. Participation by women in particular and all stakeholders generally is also given prominence in basin management.
Coherence, Co-ordination, Complementarity	Danida is currently the only donor supporting water resources management, but the intra-sector agency co-operation currently being developed provides opportunities for any new support from other partners to be properly co-ordinated and harmonised.
Global Assessment	The impact of the support to the sector has been very significant, with the institutions involved having had their capacities improved sufficiently to enable them to perform their respective functions far more effectively.

5.9 Question 10: To what extent has Danish assistance contributed to the development of organisational and institutional capacity in the water and sanitation sector and enhanced the capacity of key actors in the sector to perform their respective roles and responsibilities and sustained improved performance of these in Ghana?³³

Figure 10 depicts the levels of governance in the water and sanitation sector in Ghana. At all these levels, capacity development has been a major component of Danida interventions. Capacity-building has been a key strategy of Danida in all the SPS programmes and has involved not only traditional training and TA, but also operational and logistical support and incentives. Sector investments have also been made to allow this capacity to develop.

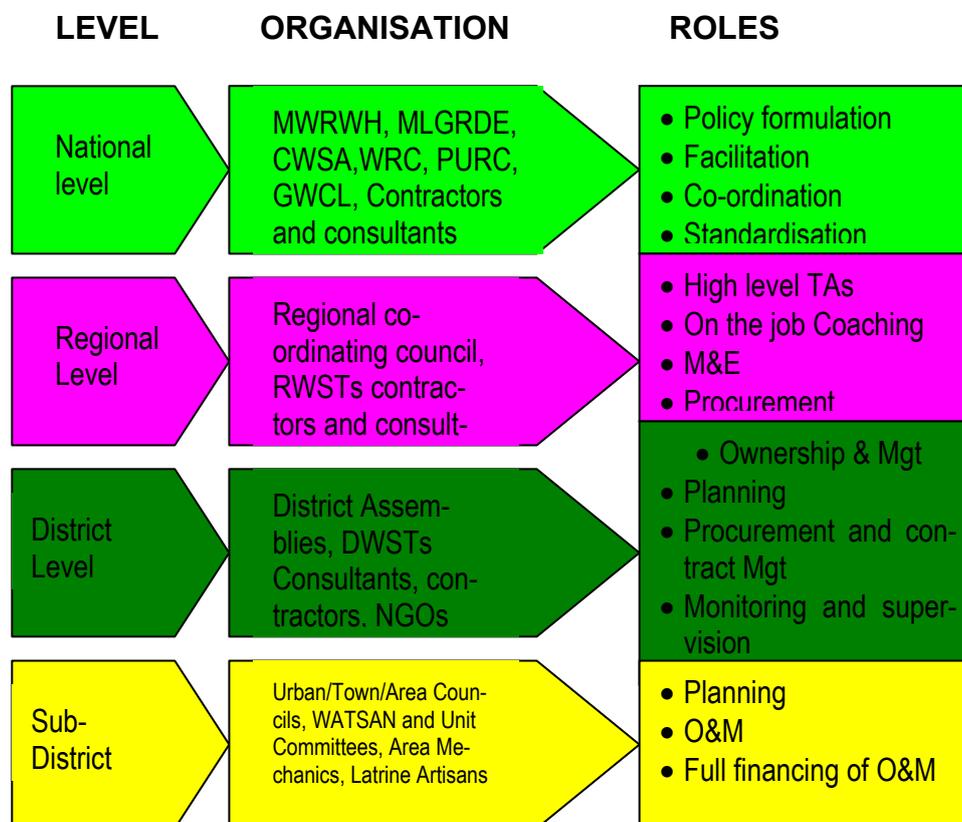
³³ This is a slight expansion of the question formulated in the inception report.

However, the obvious dilemma is how to balance the process of making the resources available with sustainability in the longer term.

The adopted strategy of stakeholder consultation, intensive community development and training programmes, and an adaptive approach which encourages learning and building on experience, is effective and is ensuring that capacity-building activities remain relevant to the needs of the sector.

In 2004 Danida applied a capacity development outcome evaluation (CDOE) methodology in two Danida-supported programmes in Ghana: the water sector programme and the thematic programme for good governance and human rights. The study was undertaken during the period July-September 2004. Both areas of study are of relevance to the water sector evaluation and the study provides a solid background for a more comprehensive institutional assessment. One conclusion of the study is that capacity development has been more successful in the water sector than in decentralisation to local authorities.

Figure 10: Levels of governance in the Water and Sanitation Sector in Ghana



Source: TREND/IRC: Capacity development at the intermediate level for improved water governance and delivery in Ghana. Sept 2006

In the water sector, the study identified significant changes in the outputs and outcomes of CWSA since its establishment in 1998. The changes in outputs include:

- development of training and technical assistance support to regions and districts;
- significant increases in facilities such as household latrines.

Changes in outcomes include:

- increased water supply and sanitation in rural communities;
- improved data collection; *and*
- improved relationships with NGOs.

The changes in the output of CWSA can be explained by a number of factors. The most significant of these factors are well-qualified and competent staff, continued sector investment, capacity development support from various sources and core government funding (although delays in release affects effectiveness). According to the study, whilst Danida's support to capacity development has been significant, it did not account for all changes in output and outcomes. Inputs from other sources such as government, the World Bank and CWSA's own efforts have all contributed to the changes.³⁴ This is positive from the point of view of institutional sustainability.

A number of cross-sectoral lessons and issues emerge from the study. These include:

- importance of internal capacity and leadership commitment;
- improving synergy between programmes;
- effectiveness of long term capacity development support and flexibility in an enabling environment;
- the need for co-ordination and harmonisation of capacity development support;
- balance between capacity development support to the centre and to district level;
- balance between skills and knowledge transfer, and broader institutional support;
- demand-led *versus* supply-led approaches and sustainability; *and*
- making resource transfers more reliable.

The following box provides a summary of some the capacity-building outcomes resulting from Danida interventions over the years.

Box 7: Summary of outcomes Danida Capacity Development interventions

<p>Human Resource Development:</p> <ul style="list-style-type: none"> • Skills development at regional and district level, technical and managerial training and awareness interventions at community level and involvement of the private sector • Continued support to the HRD programme for WRC and its Secretariat. Training of professionals and development of skills related to management functions at DA level. • Improvement of teachers' capability. Coaching and supervision of SHEP co-ordinators. TNA at different levels <p>Organisational strengthening</p> <ul style="list-style-type: none"> • Capacity-building at regional and district levels • Equipment supplied to WRIS institutions • Capacity-building at DA and local community levels. Internal organisational development of WRC and its Secretariat • Support from international adviser for SHEP • Operationalisation of the Water Directorate at MWH and the Environmental Health Unit at MLGRD. Improved planning capacity at CWSA. <p>Systems Development</p> <ul style="list-style-type: none"> • Development of District Water and Sanitation Plans. Involvement of the communities and the private sector in O&M • Development of an efficient and effective management system, and decentralised water resources management structures. Continued development of Decision Support System (DSI). • Development of curricula, teaching aids and hygiene promotion material at national level • Development of CWSA's monitoring and evaluation system for integration into the system established by MWH and MLGRD in collaboration with GPRS M&E system.
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³⁴ Ministry of Foreign Affairs / Danida: Capacity Development Output Evaluation. Step 4: Draft Evaluation Report. December 2004.

Within the first two years of WSSPS II, the DAs were provided with block grants for operational expenses in connection with provision of water supply and sanitation (WSS) services. After the two year period the DAs are expected to include these costs in their budgets, however the evaluation team found that most of the districts had yet to include the operational expenses of DWSTs in their budgets.

Conclusions

Danish support to capacity development in the WSS has been comprehensive, looking beyond training but also targeting institutional strengthening and systems development. In that regard many of the institutions in the sector are now able to perform their respective functions more efficiently.

The establishment of the Water Directorate in the MoWRWH has resulted among other things from the support received from Danida. However, formal mainstreaming within the sector ministry through recognition from the Office of the Head of Civil Service is as yet delayed. The result is that the directorate does not have budget provision for its operations from GoG.

The Danish support has certainly contributed to an increase in the competence of staff in the WRIS institutions, WRC, CWSA, DWST, the EHAs and the GES, Similarly, in the districts are staff are more confident in the preparation of their DWSPs and contractors and POs are better able to deliver services to communities. However, progress in building DA capacity remains low within most areas, particularly the capacities to update district plans, evaluate tenders, supervise construction, and monitor operation and maintenance. The immediate problem seems to be frequent transfers of core district staff such as District Coordinating Directors, Finance Officers, Planning Officers, and Budget Officers, a problem that is symptomatic of the general capacity of the DAs.

Table 16: Summary of DAC-criteria assessment of development of organisational and institutional capacity in the water and sanitation sector and enhanced capacity of key actors in the sector to perform their respective roles and responsibilities

Criterion	Assessment
Relevance	<p>Improved ministerial oversight in the water and sanitation sector has been recognised as a critical step in improving effective delivery of water and sanitation services. Danida's intervention in the establishment of the Water Directorate and in improving capacity for policy development and harmonisation is thus most relevant to the country's needs in capacity-building in the sector.</p> <p>The development of capacities within the various WRIS institutions and WRC was required to ensure comprehensive water management in the country.</p> <p>CWSA's role as the facilitating agency for community water delivery required varying skills and capabilities which Danida has been instrumental in establishing.</p> <p>Capacity development embedded at district and community levels was developed on the basis of assessed capacity needs and delivered by POs.</p>
Effectiveness	<p>The long awaited sector policy that has come into effect recently has only materialised as a result of the unflinching support received from Danida who have provided not only all the funding needed in the process chain for policy development but also have supported the establishment of the Water Directorate.</p> <p>Effectiveness and good practice in the areas of community management for operation and maintenance and hygiene promotion needs further investigation across the sector. There are varying views as to what is working and what is not working, and inputs into programmes by different organisations seem to be variable (e.g. reasonably short time-bound inputs of POs, limited software for some DACF-funded projects <i>versus</i> longer term approaches by NGOs). CWSA has been involved in undertaking research in some of these areas but the lessons need to be disseminated to stakeholders from national to district level, and further cross-sectoral research needs to be undertaken as appropriate.</p>

Criterion	Assessment
Efficiency	The various SPS components which include capacity-building relating to district level have addressed the various key actors in the WS sector at the different levels and their capacity development needs. The support has been both in terms of what is traditionally understood as capacity-building such as training and TA, but also a range of supporting elements such as logistics, some operational costs, allowances (which have impacted on motivation) and investment for the sector projects, which allowed staff to practice what their capacity was developed for.
Impact	Danida support has boosted performance in the WSS across the board from the policy level to the water point level. The capacity development support such as training for staff, operational costs, allowances and facilities such as offices and in particular vehicles have boosted morale and allowed the DWST to function. However, these have also been 'double-edged swords' in that there is an imbalance across the various departments in the district. The effective resourcing of teams is a difficult dilemma when many departments are under-resourced. This aspect is especially coming into greater focus under WSSPS II where the full operational costs of the DWST are supposed to be borne by the DAs. The development of District Water and Sanitation Plans that has resulted from intensive capacity development of core district staff has provided skills that are helping in the development of medium term district plans.
Sustainability	Low level of GoG investment in the WSS is a real cause for concern in relation to continued effectiveness of the CWSA. The agreement of DPs to provide management fees to CSWA is providing some funding but the incremental funding expected of GoG and the timeliness of the release of funding continues to impede progress in the sector.
Cross-cutting Issues	The issues of HIV/AIDS and gender mainstreaming has been incorporated into different modules developed and delivered at all levels of training.
Coherence, Co-ordination, Complementarity	Capacity-building at programmes of other DPs have been co-ordinated at the CWSA level. In particular the WB CWSP 1,2, and 3 all had capacity development components that have been implemented with Danida support. However, at the district level there is not always such harmonisation, leading to duplication and considerable pressure on staff time.
Issues of Procedures, Administration and Management	Capacity development has been incorporated into all components of the different programme interventions. Even in the WSSPS I where capacity development was identified as a component on its own, all the other components still incorporated capacity-building notwithstanding.
Global Assessment	Support from Danida has contributed immensely to the full functioning of many of the institutions in the WSS and has equipped staff to better perform their required duties. However, the contribution of other partners and GoG in building capacities at all the different levels has also been great and therefore attribution cannot be made only to Danida. Nonetheless, it can be said that Danida's role in the current capacity in the WSS has been very significant.

5.10 Question 11: How appropriate were the aid modalities / support and funding methods used by Danish assistance in the Water and Sanitation sector?

There are many external support agencies in the WSS but there is no common policy for the modalities of the support from the various DPs and NGOs in the WSS. This is a serious disadvantage, as the implementation procedures and the degree of harmonisation of these procedures are of paramount importance for the WSS sector's effectiveness and efficiency. Most of the activities funded by development partners have been implemented predominantly in a traditional project approach. Given the number of support agencies in the sector and the lack of common systems and procedures, GoG actors have to devote considerable time to each of the partners and their respective systems and requirements. This causes high transaction costs for both GoG and ESAs. It also distracts management and professional staff from execution of their primary tasks. The establishment of the Water Directorate and its effective functioning will, it is hoped, help address this issue.

5.10.1 Level of achievement of objectives and induced sustainable impacts by aid modality

Indications from interviews with different stakeholders are that the present aid modalities are perceived as effective with good predictability and high flexibility, allowing better planning and implementation. .

5.10.2 Assessment of modalities applied by Danish assistance by Ghanaian Government, Civil Society and other partners

Danish assistance is perceived by government operators and NGOs to be flexible. The increasing use of the decentralised institutions at district level is however, perceived differently at different levels. At district level, there is much appreciation of the substantial strengthening provided by Danish aid modalities. However within CWSA there is a more cautious view of the approach, given the current low capacity of the districts. Danida's increasing moves towards decentralisation are perceived as being "pushed too hard" and Danida is regarded as "running ahead of government" in its approach. This sentiment was also expressed by some development partners interviewed.

5.10.3 Appropriateness of combination of modalities to national policy and institutional context

Given the increasing institutional and capacity development in the sector, albeit at a slower than expected pace, the increasing move towards a sector-wide approach is seen as appropriate. The increasing use of the WRC, for example, in managing the relationship with the WRIS institutions is proving to be a more appropriate modality than the previous targeting of the individual institutions. The Water Directorate's role in providing the needed leadership in co-ordination of implementation in the whole sector is however hampered by the delays in the full establishment of, and embedding in, the mainstream ministerial operations. However, the approval of the sector policy should permit moves towards a SWAp and some form of sector budget support.

5.10.4 Conclusions

Danida's transition from a project approach to SPS and further to basket funding and eventually budget support is evolving only gradually, and there are still very few concrete measures for facilitating this process. The Danida sector programme still currently resembles the traditional project type of aid delivery mechanism, although more attention is being paid to synergy and coherence between projects, components and the increasing role the Water Directorate is playing. Danida's role in accelerating decentralised aid delivery is considered as a catalyst for the implementation of government decentralisation policy yet is also described as over-optimistic and more ambitious in its outlook than that of either GoG or other development partners.

Table 17 Summary of DAC-criteria assessment of the appropriateness of aid modalities and funding mechanisms of Danida in the Water and Sanitation Sector

Criterion	Assessment
Effectiveness	Danish aid delivery is considered to be holistic and effective by all interviewed.
Efficiency	Danida disbursement modalities are perceived to be highly efficient and predictable
Impact	Increasing role of Water Directorate, WRC and the Districts in aid delivery will eventually enhance the management capacity at the various levels and help release more human resource needed for CWSA to play its role effectively as a facilitator of programmes in the sector.

Criterion	Assessment
Sustainability	On the one hand the sustainability of the interventions in the WSS depends on the extent of ownership, integration and leadership provided at district level. On the other hand, however, a hard drive to decentralisation without the necessary capacity and parallel movement in other sectors along the same path by the district may have the opposite effect of frustrating implementation. A balanced approach of incremental decentralisation is required to assure sustainability of the programmes.
Coherence, Co-ordination, Complementarity	Many other DPs in the WSS still operate traditional project approaches requiring parallel reporting lines and formats from GoG operatives, thereby increasing transaction costs considerably.
Global Assessment	Overall Danida is considered a very dependable partner, flexible in its aid delivery and yet firm in its insistence on accountability and effective aid management.

5.11 Question 12: To what extent were cross-cutting issues and priority themes duly considered in Danish assistance to the water and sanitation sector?

At a general level cross-cutting issues have been well integrated into the sector support programme. Monitoring reports include chapters on gender participation and balance, HIV/AIDS awareness as well as environmental issues. However, human rights and good governance are not given much prominence in monitoring.

5.11.1 Gender as a cross-cutting issue

Gender is a key issue in any analysis of poverty and water-related issues. Gender considerations have been central to the intervention in the sector. Much work has already been done in promoting gender awareness and balance in the water and sanitation sector. Gender awareness is found to be highlighted in existing information and training materials. Moreover, a high degree of gender balance has been achieved among the health and community development staff at district level.

Support was provided for the development of a gender strategy to the CWSA, under the WSSPS I. The gender strategy for the water and sanitation sector which was prepared in 2001 has the following elements:

- Mainstreaming gender issues
- Gender awareness training
- Gender-balanced staffing
- Gender training for community leadership
- Focus on women's participation at all levels

Gender issues, especially women's participation in the management of the water facilities at community level was considered paramount in the implementation of the Volta project and WATSAN committees had women specifically selected as members. In addition, at management level it was considered that community animation and extension would be better enhanced if led by females, and effort was made to ensure that at least 50% of the software staff were female.

Gender balance was even also an important criterion in PO pre-qualification and selection. Gender consideration was part of PO terms of reference and POs have received extensive orientation and training in gender mainstreaming. Men and women were engaged in all aspects of project activities. POs' staff have the right gender mix.

In WSSPS II, however, gender equality is addressed mainly through mainstreaming into all programme activities.³⁵ Compared with earlier projects and programmes, which included specific action plans, the WSSPS II is less specific on gender issues. Preferential treatment of women is practised in some areas, for example in the decision-making role of women under the COM concept, which complies with Danida's policy of equal representation of women and men in WATSAN committees

It was noted during the evaluation team's visits that by and large the WATSAN committees do have a high level of gender balance but that the WSDBs tended to be more male-dominated. Barriers such as structure of the boards (selection process and centralised nature of the board), high illiteracy, poverty, culture, religion and social factors were all serving to hinder effective participation of women on the water boards. There was just one exception (in the communities visited) where the chair of the WSDB was a woman.

The provision of potable water and improved access to facilities is acknowledged throughout the beneficiary communities as having a positive effect on the socio-economic conditions of women and children in particular.

Box 8: Box: Water saves marriage

In several places during the study, several communities spoke of the important impact the provision of potable water had had on them. A woman in Bonya Community in the Eastern Region had an interesting impact assessment when she mentioned that:

"... since this water came into the community two years ago, I have had fewer quarrels with my husband over my delays in getting to the farm. In the past there were frequent quarrels between us. He usually accused me of being a gossip and that was the reason I spent so much time to fetch water, while he would have been waiting for his food on the farm. He wouldn't accept my explanation on the difficulties in fetching water. Since the facility was installed behind my house, I'm now able to walk together with him to the farm early in the morning. Now no more fights...."

Source: A woman at Bonya Community meeting, August 2007

5.11.1.1 Conclusions

Table 18: Summary of DAC-criteria assessment of gender as a cross-cutting issue

Criterion	Assessment
Relevance	A focus on gender is indeed a strategy applied by GoG and in the Danish development agenda.
Effectiveness	The gender policy provides relatively clear guidelines on how to deal with gender issues in programme implementation. But these are not always followed.

5.11.2 Environment as a cross-cutting issue

As a result of the Strategic Environmental Assessment (SEA) of the Ghana Reduction Strategy (GPRS I) undertaken in 2003 and 2004, SEA has now become an integral part of the policy and planning process in Ghana. The water sector is the key sector in which to integrate SEA into its policies and planning processes, and this is supported by Danida through the WSSPS-Phase II programme using the SEA funds reserved for this purpose. The SEA activities are designed as an integral part of the Policy, Monitoring and Management Support (PMMS) and the Integrated Water Resources Management (IWRM) compo-

³⁵ Gender mainstreaming is the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring, and evaluation of any said action, so that women and men benefit equally. Ref.: Asian Development Bank: Water for All Series 4. 2004.

nents. Additionally, the SEA subcomponent will assist the introduction of SEA principles into the district water and sanitation planning process.

The CWSA has a detailed format for the conduct of EIAs that is contained in the Small Towns Water and Sanitation Policy. The format requires detailed assessment of various aspects relating to water supply including the environmental consequences of groundwater abstraction, watershed management, drainage around stand posts and hand pumps, and the pollution effects on shallow wells of poor solid waste disposal. The DBWSC has adhered to the CWSA's requirements for EIA preparation as well as the regulatory requirements of both the Environmental Protection Agency (EPA) and the Water Resources Commission. The IWRM and PMMS components have mainstreamed considerations of environmental sustainability through the conduct of strategic environmental assessments. Both the National Water Policy and the Environmental Sanitation Policy have been subjected to environmental sustainability tests as part of Strategic Environmental Assessment (SEA) activities.

Overall, then, environmental considerations have been taken into account in Danida-supported activities and have become an integral part of policy planning in the water sector in Ghana, at least during recent years. The trend is boosted by the adoption of SEA as a mainstream activity for policy and programme planning and implementation in Ghana

5.11.3 Human rights and democracy as cross-cutting issues

Equal access to life and health is considered a basic human right. Therefore by intervening in the sector that provides water and sanitation (which are directly linked to survival and health) Danida is therefore tackling the rights of the beneficiaries. The programmes also empower women by exposing them to their rights and limitations, leading them to take up leadership positions and participate fully in decision-making.

The objective of the WSSPS II is to improve governance in general, support the decentralisation process, consolidation of democracy, the fight against corruption and promotion of access to justice for the poor as outlined in the GRPS. To achieve this objective the WSSPS II depends on the extent to which the DAs can administer their mandate in the decentralised administration. The extent to which districts are taking full control over the management of the WSS is very limited and to date there is very little investment from the districts (or central government) in the sector. With the increase in the DACF to 7.5% it is hoped that the districts will begin to invest in the WSS.

Overall Danida plays a positive role through its general support to decentralisation, but there is no direct linkage between the thematic programme for good governance and human rights and the WSSPS II. Danida only actively promotes inter-linkages between different ministries, for example through closer co-operation between its support to different sectors, and through its support to the Water Directorate.

5.11.4 Private Sector as a priority theme

Private sector involvement in the provision of rural water supply has been an implementation strategy in all programmes. Most support to the private sector has been provided from regional rather than national level. Private sector organisations and individuals and NGOs who have been provided with capacity development (CD) support through the CWSA include civil and building contractors, drilling companies, area mechanics, small scale latrine artisans, hand-dug well contractors, partner NGOs as WATSAN trainers, and other specialised consultants such as design consultants, hydrogeological consultants, suppliers, journalists, and others. A national spare parts network system was initiated in October 2000 through a private company, FAM. Spares for four types of hand pump were initially

supplied through the company. Two central warehouses and nine wholesale warehouses were set up by November 2003, covering all regions except Eastern Region. This involved the establishment of networking and capacity-building for management and monitoring. Currently, the private sector interest in stocking the spare parts is low because it locks up their capital.

Support to the NGO sector led to the establishment CONIWAS. In the WSSPS II, within the PMMS component support was given to establishment of a secretariat for CONIWAS. The secretariat has adequate office space, core staff and has developed a business plan and a draft code of ethics to guide the activities of NGOs in the Sector. Membership of the coalition stands at almost a hundred. Support from PMMS and other donors has ensured that the Mole Conference series organised by CONIWAS has continued to be recognised as an important forum for multi-stakeholder consultation and policy dialogue.

CONIWAS has the potential to help promote the optimal contribution of NGOs to sector development. The organisation could also play a role in checking the increasing incidences of non-compliance by NGOs with the National Community Water and Sanitation Programme. However with limited resources from member contributions and PMMS support, CONIWAS is unlikely to fulfil its expected mandate. Future support from PMMS should therefore also focus on advocating additional funding support from other development partners and support for capacity development in fundraising.

5.11.4.1 Conclusions

The private sector is considered important in the implementation of the sector support programme and Danida strongly supports its involvement. Different capacity enhancement activities have been undertaken to make private sector players more effective in their respective roles. However, although Danida's interventions are primarily conducted by the private sector they are channelled through the public sector with limited involvement of CBOs, NGOs and Civil Society. NGOs are mainly involved as consultants in capacity-building (service delivery).

NGOs have been vocal in relation to urban water supply, but their advocacy role in relation to rural water supply (and sanitation) is less visible. The activities of NGOs in relation to rural water supply focuses more on service provision whereas in urban water supply the NGOs are much more militant.

Private sector operators are important for urban water systems, but much less so in rural systems. Small-scale contractors are targeted in the WSSPS II. The private sector has not yet fully taken over the supply chain for spare parts.

Table 19: Summary of DAC-criteria assessment of the private sector as priority theme of Danida support

Criterion	Assessment
Relevance	Involvement of the private sector is a major focus in the implementation of the sector programme support and aligns it with government policy of using the private sector as a pillar of growth.
Effectiveness	The involvement of the private sector is not currently optimised. Support requires creating a spare parts supply chain which has not materialised yet.
Coherence, Co-ordination, Complementarity	Strategic use of private sector operators in the sector is a common approach by all the external support agencies in WSS. CONIWAS' role in co-ordinating NGOs activities in the sector is been enhanced by the recognition accorded by all the DPs in the sector.
Issues of Procedures, Administration and	Procurement of the services of the private sector is aligned with the procurement procedures contained in national laws. Much more quality control over the different types of work and services from the private sector is required to enhance the effec-

Criterion	Assessment
Management	tiveness of the private sector's contribution to water supply and management
Global Assessment	The policy orientation of Danida intervention is private-sector-led implementation. However, the level of involvement of the private sector in different districts is limited by the number of private sector organisations available in the region and districts. In the event, implementation of activities by the private sector does not necessarily create enough capacity within the localities of the project.

5.11.5 HIV/AIDS as a priority theme

The key role played by improved water supply and sanitation in caring for HIV/AIDS victims is well recognised by the CWSA. Hence the DBWSC has integrated HIV/AIDS education and information into community mobilisation training and hygiene education on issues such as hand-washing. Significant steps have been taken to mainstream HIV/AIDS education into community level activities. For example, HIV/AIDS issues are integrated into the training activities of extension officers. Throughout the four DBWSC regions, the subject of HIV/AIDS has been incorporated in the curricula and reference materials used in training water and sanitation committees (WATSANs and WSDBs). Key messages are designed to support the national preventive effort and to ensure that HIV/AIDS victims have access to the affordable water supply that is indispensable for home-based care of victims. CWSA staff working in the four beneficiary regions are convinced that the mainstreaming of HIV/AIDS awareness campaigns is helping the beneficiary towns to attain a better understanding of the subject, thus demystifying it and encouraging open discussion. However this HIV/AIDS education is not being monitored, and thus the direct benefits from the Programme's efforts cannot be directly assessed.

5.11.5.1 Conclusions

Table 20: Summary of relevance and effectiveness

Criterion	Assessment
Relevance	The GPRS lays emphasis on mainstreaming the issues of HIV/AIDS and other vulnerable groups in its quest to reduce poverty. Danida's focus on the issue is thus consonant with the country's needs.
Effectiveness	It is difficult to assess the effectiveness of the specific intervention of Danida with respect to HIV/AIDS since it is only one of several different initiatives ongoing in all parts of the country.

6 Summary assessment, related to the DAC criteria

Table 21: Summary assessment of Danida support to the water and sanitation sector related to DAC criteria

Criterion	Assessment
Relevance	The Danish-funded programmes clearly support Ghana's policies, strategies and programmes from the GPRS, which builds on international development targets such as the MDGs and the Johannesburg Declaration. The programmes contribute to the achievement of these goals and are, as such, relevant. Government's objectives are ambitious and many of the policies still need to be made operational. Implementation modalities by Danida are intended to strengthen the decentralisation process
Effectiveness	<p>Water supply in the rural communities on which Danida focuses has progressed steadily. However, the level of investment required to ensure the meeting of the MDG targets is far higher than the total investment in the sector. Thus while for its own specific intervention Danida may be considered effective, its effectiveness in tackling the overall water and sanitation problems is very limited. Danida's support has been acknowledged at all levels to be effective in its delivery mechanisms and implementation has followed agreed paths.</p> <p>In terms of capacity-building, Danida has been instrumental in supporting the establishment of the Water Directorate which is gradually asserting its influence on the different players in the sector. The long awaited sector policy that has come into effect recently has only materialised as a result of the unflinching support received from Danida, which provided not only all the funding needed in the process chain in the policy development, but also supported the establishment of the Water Directorate. Delivery of support for the development of capacities within the various WRIS institutions and WRC, and the institutional capacity-building of the CWSA, has been very effective and the enhanced performance in these institutions has to very large extent been attributable to Danida. Much effort to support and develop the private sector was particularly laid down in Volta Phase I and WSSPS I. As an example, a pool of equipment was provided during Volta I from which the contractors could rent equipment or buy it on a long-term payment agreement. Another example was the establishment of a private company which provided training for different target groups in cooperation with KNUST (Kumasi Technical University) and with the Polytechnic in Ho.</p> <p>Effectiveness in addressing cross-cutting issues has been mixed as the strategies have in some cases not been translated into action plans and activities at project level, and in particular promotion of good governance and human rights is very limited in programming in the sector. However, there are clear indications of mainstreaming of gender and HIV/AIDS into the sector programme support.</p>
Efficiency	<p>In Danida's Sector Programme Support (SPS), there is as yet only limited activity-based budgeting and cost analysis, which is a prerequisite for monitoring effectiveness and efficiency through unit costs. So assessment of efficiency is constrained. Nonetheless, qualitative assessments were made of the efficiency of delivery.</p> <p>Support by Danida in the sector is considered highly efficient. The development of a sector-wide monitoring framework and support through the PMMS component provides a good basis for improved efficiency. Implementing partners interviewed at various levels were almost unanimous in appreciating Danida's highly efficient mode of support compared with some other sector donors. Support in terms of capacity-building and training usually provided as an integral part of Danida interventions ensures higher efficiency. Flexibility in the disbursement mechanisms allows more efficient implementation of projects. Budget allocations are made on the basis of agreed proposals upon and accounting for disbursement is also done efficiently.</p>
Impact	<p>Investment in the WSS on the whole falls below what is needed to achieve the set targets. The bulk of investments come from DPs. Danida and other development partners have been instrumental in increasing capacity at all levels in the WSS sector from MoWRWH to the communities.</p> <p>In specific communities, the impact of water supply is quite apparent, ranging from</p>

	reduced time spend in fetching water to eradication or reduced incidence of water-borne diseases. However, the resurgence of certain water-borne diseases in Ghana recently is a pointer to less-than-desired impact on water supplies.
Sustainability	<p>The communities support WATSAN committees, and Danida has with success been active in creating and supporting community-level WSS organisations. Their sustainability is in some cases a cause for concern.</p> <p>Danida has introduced conceptual innovations, for example in IWRM and the SHEP component, but there is a need to develop innovative concepts or a new approach to household sanitation in rural areas. In a number of areas, continued support is required to define sustainable systems that can function without full external financial support.</p> <p>With respect to IWRM, sustainability is currently assured with the creation of the WRMA and greater capacity within the institutions.</p>
Cross-cutting Issues	Gender, HIV/AIDS and to a lesser extent environment as cross-cutting issues have been mainstreamed. Good governance and human rights, although recognised as important, have not been directly developed as measurable entities within the programmes. The focus on decentralisation is assumed to promote good governance. However, since there is no explicit targeting of good governance and human rights in the sector, results in this regard are not measured
Coherence, Co-ordination, Complementarity	Promoting harmonised practices is considered a prerequisite for strategic, cost-efficient and effective management of development resources for poverty reduction. In the WSS sector such practices have been implemented only to a limited extent, although it is reported that there is close informal co-ordination between the development partners in the sector. Co-operation between Danida and the World Bank has been cited as an example of such informal co-ordination. As a co-leader with DFID of the water and sanitation sector group, Danida is promoting coherence and better harmonisation, even though this is far from being achieved.
Issues of Procedures, Administration and Management	<p>Decentralisation is at the centre of Danida intervention. Decentralisation is a high priority for government but actual practice lags behind due to a lack of funding and a shortage of qualified staff. However, district assemblies are the delivering authorities for water and sanitation, and Danida is supporting the process at an accelerated pace.</p> <p>Procurement procedures for local goods and services are quite well aligned to national procurement rules. However, it is unclear how this is controlled in practice, for example how overpricing is avoided or how political interference is avoided when inviting bids, in tendering and in the award of orders or contracts.</p>
Global Assessment	Danida is considered a reliable partner in the water sector and in terms of rural water supply is in the forefront. In terms of integrated water management, the Danish support remains to date the only significant investment in that regard.

7 Overall Conclusions and recommendations

Overall, the Danish support to the Water and Sanitation Sector in Ghana has been consistent with national policy. Many policy and institutional development issues have been addressed by Danida's support to the WSS. In the WSS, Danida has shown itself to be a consistent and reliable partner, providing significant support not only in the provision of water facilities but also in its commitment to capacity-building in the sector. Danish support has made a significant contribution to access to clean water (and to a lesser extent sanitation). Danida is also in the forefront of implementation of decentralised water supply and private sector involvement in the construction of water and sanitation facilities.

There are however still many challenges to be addressed to ensure an accelerated rate of implementation, and especially achievement of the set targets. More innovative approaches are required, especially in the sanitation sub-sector, to achieve any significant results.

The Ghana Millennium Development Goals Report³⁶ enumerates a number of factors that constrain the achievement of the MDG targets in the supply of water. These include low plant capacity, inadequate collaboration between stakeholders and lack of funding. For rural areas, the report indicates that “the limited ability of communities to contribute to capital costs is real. Other constraints for rural dwellers are the low bore-hole yield, poor quality of ground water, low levels of training of local maintenance staff with the result that bore-holes remain out of service for longer than necessary. Obtaining spare parts is another issue to be grappled with, as there is difficulty in establishing spare parts outlets in remote rural areas.”

Overall, the major constraints for WSS sector development are:

- limitations in committed government and other partners’ funding to achieve water and sanitation targets as anticipated in the SIP;
- limited institutional and human resource capacity at district level;
- inadequate O&M schemes as a prerequisite for institutional sustainability;
- insufficient health/hygiene efforts, which will diminish health impact; *and*
- fragmentation of the WSS sector, which to some extent is caused by the lack of co-ordination between the development partners.

7.1 Inadequate GoG funding

Development partners contribute over 80% of the investment cost in rural WSS facilities. Government’s share has declined from 12% to just over 4% between 2000 and 2003 and currently stands slightly above 5%. With the increment of the DACF from 5% to 7.5%, it is expected that the share of Government will also increase. However, the investment required over the eleven-year implementation period (2005-2015) to provide coverage for 85% of the population is estimated at USD 756m. To achieve this target, government’s share has to increase to about 60% of total investment. It cannot be assumed that this situation can be achieved during the next decades as it would require too drastic changes in the national economy. At district level such inadequate funding is already manifested in the lack of logistic support to the DWSTs which is already limiting their effective outreach to communities.

In rural water supply it is expected as a general practice that the communities should contribute between 5% and 7% to the capital cost of rural water supply, but this is obviously inadequate to meet the funding gap. Contributions to O&M costs at best cover recurrent expenses (e.g. minor repairs). There is no mechanism for financial provision for larger items of expenditure such as replacement of pumps.

More innovative ways of financing the WSS needs to be developed in order to meet the MDG targets. It is not clear whether, even in the event of more funding being available, the existing institutional capacities could deliver the MDG targets for the sector.

7.2 Institutional Strengthening

The WSS structure in Ghana is characterised by institutional fragmentation (notably for sanitation, but also water). Responsibility is shared between different line ministries. The responsibility for co-ordination in the sector lies with the newly created Water Directorate, which is as yet not fully mainstreamed. Much capacity-building is needed to achieve institutional sustainability. With more responsibility placed on the DAs in the implementation of

³⁶ Ghana: Millennium Development Goals Report, 2003.

a more decentralised water delivery programme there is a need to develop new approaches in which the DAs gradually assume more responsibilities, eventually taking over the role of planning and implementing rural water supply systems. Danida contributes directly to this process of change through its approach to programme implementation. The CWSA's role in this process as a facilitator rather than a manager is still developing and requires more institutional support. Danida has been instrumental in funding the decentralised structure for CWSA but a clearer road map is needed for implementation of the fully decentralised implementation programme, bearing in mind that the Works Department, through which water and sanitation programmes are expected to be implemented in the districts, remains one of the weakest departments within the DAs.

7.3 Adequate quality control of work done/facilities provided and adequate O&M schemes as prerequisites for institutional sustainability

The findings of the evaluation team confirm the assertion in the WSPS I programme completion report that "the communities' understanding of their O&M responsibilities rest on a weak foundation, and long term nursing through consistent education is essential to ensure sustainability of the facilities installed and the WATSAN committee concept". The concentration of support to WATSAN committees is during pre-installation of facilities. However, in order to ensure sustainability at community level, it is essential that the facilities provided are of high quality and it is equally important to ensure ownership of WSS facilities through participatory processes with a focus on equity and democratic procedures. Such a process requires a longer engagement beyond the installation of the facilities. The DAs need to be strengthened in order to provide such support to the communities. Particularly if sanitation interventions are to have a significant demonstration effect and influence demand and sustainability, great attention needs to be paid to marketing and promoting this aspect. It is not clear though how this would be carried out as such experience is limited at local level.

7.4 Insufficient hygiene/sanitation effort

The current low level of investment in sanitation raises a question over the achievement of the health-related targets of the WSS. Danida's overall commitment to improved health is, to some extent, contradicted by the low profile in relation to rural sanitation. The promotion of hygiene education needs to be accompanied by greater effort in provision of sanitation facilities. There is however a need to investigate how the overall health objective can be achieved through an integrated approach to WSS. It is generally assumed that provision of safe water and basic sanitation accompanied by hygiene promotion can reduce the incidence of diarrhoeal diseases, which are still a major cause of mortality, contributing to the high under-five mortality rates (U5MRs) in Ghana.³⁷ Although few studies have been made in Ghana, there is little evidence that there has been a significant impact on health from the provision of safe water and improved sanitation. In some cases there has even been a negative correlation between safe water and, for example, incidence of guinea worm, the number of infections increasing by 44.3 % between 2002 and 2003. The PRSP indicators for both infant and childhood mortality rates have also increased in recent years. As an example, childhood mortality increased from 108 to 118 per 1000 live births between 1998 and 2003.³⁸

³⁷ WHO Country Co-operation Strategy: Ghana

³⁸ Danida: *Ghana Country Report (draft): Evaluation of Danish Support to Water Supply and Sanitation October 2005*

7.5 Fragmentation of the WSS sector

As noted earlier, the institutional responsibilities for the sector are scattered between different line ministries which do not all have representation at district level. For instance the EHAs are responsible to the MoLGRDE, while the other members report to different ministries. It is envisaged that the promulgation of the National Water Policy will enhance co-ordination through the Water Directorate. A co-ordinated approach by donors will also go a long way towards better harmonisation between the different agencies involved in implementation in the sector but for this to happen government must exercise a leadership role.

Table 22: Summary of conclusions and recommendations

	Conclusion	Recommendation
1.	Low Government investment in the sector remains very low. The 5% level of investment is inconsistent with often stated government position of water and sanitation being a priority sector.	A refocusing and prioritisation of water and sanitation as a means for poverty reduction is required from GoG.
2.	Decentralised implementation of water delivery is inevitable for effectiveness; however current capacities at DA level present major constraints on delivery at that level.	A clearly thought out capacity-building programme for district Works Departments and the other technical agencies should be designed as part of total decentralised delivery through the DAs. A programme of reorientation of key DA personnel such as the DCD, the DFOs and the Planning Officers is needed.
3.	CWSA is playing a more facilitating role in implementation of programmes in the sector. However, this is sometimes frustrated by the lack of completely harmonised approaches in the sector by external support agencies	Harmonisation of approaches across the sector would assist the effectiveness of CWSA in playing a more facilitating role. GoG needs to take leadership in this area.
4.	With the setting up of the Water Directorate, the passing of the National Water Policy and the steps being taken towards clarifying the policy framework and strategies for implementation, a more co-ordinated sector is anticipated. This will provide opportunities for more sector-wide support, and thus also for enhanced harmonisation.	Effort should now be channelled into accelerated implementation of the national water policy. Danida should provide support for the roll-out of the policy. The Water Directorate should provide leadership in developing a SWAp in the sector based on the policy
5.	Sanitation coverage is very low throughout Ghana and disposal of solid waste remains a tremendous challenge to all DAs in Ghana. Danida's investment in the sector does not reflect its commitment to health targets.	A national policy framework is needed for the implementation of interventions in environmental sanitation, and harmonised concepts for household sanitation in particular should be developed. Having been subsumed under the water sector, sanitation receives less than adequate attention and funding, it is recommended that in future programmes, sanitation be considered on its own merits and treated as a sector.
6.	The relationship between water and sanitation provision is currently not systematically studied in Ghana. The expected impacts are all based on assumptions that are as yet untested	There is a need to investigate how the overall health objective can be achieved through an integrated approach to WSS.
7.	The model of support to the Water Directorate and the WRC in which the establishment of the Water Resource Management Account has increased sustainability is a worthy example of how institutional strengthening of public bodies can improve	Lessons learnt from the support to WRC and the establishment of the WRMA should be applied to helping the Policy Directorate of MoLGRDE to create an innovative funding mechanism to sustain it..

	Conclusion	Recommendation
	performance and create synergies in the sector	
8.	CONIWAS has the potential to help promote the optimal contribution of NGOs to sector development. The organisation could also play a role in checking the increasing incidence of non-compliance by NGOs with the National Community Water and Sanitation Programme. However with limited resources from either member contributions or PMMS support, CONIWAS is unlikely to meet its expected mandate.	Core funding for the coalition is needed. A sector-wide programme of support should treat the NGO sector as an important ally in the process of achieving the targets for the sector. Other donors should also be encouraged to provide funding for the coalition.
9.	Good Governance and Human Rights are not specifically targeted as cross-cutting issues in programming. They are only assumed to be effected through decentralisation and other delivery mechanisms.	The increasing importance of accountability, cost efficiency and good governance in general requires that unit and service costs and other specific indicators be developed and measured during implementation.

8 Annexes

8.1 Persons met

<i>Name, first name</i>	<i>Organisation / institution</i>	<i>Function</i>
Peter Jul Larsen	RDE	Minister Counsellor
Lars Moller Larsen	RDE	Programme Co-ordinator
Kojo Bibah	RDE	
Aboagye Mintah	MoWRWH, Water Directorate	Director
Ben Ampomah	Water Resources Commission	Executive Secretary
Prof Dorm Adzorbua	Water Resources Commission	Immediate Past Chairman
Edem Asima	CWSA, Greater Accra	Regional Director
Paulina Oppong	CWSA, Central Region	Extension Services Specialist (ESS)
Ben Sam	Abora Asebu Kwamankese (AAK) DA	DWST
Felix Moses	AAK DA	DWST
Ebo Prah	AAK DA	DWST
Edward Osei	AAK DA	EHA
Vittor Gregory	AAK DA	EHA
William Akomanyi	AAK DA	EHA
Afful	AAK DA	District Budget Officer (DBO)
Doreen Ainoson	AAK DA	District Planning Officer (DPO)
Fast-O-Way	Komenda Edina Eguafo Abirem DA	DWST
William Yemofio	KEEA DA	DWST
Emanuel Annan	KEEA DA	EHA
Hayford Appiah	KEEA DA	EHA
Amponsah	KEEA DA	EHA
Habib Mohammed	KEEA DA	DPO
Ness Darkey	KEEA DA	DBO
Helen Fytche	Ghana Canadian Program Support CIDA	Senior Planning Advisor
Mette Baekgaard	CWSA, DBWSC	Community Development Advisor
Felix Motte	CWSA, Volta Region	Head of Extension Services
Sylvester Attakumah	CWSA, Volta Region	Extension Services Specialist
Godwin Nutakor	Keta DA, DWST	Environmental Health Officer (EHO)
Peter H. K. Akogo	Keta DA, DWST	Sanitation officer
Ahorkonu Harrison	North Tongu DA	Tehnician Engineer (TE)
Harrison Ahadzi	North Tongu DA	SO
Draffor Matthew	North Tongu DA	Community Development Officer (CDO)
Awudey Gershon	North Tongu DA	EHO
Philip Amanor	CWSA Eastern Region	Regional Director
Theophilus Mensah	CWSA ER	Water and Sanitation Engineer
Grace Amehane	CWSA ER	ESS
Oscar P. Ahianu	CWSA ER	ESS
Paul Adzasoo	CWSA ER	Regional Account- ant/Administrator
G. G. Acicah	New Juabeng Municipal Assembly	MWST Co-ordinator
Prosper Agyei	NJMA	EHA

<i>Name, first name</i>	<i>Organisation / institution</i>	<i>Function</i>
Johnny Wordu	NJMA	Health and Environmental Officer
Christopher Narh	NJMA	EHA
Anthony K. Sosu	NJMA	TE
Alex Anning	NJMA	Municipal Planning Officer
Mr Obeng?	NJMA	Municipal Co-ordinating Director
Kwasi Ofosu	Akwapim North DA	EHO
James Darko	Akwapim North DA	TE
Emmanuel Offei Larbi	Akwapim North DA	CDO
Mintah Aboagye	Water Directorate MoWRWH	Director
Swatson Arthur	World Bank	Responsible for Water and Sanitation
Wallace Mensah	Hydrological Services Department MoWRWH	Ag. Director
Dr S. Dapaah Siakwan	Water Research Institute	Head, Water Quality

8.2 Communities visited

<i>Community</i>	<i>District /Region</i>	<i>No. of Persons attending /Key Person (s)</i>
Odumekyir Abaka	AAK / Central	20
Odonase	AAK / Central	12
Dominase	KEEA / Central	40 / Josephine Eshun (Assembly woman)
Besease	KEEA / Central	30
Anlo Afiadenyigba	Keta DA / Volta	10 / Mad Victoria (Chair of Water Board)
Sasieme	Keta DA / Volta	15
Dadoboe	North Tongu / Volta	15
Klukpo	North Tongu / Volta	14
Bonya	NJMA / Eastern	12
Monrovia #2	NJMA / Eastern	7 / Gestey Paul (Chair Watsan, Elizabeth Manteh, Treasure, Janet Agyakwa Member)
Kwadarko	Akwapim North / Eastern	40
Asifaw North	Akwapim North / Eastern	35

8.3 Overview of Development Partners' Support to the Water and Sanitation Sector in Ghana (2003 – 2009)

Water and Sanitation	2003	2004	2005	2003-2005	2006	2007	2008	2006-2008	2009
	62.42	55.32	65.34	183.08	90.44	126.79	115.03	328.66	94.81
Credits (US\$m)	27.67	14.87	10.59	40.27	43.84	58.16	57.01	71.93	51.52
Grants (US\$m)	34.74	40.45	54.75	142.81	46.60	68.63	58.02	256.72	43.30
World Bank	16.56	14.31	20.50	51.37	38.49	44.00	46.22	128.71	39.15
ADB					7.83	21.17	21.17	50.17	32.77
EU	1.05	0.75	8.97	10.77	0.00	15.09	1.26	16.34	
Canada	1.65	1.73	2.14	5.52	4.32	4.95	7.57	13.24	9.45
Denmark	17.00	13.98	11.46	42.45	10.00	10.00	10.00	30.00	2.50
France	0.36	1.68	2.16	4.20	5.76	1.20	2.40	9.36	4.80
Germany	5.15	7.94	5.44	18.53	4.69	3.77	3.77	12.23	3.14
Italy									
Japan									
Netherlands	8.49	12.50	11.97	32.95	12.49	12.49	12.49	37.47	
Nordic Development Fund	1.02	0.12	0.63	1.77	2.64	4.68	4.44	11.76	3.00
Spain	10.00	0.00	0.00	10.00	3.02	6.03	3.02	12.07	
Switzerland									
United Kingdom	0.22	0.63	0.73	1.78	0.00	3.41	0.00	3.41	
United States	0.92	1.47	1.34	3.73	1.20	0.00	2.69	3.89	0.00
FAO									
IFAD									
ILO									
IOM									
UNAIDS									
UNESCO									
UNFPA									
UNICEF									
UNIDO									
UNDP									
WFP									
WHO									
Global Fund									

Source: Ghana Consultative Group Meeting 2007, Accra

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