Sida Evaluation 00/40

Swedish Initiative for Support of Sustainable Management of Water Resources in Southern Africa

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Department for Natural Resources and the Environment

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Acronyms

DFID	Department for International Co-operation (UK)
DRFN	Desert Research Foundation of Namibia
DNRE	The Department for Natural Resources and the Environment of Sida
ECZ	Environmental Council of Zambia
ERCSA	Environment Resource Centre for Southern Africa
GWP	Global Water Partnership
HYCOS	Advanced Hydrological and Environmental Monitoring Network
IUCN	The World Conservation Union
IWSD	Institute of Water and Sanitation Development
IWRM	Integrated Water Resources Management
LFA	Logical Framework Approach
PCN	Project Concept Note
SADC	Southern African Development Community
SEI	Stockholm Environment Institute
Sida	Swedish International Development Co-operation Agency
SIRDC	Scientific and Industrial Research and Development Centre
UNICEF	United Nations Children's Fund
WRMS	Water Resources Management Strategy Project
WDM	Water Demand Management
WSCU	SADC-Water Sector Co-ordinating Unit
ZRA	Zambezi River Authority

Executive summary

Sida's Initiative for Support to Sustainable Management of Water Resources in Southern Africa (the Initiative) was launched in 1996. Its two immediate objectives are:

- to raise awareness and build capacity in sustainable use and management of water resources, and
- to support integrated management of international water resources.

This document presents an evaluation of the Initiative, with the purpose to provide lessons from the first four years and guide Sida regarding a possible continuation of the Initiative. The evaluation was carried out during the autumn of 2000 by M. Sc. Len Abrams (Water Policy International), M. Sc. Lennart Peck (Boman & Peck Konsult AB), Dr. Klas Sandström (Akkadia Environment Management Consultants) and M. Sc. Karin Dahlström (Boman & Peck Konsult AB).

The evaluation departs from an analysis of the programme context and factors influencing the Initiative. It discusses the political instability and economic problems that many of the countries included in the Initiative are facing. Individual and institutional poverty is a cause as well as a result of poor water resources management. Climate and hydrology is characterised by high variability. The large number of shared rivers makes water resources management a regional issue. A large number of international donors are engaged in the sector.

The evaluation goes on to describe and assess the objectives, management and projects of the Initiative. The evaluation concludes that the overall programme objectives are directly relevant to Sida's environment objective and have indirect relevance for the poverty reduction objective. Considering the large number of international rivers and the similarities of problems in the region, a regional approach is relevant, as a complement to local and national efforts. Programme objectives are also relevant to sector problems but too broad to effectively guide the programme.

The management model, characterised by a strong local presence, pro-activity and large Sida input has been relevant for a start-up phase of the project. Nonetheless, it is believed that more involvement of other Sida departments and the embassies could have benefited the programme. The programme is well managed within the current programme constraints and format. The presence of a regional co-ordinator is highly appreciated by the implementing organisations and has been positive for the Initiative. Due to the relatively large number of small projects and the fact that the programme is new, management cost in relation to disbursements has been high. Future management must be determined by the choice of programme focus.

The projects financed are relevant to sector problems as well as the objectives of the Initiative, but the project portfolio lacks strategic focus and is little known in the region. A broad scope may be appropriate in a start up phase, but increased focus is required for the next phase to achieve a critical mass, reduce management costs and facilitate co-ordination with other donors. With few exceptions, projects have fulfilled their output objectives. It is still too early to make an assessment of impact and sustainability. Positive side effects include contacts established between organisations in some of the projects and the increased experience and contact network of Sida.

Regarding future programme focus, four options are discussed: thematic projects, international river basin focus, support through SADC Water Sector Co-ordination Unit and water supply and sanitation. Having analysed these options with respect to regionality, poverty impact, effectiveness, manageability, viability and risk, and leverage of funds, *the team recommends a strategic focus on international river basin management.* This focus should be complemented by additional activities such as thematic activities, networking (GWP), advocacy and support to SADC WSCU.

In relation to management, fewer, larger and more complex projects can be foreseen. There is also likely to be a pressure to limit the costs (in relative terms) for management of the Initiative. The report foresees a need for continued regional presence through a regional co-ordinator focusing on co-ordination, facilitation of processes and strategic issues; continued involvement of Sida, Stockholm, for formal decision making, quality control, consultancy procurement and administration; increased involvement of Swedish embassies and other Sida departments; increased use of consultants in key areas and for project monitoring; Sida assuming a brokerage and facilitative role; flexibility within clear financing criteria ; and increased focus on hydropolitical issues, diplomacy and international issues.

1 Introduction

1.1 Background

The Swedish International Development Co-operation Agency (Sida) has been engaged in the water sector for many years. The scope has gradually been broadened from water supply and sanitation to integrated water resources management (IWRM) and from the national to the regional level. In 1996 The Department for Natural Resources and the Environment (DNRE) of Sida launched its Initiative for Support to Sustainable Management of Water Resources in Southern Africa (the Initiative). The two immediate objectives of the Initiative are:

- to raise awareness and build capacity in sustainable use and management of water resources, and
- to support integrated management of international water resources

The Initiative has led to the establishment of a number of new projects addressing new issues and with new counterparts for Sida. The initiative is also managed differently to many other Sida programmes.

1.2 Purpose and Limitations

The purpose of this evaluation is to provide lessons from the first four years of the Initiative and to guide Sida regarding a possible continuation of the Initiative. Are objectives relevant? Are they being fulfilled? What can be learned from the way the programme has been managed? The Terms of Reference (ToR) for the evaluation (See Annex 1) lists the following main issues to be covered by the evaluation:

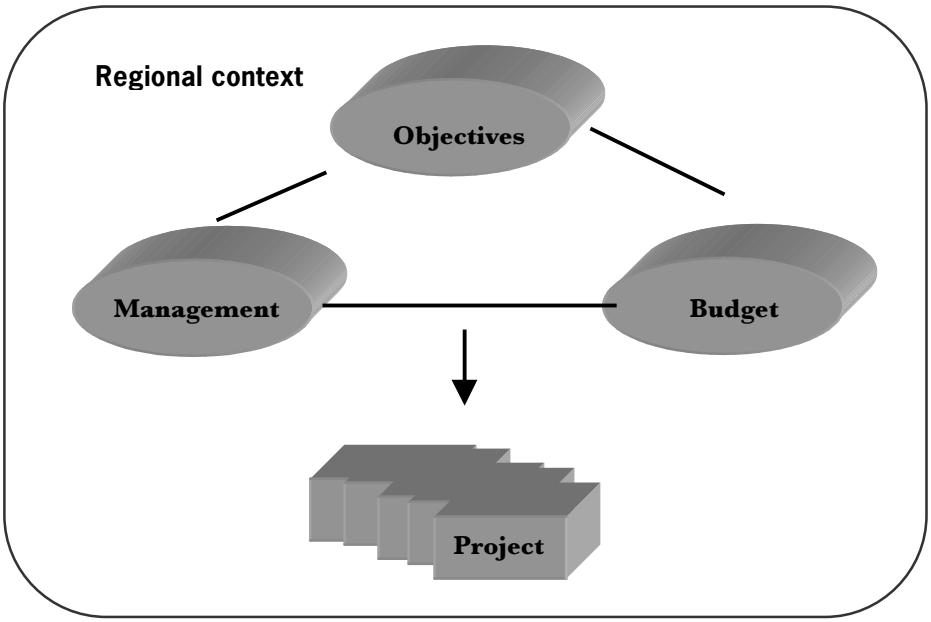
- The relevance of the Initiative,
- The management strategy of the Initiative,
- Achieved results of the Initiative as well as of the projects,
- The composition of the project portfolio,
- The impact on direct target groups,
- Relevance to Sida's four action programmes.

The evaluation should cover the project portfolio as a whole and make a somewhat more in-depth analysis of four selected projects.

1.3 Methods

In order to assess the Initiative and discuss alternative approaches, it is important to have a clear notion of what the Initiative actually is. It can firstly be defined in terms of its *objectives.* It also represents a specific *management model.* From a financial viewpoint, the Initiative is funded out of a separate *budget* for regional water resources management. The Initiative is also manifested by the various *projects* that have been supported. All of these factors must be viewed within the regional context of the program.

Figure 1: The Initiative



When assessing the Initiative and discussing future options, it is necessary to consider how these components interrelate. A change in one of them, for example objectives, may call for a different type of management approach or have budget implications.

The objectives of the Initiative will be assessed in relation to the regional water context and regional policies, primarily those of SADC. The management model will be assessed with consideration to the overall objective of the Initiative, the budget (cost-effectiveness) as well as the nature of projects undertaken and the type of management they require.

A distinction must be made between the evaluation of the Initiative itself and the evaluation of the individual projects. Individual projects cannot be used to generalise regarding the Initiative as a whole.

Projects will be assessed using Sida's standard evaluation criteria, such as relevance, fulfilment of objectives etc. However, it should be recalled that the projects have reached different stages of implementation. Some are ongoing, others have recently been completed but none have reached a stage where the full impact can be seen. It should also be recalled that awareness raising and competence development, which most projects aim at, are complex and long-term processes. The impact of, for example a book or participation in a seminar may not be distinguishable among all the other factors that have contributed to awareness raising. This evaluation is thus largely limited to an analysis of output. This is complemented with a more general discussion on project relevance but it is, at this point, not feasible to make a full impact assessment.

1.4 The Evaluation Mission

The evaluation has been carried out by M. Sc. Len Abrams (Water Policy International), M. Sc. Lennart Peck (Boman & Peck Konsult AB) and Dr. Klas Sandström (Akkadia Environment

Management Consultants).[1] The assignment was discussed with Sida in June and desk research was commenced in August 2000.

The choice of the four projects to be analysed more closely[2] was made by the team in consultation with Sida. The choice was primarily based on three criteria: geographical coverage, level of implementation of projects and objectives (including both of the immediate objectives of the Initiative).

During a two week mission to the region, covering Zimbabwe, Zambia, Namibia, South Africa and Lesotho (See Annex 2: Work Programme) the consultants met with representatives and beneficiaries of the various projects as well as the SADC Water Sector Co-ordination Unit (SADC WSCU), international donors and the regional co-ordinator (See Annex 3: List of persons met). To a considerable extent, the evaluation has also been based on desk research and information compiled from project reports.

This document is a draft report to be discussed with Sida/DNRE. Feedback received from Sida will be considered in the preparation of the Final Report.

[1] Desk research was also carried out by Karin Dahlström, Boman & Peck Konsult AB.

[2] ERCSA, State of the Environment of Zambezi; Desert Research Foundation of Namibia, NetWise; IUCN-ROSA, Water Demand Management; Zambezi River Authority, Environmental Monitoring. Findings on these projects are summarised in Annex 6: Cases.

2 Context – Situation and trends

There are several key factors which characterise the countries with which the Initiative has been engaged[3] including:

- the political context,
- economic factors including the impact of poverty,
- the climate of the region,
- the hydrology of Southern Africa,
- water use and water scarcity,
- water resources development on international rivers in Southern Africa,
- capacity in the water sector,
- information and knowledge transfer,
- regional co-operation, and
- regional institutional arrangements.

2.1 Political and economic situation

The political circumstances of the countries of the region may be divided into three categories: unstable, transitional and stable. Political circumstances in each country and in the region as a whole have a direct impact on the economy of each country and the region. Many countries in the region have recently been engaged in protected civil conflict or in negotiated political transition. Some of these conflicts remain unresolved such as Angola and Zimbabwe.

Strengthening democracy and good governance in the region is undoubtedly one of the most important contributions which can be made to improve the management of natural resources including water. This includes ensuring that a broader segment of the population is engaged in water resources management activities through mechanisms such as water users associations, catchment level management and the engagement of the private sector.

[3] Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia, Zimbabwe.

Table 1: Broad Political circumstances in Southern Africa

	Broad category	Comment
Angola	unstable	unresolved long-term civil war
Botswana	stable	
Lesotho	transitional	recovering from recent political unrest
Malawi	transitional	emerging democracy
Mozambique	stable	emerging from long-term civil war
Namibia	stable	emerging democracy
South Africa	stable	emerging democracy
Swaziland	transitional	political tension and unresolved constitutional issues
Tanzania	stable	
Zambia	stable	
Zimbabwe	unstable	continuing political uncertainty and occasional public unrest

A number of the countries in the region are amongst the poorest in the world as is indicated in Table 2 below. Some of the countries, for example Lesotho and Zimbabwe, have experienced negative growth recently as a direct consequence of political unrest.

Table 2: Economic indicators of Southern African countries

	GDP (US$/cap) - 1998	Currency value against US $ in 1994	Currency value against US $ in 1998	Annual devaluation against US$
Angola	640	2729 (1995)	600000	7329%
Botswana	3,087	2.772	4.226	38%
Lesotho	448 *	3.551	5.528	39%
Malawi	150	8.736	31.073	89%
Mozambique	120	5,918	11,853	50%
Namibia	1,752	3.551	7.74 (present)	37%
South Africa	3,180	3.531	7.74 (present)	37%
Swaziland	1010	3.551	7.74 (present)	37%
Tanzania	256	509.6	665.0	33%
Zambia	317	669.37	1,862.07	70%
Zimbabwe	645 (1996) **	8.15	53 (present)	108%

Source: www.sadcreview.com - official web site of SADC

* Before political unrest in Lesotho of 1998/1999

** Before current political problems

The poverty which exists in Southern Africa affects all aspects of society. An understanding of the all-pervasive nature of poverty is important when assessing its impact on any particular individual sector. The effects of poverty are not confined to the individual and household level but also impact the whole range of institutional life of countries from the public institutions of government to the private sector.

Individual poverty is characterised by:

- very low levels of formal employment, particularly in rural areas and poor urban fringes,
- access to basic services is very difficult and is often comparatively expensive,
- living below the poverty line requires enormous skill and creativity each day for large numbers of people in order to survive,
- disease and poor health are constant realities,
- even minimal costs for basic services represent a large proportion of disposable income,
- education, if available, is of a very low standard and literacy levels are very low,
- long distance to water, poor water quality and expensive water.

Institutional poverty has the following characteristics:

- public institutions are not able to raise funds from taxes and revenues, because of the poverty of individuals and the private corporate environment,
- public sector conditions of service are therefore very weak with extremely low salaries and inadequate working conditions,
- public spending on basic necessities such as education and health care are very low,
- it is difficult to attract and keep good calibre public servants and capacity building programs often result in professionals leaving public service for more attractive opportunities elsewhere,
- the capacity and experience of officials is consequently often inadequate,
- fertile grounds are laid for corruption and graft,
- systems of patronage and nepotism often result in political interference,
- mounting foreign debt is accompanied with an inability to compete on international markets,
- and the gap of technological advancement, particularly in information technology, is ever widening.

Ineffective water resources management is both a consequence and an indicator of institutional poverty in many of the countries of the region. It must be realised that, as a consequence of the pervading situation of poverty in the region, the effectiveness of aid programmes is reduced.

The relative economic strength and advanced state of development of South Africa has a considerable impact in the region and the balance of political leverage in the development of the regions, particularly concerning international rivers where South Africa is a riparian state.

2.2 Climate, hydrology and water resources

The climate in Southern Africa is characterised by large variability, from place to place, season to season and year to year. It varies from tropical to arid with rainfall variations from 1800 mm per annum (in the Malawi lowlands) to less than 30 mm per annum (in the Kalahari Desert). Seasonally the region varies from the Mediterranean climate (winter rainfall) of the Western Cape of South Africa to the summer rainfall patterns which exist over most of the region. In addition to regional and seasonal variations the annual variations are extreme, varying from recurrent drought cycles to extreme flooding.

As a general topographical description, the main feature of the Southern African region is a plateau with an average elevation of 1200m. Most of Angola, Botswana, Lesotho, Namibia, South Africa, Swaziland, Zambia and Zimbabwe are situated on it. Northern Angola lies in the Congo Basin while Malawi and Tanzania are dominated by the Great Rift System. Most of Mozambique lies on a coastal lowland.

Table 3: Climatic conditions

Country	Climate	Annual Precipitation (mm)
Angola	North and central – tropical Extreme south - semi arid	1 000 to 1 500 50
Botswana	North and east - semi arid Southwest - desert (Kalahari Desert)	300 to 560 Negligible
Lesotho	Mild highland climate	710
Malawi	Lowlands - hot, humid, tropical Plateau - cooler tropical	1 800 to 760 North to south
Mozambique	Tropical	400 to 1 200
Namibia	North - semi arid South- desert	200 to 500 30 to 150
South Africa	Mild semi arid with pockets of subtropical and Desert	1 000 - east coast Generally less than 600 Negligible in deserts
Swaziland	Tropical	500 to 1 900 east to west
Tanzania	Tropical	400 to 1400
Zambia	Tropical	1 300 north 500 to 750 – south
Zimbabwe	Northeast – tropical Southwest - semi arid	1 300 - east 400 – west

Source: Stanley Consultants, Inc.

The hydrology of Southern Africa is characterised by a number of major river basins with great variability in area and flow, and by the large number of rivers which are shared between different nations within the region. Table 4 below indicates the major river basins in Southern Africa and their annual average flow rates together with the countries which form part of their basins. Table 5 shows the States which share rivers in the region.

Table 4: Major River basins and flows in southern Africa (FAO)

River	Flow (cu km)*	Countries
Congo	1174	Angola, DRC, Zambia
Zambezi	212	Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia, Zimbabwe
Lilongwe	29	Malawi
Cuanza	26	Angola
Rufiji	26	Tanzania
Kilombero	14	Tanzania
Orange	12	Lesotho, Namibia, South Africa
Shire	11	Malawi, Mozambique
Kafue	10	Zambia
Luangwa	8	Mozambique, Zambia
Okavango	8	Angola, Botswana, Namibia
Lurio	7	Mozambique
Cunene	7	Angola, Namibia
Limpopo	5	Botswana, Mozambique, South Africa, Zimbabwe
Save	5	Mozambique, Zimbabwe

(Source: FAO, Source Book for the Inland Fishery Resources of Africa, FAO, Rome, 1990.)

* Other figures for the flow of these rivers are given by other sources, most notably the Zambezi, which is quoted by P. Heyns, DWA Namibia, as having a flow of 100 cu km.

Table 5: SADC states sharing international river basins

Basin state	Number of basins	Name of river basin covered
Angola	5	Cunene, Cuvelai, Okavango, Zaire, Zambezi
Botswana	5	Limpopo, Nata, Okavango, Orange, Zambezi
Lesotho	1	Orange
Malawi	2	Rovuma, Zambezi
Mozambique	9	Buzi, Incomati, Limpopo, Rovuma, Save, Maputo, Pungue, Umbeluzi, Zambezi
Namibia	5	Cunene, Cuvelal, Okavango, Orange
South Africa	4	Incomati, Limpopo, Maputo, Orange
Swaziland	3	Incomati, Maputo, Umbeluzi
Tanzania	2	Rovuma, Zambezi
Zambia	1	Zambezi
Zimbabwe	6	Buzi, Limpopo, Nata, Pungue, Save, Zambezi

(Source: Manuscript draft to SIDA by P. Heyns, Department of Water Affairs, Namibia)

With a growing population in the region and limited renewable water resources, it is likely that water scarcity, leading to possible water stress, will become a permanent feature of the region

within the next 20 years. Water scarcity situations already regularly occur during protracted dry periods in the region.[4]

Table 6 gives the renewable water resources available in the SADC region. The table shows that while South Africa accounts for more than 80 percent of the total regional water use, only 10 percent of the total water resource is available in South Africa. The figures for per capita usage are average figures. Given that the availability of water varies substantially from place to place in countries and that it varies seasonally, these figures should be regarded as indicators only.

Table 6: Renewable water resources and water usage

State	Renewable water resources		Annual usage	
	Total 10^6m^3	1990 per capita m^3/a	Usage $10^6m^3/a$	Per capita usage m^3/a
Namibia	9000	240	n/av	n/av
Botswana	9000	780	90	98
Malawi	9000	1070	160	22
South Africa	50000	1420	19040	540
Lesotho	4000	2250	50	34
Zimbabwe	23000	2370	1220	129
Tanzania	76000	2780	480	36
Mozambique	58000	3700	760	53
Swaziland	7000	8820	n/av	n/av
Zambia	96000	11350	360	86
Angola	158000	15770	480	43

Source: Pitnan

Table 7 provides an estimate of demand and the use of water in different sectors. It will be noted that there is some discrepancy between some of the figures in the two tables. This is due partly to the different years when the figures were recorded. The information indicates that there are two countries (South Africa and Botswana) where the demand will exceed supply by the year 2020.

[4] Water shortage is used to describe an absolute shortage where levels of available water do not meet certain defined minimum requirements. The actual quantity that determines a per capita minimum may differ from place to place.

Water scarcity is a more relative concept describing the relationship between demand for water and its availability. The demands may vary considerably between different countries and different regions within a given country depending on the sectoral usage of water. A country with a high industrial demand or which depends on large scale irrigation will therefore be more likely to experience times of scarcity than a country with similar climatic conditions without such demands. Countries such as Rwanda, for example, would be classified by most standards as suffering water shortage but, because of low industrial and irrigation utilisation, would not be classified as water scarce.

Table 7: Past and projected water demand (cu km/year)

Country	1993 Demand	1993 Irrigation	2020 Demand	2020 Irrigation	Total Available
Angola	1.335	0.350	2.757	0.750	78.000
Botswana	0.129	0.020	**0.336**	0.047	**0.230**
Lesotho	0.118	0.070	0.268	0.160	2.490
Malawi	1.135	0.795	2.578	1.820	4.240
Mozambique	1.967	1.308	3.210	3.000	132.000
Namibia	0.265	0.108	0.538	0.248	0.740
South Africa	19.295	9.615	**30.168**	12.674	**28.470**
Swaziland	0.454	0.310	0.511	0.331	1.160
Tanzania	5.374	4.560	12.220	10.450	44.000
Zambia	0.994	0.690	2.192	1.580	60.000
Zimbabwe	2.524	2.175	5.737	4.980	7.860
TOTAL	33.590	19.981	60.515	36.120	359.190

Total Available has been calculated as 60 percent of the Absolute Total, the amount hydrologists assume as available for human use. Countries where demand in 2020 will surpass total available have been highlighted.
(Source: Heyns, P. "Water Demand and Supply Management", in SARDC, 1994, p 197.)

Table 8 is similar to table 7, giving figures for estimated sectoral use of water and the fraction of available water utilised. Some of this information is outdated.

Table 8: Fresh water withdrawal by country and sector, SADC countries

Country	Total annual renewable fresh water available (cubic km)	Total annual fresh water withdrawal (cubic km)	Fraction withdrawn (percent)	Domestic use (percent)	Industrial use (percent)	Agri-cultural use (percent)
Angola	158	0.48	0	14	10	76
Botswana	18	0.09	1	5	10	85
Lesotho	4	0.05	1	22	22	56
Malawi	9	0.16	2	34	17	49
Mozambique	58	0.76	1	24	10	66
Namibia	9	[n.di	2	6	12	82
South Africa	50	9.20	18	16	17	67
Swaziland	7	0.29	4	5	2	93
Tanzania	76	0.48	1	21	5	74
Zambia	96	0.36	0	63	11	26
Zimbabwe	23	1.22	5	14	7	79

(Gleick 1993, p 374–375)

The development of water resources in Southern Africa varies significantly between countries. By far the most developed country is South Africa. Elsewhere water resources infrastructure is less developed. A pervasive problem in the region is lack of adequate ongoing operation and maintenance of existing infrastructure and plant resulting in the diminished returns and output

being derived from existing assets. Annex 4 provides a summary of the developments which have been undertaken on various shared rivers in the region.

2.3 Capacity, knowledge and information

Skills and experience in the region vary from country to country and are related to the comparative wealth of each country. In general professional capacity to manage water resources is critically low throughout the region. In each country there are capable and committed professionals but their experience is often limited and they are insufficient in number.

Capacity building has been a focus in many donor support programs in recent years. While this is an important contribution it must be recognised that the overall capacity to manage water resources within the region is dependant on systemic factors[5] rather than the skills and capacity of individuals. Therefore, whilst sectoral capacity building projects undoubtedly make a contribution, they are not ultimately the solution. The solution is embedded in solving the overarching poverty problem which would create an economy and a society which is able to establish and sustain a capable professional skills base in the countries of the region. The dilemma is that such a solution requires a capable professional cadre which illustrates the syndrome which the countries are trapped in.

Information concerning water resources is generally inadequate throughout the region except in South Africa. The gathering, collating, analysis and archiving of hydrological information is characterised by lack of adequate cover, poor maintenance of existing equipment, lack of trained personnel, insufficient investment, lack of consistency of data formats in shared river basins and other problems. Information collection and management is a costly exercise and in countries with very limited resources it is usually a low priority. This however has a direct detrimental impact on the planning and management of water resources. Sound hydrological information which is mutually accepted by different governments in shared river basins can contribute significantly to successful joint management of shared rivers and the optimisation of mutual gains.

These issues are beginning to be addressed through projects such as the EU funded project entitled "Advanced Hydrological and Environmental Monitoring Network (SADC-HYCOS)". The Department of Water Affairs and Forestry in South Africa will implement this project. The objective of the HYCOS-SADC project is to provide an efficient system for hydro meteorological data collection, processing and dissemination. This system is intended to provide a mechanism for timely data exchange between the collecting agency and the users throughout the SADC region and to provide an early warning system of impending problems due to floods, drought, water shortages, etc.

[5] Such as functioning institutions, regulatory frameworks etc.

Table 9: Summary of factors effecting water resources management in Southern Africa

Factor	Applicability in the region
Economic growth	Economic growth is an elusive goal in the Southern African sub-continent. The necessary prerequisites for economic growth with equity and social development are present in some countries in the region but not in others. South Africa has the most highly developed economy in the region and, since the elections of 1994, the incorporation of South Africa into SADC has strengthened the economies of the region generally.
Political and social stability	The region has enjoyed greater social and political stability in recent years, with the cessation of armed conflicts in many parts of the sub-continent. With peace being established in Mozambique and South Africa there remains the requirement for a lasting settlement in Angola. The consequences of previous conflicts will, however, affect development in the region for some time to come.
Political will	With the disastrous effects of drought during recent years and the increasing pressures of population growth and development requirements, increasing political will to address the needs of proper water resource management has been evident recently. It remains to be seen if such political will translate into real action and be sustainable over time. The political will still appears to be insufficient to make some of the difficult decisions which are required to reduce the demand for water.
Effective sectoral reform	Whilst numerous countries have embarked on sectoral reform in recent years, there remains a great deal of work yet to be done. There is a discernible tendency to move towards effective policy development and legislative reform and away from the numerous rounds of 5 or 10 year strategic plans which were generally developed outside of an adequate policy environment.
Management of demand	Further work is required to develop policy and strategy for the management of demand for water in many countries. Greater efficiency in the usage of water is generally required which may imply a revision of factors such as the pricing and tariff structures of water in most of the countries in the region. Such a process would need to be accompanied with both support and research for improved efficiency in the usage of water, particularly for industrial and agricultural purposes.
Effective project implementation	Apart from South Africa, much of the available water resources in Southern Africa remain underdeveloped. In the context of the issues addressed above, there is a great deal of scope for effective development of the resources whilst ensuring economic and environmental sustainability. Such development could significantly assist the water security of the region.
Environmental sustainability	There are significant problems facing the region in relation to ensuring the preservation of the integrity of the water resource base in many of the countries. Both in terms of water utilisation and water quality many rivers and groundwater sources are presently under threat. Whilst some countries are beginning to develop legislation which will assist, the measure of threat to water security because of the degradation of the resource needs to be established in each of the countries.
Effective information management and transfer	In order to be sustainable, information management requires skills and human resources, together with sufficient allocation of finances and political will. Often the expense of establishing and maintaining an information management system is considered unjustifiable and systems which have been established are allowed to fall into disrepair. Information management systems need to be developed in the Southern African region. This needs to be done in a manner which will allow for the transfer of information between systems and countries. The development of information management requires support and research.

Skills and human resources	The reservoir of human resources and skills in a country is closely paralleled to the overall economic well being of the country. There is a general lack of adequate skills and human resources to meet the water resource management needs of Southern Africa. Whilst expatriate technical assistance has a major role to play, it can not and should not replace the development of national skills and human resources.
Mutual trust and dialogue within the region	The improvement of relationships between countries in the region during the past few years has provided a new platform for improved relationships and trust in the region. Further work, however, is required, particularly in the development of relationships between sector professionals from different countries.
Regional co-operation	There is a great deal of scope for regional co-operation which has yet to be fully investigated. Co-operation should be developed particularly in order to establish a framework for joint action in times of water scarcity and drought. The development of Southern Africa as an economic "zone" would assist in all sectors including water. Co-operation in Southern Africa in the water sector requires further support and research particularly with regards to the management of shared international waters.

2.4 Regional and international co-operation

The water sector in Southern Africa is very complex with many stakeholders. This is because the region is very large and includes 12 countries, the hydrology is very complex and because water affects all sectors of society. Stakeholders include various government departments in each country; local and provincial governments; different user interests including domestic users, the environment, agriculture, industry, tourism, energy generation, foreign affairs departments (international river basins), academia, the private sector etc. Because of this complexity and variety it is not possible to map all stakeholders. The importance of involving as many stakeholders as possible at appropriate levels and in appropriate ways in the use, development and protection of water resources is becoming increasingly recognised and accommodated in the region. This is a trend which needs to be strengthened and encouraged.

Given that most major rivers in the region are shared amongst at least two countries, one of the most important issues related to water resources management in southern Africa is co-operation between riparian countries in international river basins. Managing rivers as integrated systems at basin level is increasingly accepted as the most effective methodology of water resources management. This is not simple when dealing with international rivers, however. Joint management of shared rivers requires appropriate political, legal and institutional frameworks which are only established as a result of usually lengthy and intricate negotiations which assume political will and good faith from all parties. Providing support to such processes is thus a very important area of engagement for donors in the region.

Within SADC the primary institution for regional multi-lateral political and inter-governmental co-operation on water issues is the SADC Water Sector Co-ordinating Unit (WSCU). The terms of reference for the Water Sector outline the sector's vision as: "To attain the sustainable, integrated planning, development, utilisation and management of water resources that contribute to the attainment of SADC's overall objective of an integrated regional economy on the basis of balance, equity and mutual benefit for all member States."

One of the main achievements of the SADC water sector has been the development of the SADC Protocol on Shared Watercourse Systems. The initial Protocol attained the required number of ratifications and has come into force. Member States have proposed a number of amendments to the Protocol which have been debated at a number of meetings including the Legal Experts Workshop on Protocol Amendments held in Johannesburg in October 1999. It is understood that the amended Protocol is currently in the final stages of completion and adoption at present.

One of the pivotal, ongoing activities of the Water Sector has been the preparation process for the Regional Strategic Action Plan (RSAP) and the Round Table Conference (RTC) on Integrated Water Resources Development and Management (IWRM) in the SADC countries.[6] The RSAP groups these issues and constraints into seven categories, referred to as intervention areas. They are:

- Legal and regulatory framework,
- Institutional strengthening,
- Linkages with sustainable development policies,
- Data collection, management and dissemination,
- Awareness building, education and training,
- Stakeholder participation,
- Investment in infrastructure.

Following detailed analysis of these seven categories, 44 possible interventions were identified. The list was compiled from an extensive collection of submissions (from country situation reports) and projects assessed by the Water Resources Technical Committee (WRTC) and regional experts. The WRTC and the Sectoral Committee of Senior Officials evaluated the projects and identified 31 as being of high priority.

Like the RSAP, the project proposals initially focused on addressing the institutional and managerial capacity for improved water resources development and management, rather than on infrastructural projects for supply and utilisation of water.[7] "SADC Water Weeks" is a new initiative conceived by the SADC WSCU. It aims to inform key national-level water resources stakeholders and resource representatives about SADC-wide water initiatives, and to involve them in discussions about the implementation of these initiatives. The SADC WSCU has experienced difficulties in moving its program forward and its work is necessarily bound by the lengthy bureaucratic procedures of the SADC processes.

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[6] The SADC WSCU, assisted by the SADC Secretariat, held the First Round Table Conference in Geneva, Switzerland on 10–11 December 1998. The theme of the conference was "Integrated Water Resources Development and Management in the Southern African Development Community."

[7] A team known as the Water Strategy Reference Group (WSRG) for Regional Strategic Action Plan on integrated water resources development and management was formed. Its first meeting was held in Gaborone, Botswana on 15 March 1999. Following the WSRG recommendations from the meeting in Gaborone, a Multi-Disciplinary Team of Experts was convened in Maseru, Lesotho, from the 10–20 May 1999 to develop the project concept notes (PCNs) for the 31 identified projects. The PCNs include justifications, estimated costs, inputs and outputs, and the summaries of projects. The WSRG held its second meeting on 21 May 1999, in Maseru, Lesotho, and reviewed the PCNs prepared by the Multi-Disciplinary Team of Experts. Several donors have expressed interest in different projects and are currently engaging in discussions with the SADC WSCU.

Based on information compiled in June 1999, the following donor organisations are involved in water in SADC, in addition to Sida:

- The African Development Bank (ADB)
- Canadian International Development Agency (CIDA)
- Denmark International Development Agency (DANIDA)
- Development Bank of Southern Africa (DBSA)
- European Union (EU)
- France
- Finland (FINNIDA)
- Deutsche Gessellschaft fur Technische Zusammenarbeit (GTZ)
- Global Environment Facility (GEF)
- Global Water Partnership (GWP)
- Norwegian Agency for Development Cooperation (NORAD)
- Netherlands International Development Agency (IDGIS)
- United Kingdom, Department for International Development (DFID)
- United Nations Development Program (UNDP)
- UNICEF
- USAID's Regional Center for Southern Africa
- World Bank (the Bank)
- World Meteorological Organization (WMO)

The scope of assistance provided by these organisations in the region is very broad. Most donors provide support at both national and regional levels. Some tend to work in conjunction with others in the list as partners whilst others tend to work uni-laterally. The support provided is both to assist strengthening water resources management including groundwater management, and water supply and sanitation. A wide variety of types of support are provided such as direct project financing, public sector budget support, loans financing under preferential loan conditions, technical assistance, the sponsoring of meetings and conferences etc. Many of the donors on the list are considering or have already made commitments to fund projects on the list of 31 SADC WSCU projects.

3 Programme Description

In the following section, we describe the Initiative with respect to its objectives, management, budget and projects. The next chapter includes an assessment of these elements.

3.1 Objectives

The objectives of the Initiative are presented in various documents, including the memorandum Water Resources in Southern Africa of 1995[8] and Sida's decision-making memoranda.

The original project memorandum[9] recognised the need for a focused program and proposed two immediate objectives:

1. *Higher competence regarding water resource issues among the countries in the SADC region;*
2. *Strengthening of international commissions to achieve better management of common water resources.*

Awareness and capacity building (objective 1) was said to be needed in a number of areas: effective agricultural use of water, water saving technologies, pricing, water quality, research capacity and conflict prevention. Objective 2 was to include interventions to give basic knowledge for management of international waters, and institutional support. The two objectives have later been somewhat reformulated as:

1. *To raise awareness and build capacity in sustainable use and management of water resources;*
2. *To support integrated management of international water resources.*

There is no Logical Framework (LFA) matrix for the Initiative as a whole[10]. However, the development objective of the Initiative is "*to assist in the improvement of integrated water resources management in Southern Africa".* As any other Sida assistance it should contribute to the objectives of Swedish development co-operation and be in line with the four action programmes for poverty reduction, gender equality, strengthening of democracy and human rights and protection of the

[8] Jakob Granit, Bengt Johansson, Vattenresurser i södra Afrika (SADC), Avdelningen för Naturresurser och miljö, 1995-12-21.

[9] In the instructions for the memorandum, it was stated that interventions should be chosen to fit within the following framework:

- The overall objective is to build regional/national capacity by using existing regional knowledge;
- The interventions should be highly prioritised by the receiving countries and being of catalytic nature;
- The intervention should be in line with Sida's general policies. In particular, the Swedish perception of integrated water resources management and gender awareness should be mainstreamed in the interventions;
- Support can be given to a single country if it contributes to development of methods relevant for other countries in the region;
- The Swedish resource base shall constitute an important contribution in the co-operation. Co-operation between institutions in Sweden and in the region/country shall be prioritiesed.
- The interventions shall be easy to manage for embassies and Sida Stockholm. Result oriented project planning and steering (LFA) shall be applied.
- Co-ordination at regional level of SADC countries and among donors shall be supported.

[10] Which in itself makes the Initiative difficult to evaluate.

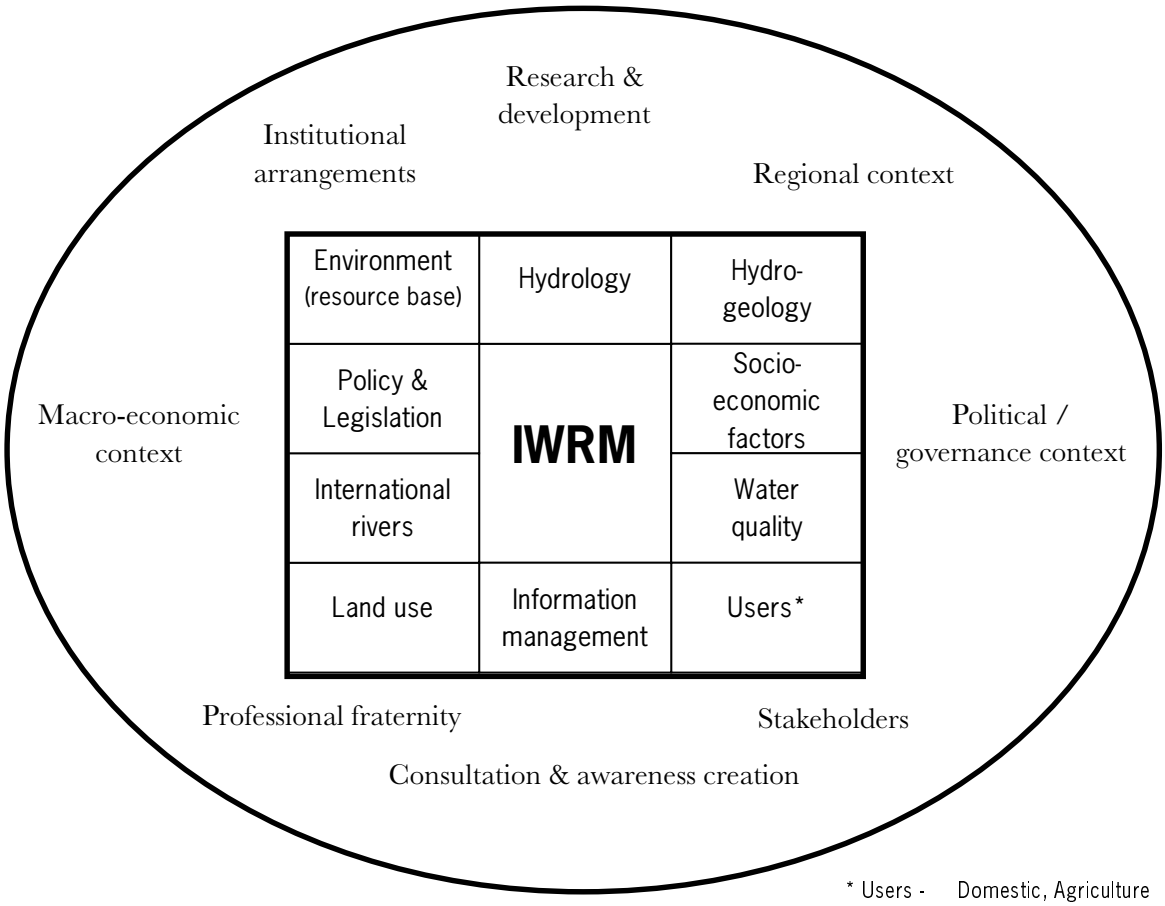
environment. Sida documents also present the Initiative as a means of preventing conflicts related to water.

In short, the objectives of the Initiative have three main dimensions: (a) the focus on IWRM (b) the regional scope and (c) capacity building. Each of these deserves discussion.

3.1.1 Key concepts in Integrated Water Resources Management

IWRM is a complex activity/function which affects and spans a number of sectors and disciplines. Because water is central to daily human activity at the individual and household level and also central to the economy of all countries, IWRM has a direct although often un-noticed role to play in society. Where droughts or floods threaten the daily lives of individuals and families as well as food security and economic activity, effective integrated water resources management is critical. The complexities of IWRM are illustrated in Figure 2. below. There are a number of items which are directly involved in water resources management (in the boxes) and a number of crosscutting contextual issues which impact on the effectiveness of management activities (the outer circle)

Figure 2: Integrated Water Resources Management Complexities



* Users - Domestic, Agriculture
Industry, Mining, Tourism
Leisure, etc.
(Note: The environment is not considered as a 'user' but as the source of water.)

Because of the broad nature of IWRM, it is necessary to identify the key components into which all elements fit. There are three primary functions of water resources management which are complimentary but which are distinct and, in certain instances, may be in conflict. Some activities within the functions overlap.

The three primary functions are:

1. *Water resources use and allocation*: This area includes all functions related to water user rights, allocation of water use rights, licensing etc. (depending on the legal regime pertaining in a particular country) and includes issues of water pricing, user representation, etc.
2. *Water resources development*: This includes the two main sub-sections of water infrastructure development, operation and maintenance, and the control of water resources such as reservoir operation, flood management etc. including hydrological information management.

3. *Water resources protection*: This includes all aspects related to care for the multiple activities involved in ensuring that water resources and aquatic environments are protected, including the monitoring of water quality and abstraction, the monitoring of Environmental Impact Assessments, the preparation and enforcement of water resources protection regulations etc.

In many countries these functions are all carried out by the same institution such as the Ministry of Water Resources which results in the same authority being responsible for both the development of resources and their protection which is an inherent conflict of interests.

3.1.2 "Regionality"

That a programme is "regional" can have several meanings. In its loosest sense it may simply mean support to local and national projects within the region. The other extreme would be to define it as joint involvement of all of the countries in the region. Projects may also be sub-regional, involving two or more countries in the SADC region.

One dimension of regionality is the status of implementing agencies. There are those that are regional (or international) by nature, such as GWP and IUCN-ROSA, and those that are national but participating in regional activities.

Regional support may be given by supporting one country to participate in regional work ("levelling the playing field"). It can also mean drawing on regional resources in a national activity or that the benefits of a national project have regional application.

3.1.3 Capacity building

The programme documents do not specify what type of support is to be provided but talks in broader terms of awareness raising, capacity building and support to management. This can be achieved in many ways, including:

- research,
- dissemination of information,
- development of methods,
- organisational development,
- training,
- hardware procurement,
- support to implementation.

3.2 Programme management

The framework for management of the Initiative is defined by:

- the assessment memorandum of the Initiative, foreseeing a regional co-ordinator and a part time programme officer in Sweden,

- the financing decision regarding regional co-ordinator including the attached work description[11],
- Sida's general instructions for programme management, LFA etc.

Management has also largely been shaped by the managers of the Initiative themselves, in particular the regional co-ordinators.

The management model can be defined in terms of the different management functions, the division of roles and the way in which functions are carried out. In general terms, the management of the Initiative can be described as follows[12]:

Project identification. Projects have generally been initiated in a dialogue between the regional co-ordinator and the local organisation. No projects have been identified by the Swedish embassies or Sida Stockholm.

Project formulation. The regional partners have had the main responsibility for project formulation. However, the local co-ordinator has been active as a dialogue partner, giving concrete suggestions and facilitating contacts between different stakeholders. In several cases, Sida has also financed project formulation workshops (LFA). For some of the larger projects (ZACPRO and Pungue) Sida has engaged consultants for project formulation. Active involvement of the embassies has generally been limited.

Project appraisal. The first appraisal of project is made by the regional co-ordinator. The only criteria for appraisal have been the general framework of the Initiative and an assessment of each project's individual qualities. The first regional co-ordinator prepared the decision memoranda himself. After the change of staff[13] the co-ordinator prepares them jointly with the programme officer in Stockholm who can also be said to have a quality control function in project appraisal[14]

Decision-making. The formal financing decision is taken by the head of section (for projects under SEK 5 million) or head of division (for projects over this amount). No project has so far been turned down, once the project has been appraised by the regional co-ordinator and the programme officer, and the decision memorandum has been produced. However, project proposals may not reach this stage having already been rejected by the regional co-ordinator. The real power of decision-making thus largely lies with the regional co-ordinator together with the programme officer.

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[11] Main tasks of the co-ordinator is according to this: analysis and information regarding water resources and environment, identification and follow-up of projects, donor co-ordination, planning and reporting, other (e.g. support to the embassies).

[12] The listed functions can be considered generic and are found in most descriptions of "project cycle managment etc." They also reflect the tasks mentioned in the work description of the regional co-ordinator. The regional co-ordinator should also be a resource to embassies in the management of bilateral projects. However, this cannot be seen as part of the management of the initiative but rather as an opportunity of having a person in the region.

[13] During the second half of 1999.

[14] The Stockholm programme officer has during the spring of 2000 worked with the preparation of Pungue, ZACPRO and WDM phase II.

Financial management. Channelling of funds and financial follow-up is handled by the programme officer in Stockholm. The local co-ordinator facilitates in contacts, forwarding financing requests to Sweden etc.

Monitoring and reporting. The regular monitoring is primarily the responsibility of the regional co-ordinator. It includes analysis of progress reports and annual reviews as well as regular dialogue (personal visits, telephone and mail) depending on needs. Sida has also followed the projects by participating in workshops and similar activities. Progress reports and other relevant information are forwarded to the Stockholm programme officer. A very brief account of the events is provided in the 6-monthly reports of the Swedish embassy in Harare.

Co-ordination. Co-ordination with other donors has been a continuous activity of the local co-ordinator, primarily through the participation in the SADC WSCU reference group, in which the SADC Regional Strategic Action Plan and international co-operation is discussed with other donors. In connection with project preparation, the co-ordinator identifies related donor activities.

Strategic planning and policy formulation. No formal strategies or policy papers with focus on the region have been prepared in recent years. However, strategies and policy issues are frequently discussed by the co-ordinator, Sida Stockholm and some of the Embassies.

Programme management has for various reasons varied over time. Initially, the emphasis was on initiating new projects and establishing relations. Later, programme management has increasingly involved preparation of project proposals and follow-up of on-going projects.

The regional co-ordinator travels regularly and has made 12 trips within the region between October 1999 and November 2000.

Summarising, the team would like to highlight the following characteristics of the management model:

Table 10: Characteristics of the management model

Aspect	Characteristics	Evidenced by-
Regional presence	Strong	Through the regional co-ordinator
Involvement of Sida, DNRE	Quite strong	In follow-up and formal decision making
Involvement of other Sida departments	Limited	Few contacts in either direction
Involvement of Swedish embassies	Varying	Limited, with some exceptions
Use of consultants	Limited	Only used in one project and for preparation of two proposals
Relations to project implementing organisations	Pro-active	Co-ordinator has planted project ideas and facilitated project formulation
Professional input	Strong	Co-ordinator been possible to provide advice
Decision making process	Ad hoc, following normal Sida procedures	Few specific programme criteria but decisions taken according to regular Sida procedures
Management input	High	Two persons managing a budget of SEK 20 million

Another feature of the management model is that the local co-ordinator is financed from the project budget.

The decision memorandum of 1999 states that projects should be seen in a long term perspective and also that the function for regional water resources should be seen as long term. However, after four years, the regional co-ordinator is still a temporary post.

3.3 Budget

The Initiative is manifested by the availability of funds for regional water resources projects. SEK 45 million were allocated for the first phase 96–98 and SEK 40 M for the second phase 99–00 of the Initiative from the budget for "Regional co-operation". Table 11 shows allocated funds and expenditure.

Table 11: Allocated funds, payments and planned payments

Year	1996-98	1999	2000	2001	2002	2003	TOTAL
Allocated	45 000 000	20 000 000	20 000 000				85 000 000
Payments[15]	16 094 721	20 173 734	13 676 710	12 900 000	2 050 000	500 000	65 395 165
Difference							*19 605 000*
Planned payments			2 800 000	18 900 000	17 600 000	5 650 000	44 950 000

The table shows that the programme initially has been underspent. Actual and planned payments are approximately 75% of the budget. This reflects the time required for project preparation, Sida's administrative capacity as well as the level of demand for financing of projects meeting Sida's requirements[16]. However with the planned Pungue project (SEK 21,5 million) and ZACPRO (SEK 10,5 million) additional funds will be required for the coming years.

The regional co-ordinator has been financed from the budget of the Initiative (SEK 5,3 million, 1996–2000) while the Swedish programme officer is financed from the administration budget of DNRE, Stockholm.

3.4 Projects

An overview of projects is presented in Annex 5. It includes ten larger projects (over SEK 1 million). In addition, Sida has financed a number of smaller interventions (Information film, workshops etc.) as well as the preparation of the ten larger projects. ZACPRO 6.2 and Pungue River have been under preparation and should be started by the beginning of 2001.

[15] 1996–1999 real, 2000–2001 agreed.

[16] Not total demand for project financing, considering that Sida has received requests to finance for example SADC PCNs.

Table 12: Major projects financed under the initiative

	Countries	Partner organisation	Budget	Duration
NetWise	8	NGO	3 300 000	1997–2000
ERCSA	8	NGO	4 600 000	1998–2000
Every River	2	NGO	6 950 000	2000–2002
GWP	SADC Region	International org.	5 600 000	1998–2000
Nkomati	3	University	1 000 000	1999–2000
Pungue*	2	Government	21 450 000	2001–2003
Research fund	SADC Region	NGO	9 100 000	1999–2001
UNICEF	SADC Region	International org.	3 000 000	1997–2000
Water Quality	1	NGO/Govt	3 400 000	1998–2001
WDM	5	NGO	3 100 000	1998–2000
ZACPRO*	8	Govt	9 000 000	2001–2003
ZRA	2	Govt	6 000 000	1998–2001

* Financing decision expected to be taken by the end of 2000.

As can be seen from table 12, about a third of the projects involve two or three countries, a third involve 5–8 and a third concern the SADC region as a whole. There is a strong overrepresentation of some countries and an under representation of others. For example, Zimbabwe is involved in ten projects[17] and "hosts" five, while countries like South Africa, Mozambique, Botswana and Namibia are only involved in one or two.

In terms of partner organisations, there is a broad mix of NGO, government, international organisations and university institutions. Organisations are usually national. For example, DRFN, ERCSA, IWSD are national NGOs even though their work involves international activities and networking. ZRA is the only "regional" entity while UNICEF and GWP are international.

Projects are generally of rather short duration, on an average two years. In one case (WDM) Sida has approved a second phase, and some other projects have presented proposals for a continuation.

By Sida standards, projects are relatively small, with an average total budget of SEK 4,5M. However, the two up-coming projects are considerably bigger; ZACPRO has a budget of SEK 11 million and Pungue 21 million. These two projects alone would thus consume a large share of the planned budget.

Project objectives vary considerably as can be seen from Annex 6, which presents objectives as well as reported outcome of projects. Table 13 gives an indication of the focus of the different projects.

[17] It has been argued that this is because many regional organisations have their head offices in Zimbabwe. However, apart from IUCN-ROSA and UNICEF these projects have involved national organisations.

Table 13: Area of co-operation

	Research	Dissemi-nation	Methods developm.	Organis. developm.	Training	Net-working	Implemen-tation
DRFN		X			X	X	
ERCSA		X					
Every River			X	X		X	
GWP		X				X	
Nkomati	X						
Pungue			X	X	X		
Research fund	X						
UNICEF							X
Water Quality			X				
WDM		X	X				
ZACPRO				X			
ZRA	X		X	X	X		

Generally speaking, the project portfolio so far shows an emphasis on research (although not necessarily academic), dissemination of existing information and methods development. Actual training has been quite limited. So has organisational development but the ZACPRO and Pungue projects, foreseeing international river basin commissions, may change this. Projects have often included some procurement of hardware, such as laboratory equipment and vehicles, but not to a very great extent.

Some projects, such as WDM and UNICEF focus primarily on water *use,* while ERCSA, IWSD water quality and ZRA focus on water *protection.* However, most of the projects deal with all of the three core issues – use, development and protection – to various degrees.

4 Evaluation

4.1 Programme objectives

Programme objectives may be assessed with respect to their relevance to Sida's policy objectives and the water resources context.

4.1.1 Relevance to Sida policy objectives

Water resources management can of course never be an objective in itself but may contribute to the overall objectives of Sida to a varying extent.

The programme objectives by definition contribute to the *environment* objective as they deal with sustainable use of natural resources.

There are many links between water and *poverty.* Lack of water for agriculture and industry limits economic growth and lack of water for personal consumption has direct effects on health and social development. This makes it a cause of poverty. Poorer households are generally those hardest hit by droughts, pollution and inadequate water supply. Lack of water is thus also an effect of poverty. The institutional poverty, discussed in Chapter 2 was noted to affect water resources management in the region. Traditional water supply and sanitation programmes are often targeted to poor populations but do not solve fundamental causes of poverty. IWRM is beneficial to society as a whole and has an important long term potential to reduce poverty. The two must therefore be seen as complementary in an overall strategy to reduce poverty.

The management of and equitable access to water resources have key democracy, human rights and gender dimensions. However, water resources management in itself does not promote democracy or gender equality. This depends on how the individual projects are designed and implemented.

4.1.2 Relevance to sector problems

As noted in Chapter 2 it is generally recognised that many water resources issues require a regional, or sub-regional approach. Water does not recognise political boundaries and problems have to be jointly solved by the affected countries. There are also issues that must be solved nationally or locally, for example water supply and sanitation. For issues such as water demand management, countries may benefit from an exchange of experience but implementation can only be done at local level with national regulatory support. A regional approach is thus appropriate in many issues, side by side with national and local application.

The Initiative should not just promote water resources management but should emphasise sustainability and integration. IWRM is an internationally recognised concept and is therefore not exhaustively discussed and explained in this report. However, it may be noted that the multi-sectoral approach, involving stakeholders at all levels, in conjunction with the regional scope of the program, gives the Initiative a very broad framework. Similarly, awareness raising, competence building and support to management may include a variety of issues.

Therefore the objectives of the Initiative may well be relevant to the problem context but does not provide sufficiently specific guidance. Given the complexities of the water resources management context in Southern Africa, the number of role-players and the importance of water in the region, it is important to determine where intervention is most needed and where it can be most effective. *Programme objectives which provide the Initiative with a clearer strategic focus are needed.*

4.2 The management model

Programme management may be seen as a project in itself[18] and may be analysed in terms of relevance, results and cost-effectiveness.

4.2.1 Relevance

Some characteristics of the Initiative with implications for management include the following:

A new programme: Initiating a new programme involves establishing new contacts, gaining new experiences and identifying new projects. This differs from management of a mature programme with on-going projects. The programme is currently in a transition from being a new programme to a mature one.

Many, small projects: The project portfolio includes ten different projects of relatively limited size, with different partner organisations and in different fields. In addition, there have been over twenty-five smaller activities financed, either in relation to the larger projects or separately.

Short projects: Projects are of relatively short term and, compared to the two up-coming projects for management of international waters (ZACPRO and Pungue), the lead-time of most projects has been rather short.

Limited complexity: Being relatively small projects, usually focusing on one-issue (WDM, water quality, etc.) and involving a limited number of stakeholders, complexity of the projects has been relatively limited.

Limited technical assistance: Sida's contribution has primarily been financial support to enable different regional activities. Technical assistance has, compared to many other Sida programmes, been limited.

Dispersed geographical coverage: The projects are scattered through a number of different countries in the region. This requires a regional perspective as well as information on the situation in the different countries.

To what extent has the management model been adapted to these requirements? One characteristic of the programme management was found to be a strong *regional presence* through the co-ordinator. It is difficult to see how the project could have been started, projects been formulated and networks been built without such a local presence. The fact that the projects have drawn on local capacity rather than on Swedish technical assistance makes it logical to manage the programme regionally. The implementing organisations have appreciated the closeness of Sida. However, the projects as such have not been more complex than most other Sida projects and the benefit of local presence is probably not unique for this programme.

[18] In terms of budget, the regional co-ordinator is actually a "project".

There is also a rather heavy involvement from Sida Stockholm, DNRE. One Programme Officer is working approximately 80% with the Initiative and financing decisions are taken in Sweden. This may be necessary to avoid that the programme gets too "individualised" and to assure quality.

There has been a *limited involvement of other Sida departments* in the management of the initiative. Recognising the multi-sectoral nature of IWRM, it would appear relevant also for Sida at times to involve its different sector departments.

The Swedish *embassies* have been involved to a varying degree in programme management. Apart from in a few cases, such as Mozambique/Pungue the involvement of the embassies has been limited.[19] The embassies have been briefed in connection with visits by the co-ordinator and receive travel reports and draft projects proposals but they have not had a very active role in the Initiative. Some of them have, however, used the co-ordinator to comment on national projects or strategies. Given the importance of a national perspective and a national presence also in regional projects, a greater involvement of the embassies appears relevant. The embassies could have a crucial role in promoting the Initiative and channelling requests to the regional co-ordinator. The political nature of some projects also calls for involvement of the embassies.

Another characteristic of the programme has been the *limited use of consultants.* In other programmes, Sida often uses consultants in project formulation and follow-up. In the Initiative, Sida has only engaged consultants for the preparation of the two big Pungue and ZACPRO projects. One argument for not using consultants is the need to build up an internal capacity at Sida in these fields. It has also been argued that the political nature of some projects, and the benefits of using diplomatic channels in sensitive stages of project formulation, makes it less suitable to use consultants. Using consultants for follow-up and project screening would possibly permit the regional co-ordinator to allocate more time for other tasks. The relatively technical nature of many projects would also tend to support the engagement of consultants. Finally, if the Initiative should grow, it may be necessary to strengthen the Swedish consultancy resource base in this field.

Sida has been rather *pro-active* in its relation to partner organisations. It has planted project ideas, given its opinion on project proposals and actively tried to bring together organisations of different countries for sub-regional projects. Even though Sida has not been imposing, its approach differs from many other programmes in which Sida merely acts as financing organisation and stresses the importance of projects being "demand driven". Considering that this has been a new programme, and that water resources management, particularly at a regional level, in itself is something quite new, a pro-active approach has probably been justified. Nonetheless, in the analysis of projects, there are indications that a more demand driven process would sometimes have generated better projects. Furthermore, it is debatable to what extent it is Sida's role as a donor to be active in project formulation, given that Sida should also undertake project appraisal.

Apart from administering projects, the regional co-ordinator has provided *professional input* to the programme. This may not have been necessary to manage the programme, but it has added an extra dimension to it and made Sida a respected partner in the sector.

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[19] Interviews seem to indicate that the first regional co-ordinator worked closer with the embassies in the region, possibly because their role may have been more important in project identification and formulation than during project implementation. The workload of managing the programme may also limit the time of the current co-ordinator to work together with the embassies.

Decision-making has followed regular Sida routines (decision memos, LFA etc.) but has otherwise been rather personalised (considerable influence of the regional co-ordinator) and ad hoc. This may partly be explained by the fact that there were initially not a great number of projects to finance. It is also reflects the absence of clear financing criteria.

The total *management input* was found to be high. This should be seen in the perspective that the programme has been in an initial phase and that it has involved financing of many, relatively small projects in different areas.

Summarising, the mission finds the arrangement with a local co-ordinator appropriate, particularly with consideration to the start-up phase of the programme. However, greater involvement of other Sida departments as well as of the embassies may strengthen the Initiative further.

To what extent did the management model actually shape the programme? Without a regional co-ordinator it is possible that there would not have been so many relatively dispersed projects. It is possible that the Swedish technical consultancy input would have been larger. To what extent is Zimbabwe's relative over-representation in the initiative a result of the location of the regional co-ordinator? Most certainly the management model, including the location of the co-ordinator, has had an influence on programme design and *visa versa*.

As the Initiative moves from the start-up phase to becoming an established programme it may be necessary to reconsider the management model. This is further discussed in chapter 5, under options and scenarios.

4.2.2 Results

The consequences of the particular programme management model include the following:

Analysis and information regarding water resources and environment: Largely through the presence of the regional co-ordinator participating in meetings and networking, Sida has gained information about water resources and the environment in the region. However, this information seems to have been shared with a relatively limited number of people at Sida such as the Stockholm programme officer, the Head of Section and sometimes with the embassies.[20]

Identification and follow-up of interventions: An important characteristic of the Initiative is that all of its projects, as well as many of the implementing organisations, are new to Sida. The identification and preparation of the 12 projects, including establishment of relationships is a major achievement of the Initiative. The team notes that project documents and financing proposals are generally well prepared, there is reporting from all of the projects and the partner organisations generally describe their co-operation with Sida in positive terms.

Donor co-ordination: The regional co-ordinator is regularly in contact with other donors, from Harare as well as through participating in seminars, in SADC meetings etc. The mission has not observed any immediate overlapping with work of other donors. This does not necessarily mean that there are not other projects very similar to those of Sida. An observation is that nobody in the sector appears to have a full picture of on-going activities.

[20] Apart from being a programme management issue, this may have to do with Sida's general capacity problem to absorb new information.

Planning and reporting: The regional co-ordinator has planned work on a six-monthly basis in dialogue with Sida Stockholm. Reporting to Stockholm consists of the forwarding of project reports and the continuous dialogue with the programme officer. Reporting to the Swedish embassies has, to the extent there has been any, been mainly limited to information on project in the particular country.

Other: Not within the actual framework of the Initiative but as a result of the management model, the regional co-ordinator has contributed to the work at the Swedish embassy in Zimbabwe and at times also supported other Swedish embassies in the region. One example is the first co-ordinator's engagement in the discussions on bilateral infrastructure projects. Another example is when the second co-ordinator filled a temporary gap for the management in the bilateral programme.

An observation of the team is that the Initiative is not well known, neither by the different projects nor by other donors. This may be because the framework of the Initiative has not been very clear and/or information has been insufficient. Making the Initiative known is obviously not an objective in itself. However, it would make it more likely that Sida is approached with project proposals, contributing to the programme becoming more demand driven. It would also facilitate donor co-ordination and give Sida more visibility as a player in the regional water sector which may be of benefit if Sida wants to pursue certain issues.

4.2.3 Cost-effectiveness

The current management of the programme must also be seen in relation to costs. The yearly cost of a regional co-ordinator has been budgeted to SEK 1,6 million.[21] Assuming that a post in Stockholm costs about the half of this, and that the current programme officer works 80%, the cost of project management is roughly SEK 2,4 million. With an average yearly budget of SEK 20 million, costs for programme management thus reaches somewhat over 10%.[22] Almost two full-time posts for the management of SEK 20 million is clearly more than most other Sida programmes. It should be recalled that the use of consultants has been limited, bringing down costs, but even so, total management costs are likely to be higher than average.

The reason for this is primarily the nature of the programme: it has been in a start-up phase, involving numerous relatively small projects etc. In this perspective, costs are not necessarily exceedingly high. Furthermore, costs for establishing relations and gaining experiences may be seen as investments for the future. Nonetheless, for the future, there may be reason to reflect on the need to focus the programme in order to reduce management costs.

Furthermore, the Initiative was found to be well managed which inevitably is reflected in costs. A lower level of ambition (for example less time for appraisal and follow-up) would reduce costs but not necessarily cost-effectiveness as programme quality would suffer. The immediate alternative use of funds would have been for projects but it is doubtful whether spending, say SEK 1 million on a project rather than on programme management would have given a greater total impact.

How the fact that most programme management has been handled by Sida itself (as opposed to by consultants and delegating to organisations) has affected cost-effectiveness is something we are not in a position to comment on. It is probably more important to recognise that administration and management is an integral part of co-operation and that it has a cost wherever it is performed.

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[21] Decision memorandum of 1999, not including funds for methods development, local consultants and other.

[22] Not including *project* management, which is the responsibility of the implementing agencies.

Whether to use Sida's own staff, consultants or organisations for certain management functions is a decision which should not only be based on cost, but on who is in the best position to assume these functions and of a clear idea of the division of responsibility between Sida, partner organisations and consultants.

In principle, funds could also have been used for the management of other Sida programmes. Though important, this issue is beyond the scope of this study. It should be up to the DNRE management, who has an overall view of management needs and resources, to determine whether the Initiative, due to its nature or importance, deserves more management resources than other programmes.

4.3 Projects

In this section we present an overall assessment of the projects financed as part of the initiative. It is primarily based on the four "cases" but references will also be made to other projects.

4.3.1 Relevance

Project relevance has to be assessed in relation to the objectives of the Initiative, regional objectives, overarching Sida objectives and problems of the sector.

Relevance to the objectives of the Initiative

All of the projects can easily be related to one or both of the programme objectives. So far, emphasis has been on objective one, i.e. *to raise awareness and build capacity in sustainable use and management of water resources*. ERCSA's publication "State of the Environment of Zambezi", the Water Demand Management project and NetWise are typically awareness raising and competence building projects. Only the ZRA project and to a certain extent the Okavango Every River project, can be labelled as management of international water resources. However, when approved, ZACPRO 6.2 and Pungue will also belong to this category. The preparation of these projects has been an important achievement of the project. An alternative, or complement, could have been to engage in co-operation with the already existing river basin commissions.

The experience seems to be that general awareness raising projects can be started relatively quickly while those dealing with international water resources management require a considerable start-up period.

All projects, except IWSD Water Quality[23], are in one or another way regional. Many would, however, best be described as sub-regional and some only concern two or three countries. Only one project has used Swedish consultancy input while all of the other ones have used regional capacity.

No intervention is explicitly focusing on IWRM. However, they all deal with aspects that may be seen as part of IWRM, including environmental monitoring, water supply and sanitation and demand management.

Relevance to regional objectives

SADC strategies and objectives were briefly mentioned in Chapter 2. SADC has elaborated 31 "project concept notes" (PCNs) representing different prioritised areas for which it seeks donor

[23] Planned up-scaling of the project is limited to Zimbabwe.

funding. All of the projects of the Initiative were conceived before the list of PCNs was compiled, and are, apart from reporting, run independently of SADC. Nonetheless, the Sida projects can all easily be related to the various PCNs, for example Every River (Promotion of Stakeholder Participation, PCN 24), Pungue and ZACPRO (Joint Integrated Basin Management, PCN 13), ZRA, sub-project 3 (Aquatic Weeds, PCN16 etc.). Hence, the Initiative projects are *thematically* in line with SADC priorities. Nonetheless, SADC has expressed a wish that Sweden would also support some of the SADC initiated projects. Sida has shown reluctance to participate, however, considering SADC's capacity and presumed role.

Relevance to Sida's overall objectives
Water resources management can of course never be an objective in itself and it is therefore of interest to see how it contributes to the overall objectives of Sida and how they relate to Sida's four action programmes.

As noted, Initiative projects by definition contribute to the *environment* objective. Examples are water quality, environmental policy and strategy, and water demand management.

The potential impact on poverty has been mentioned already - water quality and water demand management contribute indirectly to poverty reduction. However, it is noteworthy that no project has dealt with the linkages between water resources and poverty.

Generally, projects have not had a democracy or human rights perspective. An exception may be the Every River Project which is working actively to promote stakeholder participation.

It was noted that the effect on gender equality would depend on how projects are designed. Almost all project documents have a section on gender and in various ways state that gender perspective should be integrated. However, very little seems to have happened in practice.[24] The gender objective appears to have been "added on" without much analysis or ideas for how to handle it in practice. Another is that the relevance of incorporating a gender perspective often appears to vary considerably between the projects. While it is clearly important to consider the different needs and roles of men and women in relation to, for example water demand management or the mobilisation activities in Okavango, it is probably less important in, for example, flow and pollution measurements in the Zambezi. This calls for a more selective inclusion of the gender objective but also more emphasis to it where it is really relevant.

Relevance to sector problems
All of the projects respond to different problems in the water sector. The WDM study, ERCSA, NetWise and some other projects are all designed to respond to a presumed lack of information. ZRA and IWSD water quality responds to the problem of pollution. Pungue and ZACPRO respond to the need for international co-operation on river basin management.

Some of the projects, however, appear to have been rather supply driven. Examples of this are ERCSA, GWP and NetWise. These projects are based on a perceived need, not an active demand, of target groups. Awareness making processes and introduction of new concepts, such as WDM and IWRM are of course seldom demand driven. However, greater consideration to target group

[24] The ERCSA report contains a chapter on gender in relation to the environment of Zambezi and the environmental Policy and Strategy of ZRA recognises the importance of women and states women always should be consulted. However, in the 1st consultative workshop discussing the policy and strategy, there were 2 women out of 42 participants and in the 2nd workshop there were 4 women out of 50 participants.

interests, and more direct involvement of target groups, would possibly have produced more effective projects.

Another reflection is that the Sida financed projects are strategically disconnected. They may all be relevant to different sector problems, but there are hardly any linkages between them.[25] A variety of projects in different areas and with different implementing organisations may have been relevant in a start-up phase, for Sida to gain experience and to build relations. However, in the medium and long term projects need to be chosen more strategically to achieve a substantial impact in a particular area. This may also provide opportunities for co-operation between the different projects.

Relevance with consideration to other donor initiatives
There are a large number of donors involved in water resources management. Donor co-ordination is crucial and sometimes complicated. Nobody appears to have the full picture of activities going on in the region. Nonetheless, the evaluation mission has not seen any case of immediate donor overlapping.[26] In one case, IWSD, interest from Sweden and another donor led to the splitting up of a proposal into two projects, WaterNet and the Research Fund. There are, however, other donor activities similar to those of Sida. This is not necessarily a bad thing as, for example, awareness raising and research require many parallel efforts, but it may imply that funds have not always been optimally used.

4.3.2 Results

The projects have generally fulfilled their *output* objectives. There have been some delays in comparison to the original time plans but seldom very large. The only project which was significantly revised during the course of work was NetWise.

In the case of ZRA, the output produced so far consists of an environmental policy and strategy and the workshops that have been held during its preparation. It also includes training opportunities in Sweden as well as preparation of work plans and budgets. There are no reasons to believe that other planned activities and output will not materialise. The output of DRFN primarily consists in its home page. ERCSA has produced and distributed the document *State of the Environment of the Zambezi* as well as posters and newsletters. The output of the Water Demand Management (Phase I) project has been an inventory of experiences in five countries, presented in a book.

When it comes to *effects* and *sustainability,* it is yet too early to make a full assessment. In the case of ZRA, for example, it depends on how the environmental policy and strategy is internalised, operationalised and practically used. This largely depends on the human and financial capacity of ZRA as well as on its commitment to environmental protection.

ERCSA has not been able to present information on how its material has been distributed. In Zambia[27], ZRA functions as the distribution centre and has redistributed the ERCSA material to 14 Government agencies. It is doubtful whether the publication has reached decision-makers at

[25] However, there are linkages through some of the participating organisations, such as IUCN-ROSA, ZRA and IWSD who are engaged in several of the Sida projects.

[26] It should be said that time has not allowed a comprehensive analysis of other donor activities.

[27] The only case where the evaluation team had a possibility of making a follow-up.

all levels as intended. The awareness raising and competence building impact of a book alone, without any strategic promotional or dissemination activities, may also be questioned.

The NetWise project constitutes a new approach to spread information and establish contacts. Even if the long-term impact *may* be considerable, it must be recalled that access to the Internet is still extremely limited in southern Africa. None of the persons interviewed had visited the home page of NetWise. If these persons, with a relatively strong international exposure and with a demonstrated interest in water resources issues are not aware of the home page, one may assume that its impact thus far is marginal. This does not mean that the project does not have a potential in a longer term.

The four projects discussed above are, like several of the other ones, short-term projects. However, their objectives in terms of impact in the water sector in Southern Africa must be seen as long term. Raising awareness or changing the behaviour of people takes many years. Many of the interventions of the Initiative may be classified as strategic in the sense that they have a potential to trigger new processes. However, without follow-up there is an apparent risk that they will become isolated one-time events without significant impact.

Another reflection is that direct target groups are generally persons already actively involved in the issues at stake. For example, the WDM study, the ERCSA document, the NetWise home page is likely to be read primarily by those already interested and relatively well informed. Apart for the Every River Project, there is no project that has tried to involve new target groups to any large extent. Had the WDM study been used to develop a practical tool or checklist for politicians and decision-makers or had the ERCSA study been complemented with an easily accessible document directed to the public, impact may have been much greater.

A *positive side effect,* apart from benefits stated in the project documents, has been that persons from different countries have had an opportunity to meet and work together. For example, persons of five nationalities came together in the preparation of the WDM study and the Nkomati research project has, apart from research findings, led to increased contact between academics in Mozambique, Swaziland and South Africa.

Another positive side effect has been that the projects have strengthened the implementing organisations institutionally. For example, ERCSA receives questions and new requests in relation to environment following the Zambezi work, and IUCN-ROSA has benefited institutionally from hosting the GWP-SATAC and managing the WDM programme.

In addition, the projects have given Sida an opportunity to gain experience and establish a network in the region. With consideration to Sida's own needs, it may very well have been strategic to spread efforts as it has.

This evaluation has not attempted to identify negative side effects. However, unlike some infrastructure projects (for example), research, dissemination and methods development seldom do much harm. In this respect, the projects of the Initiative are rather "safe". The only risk is that their impact will also be relatively limited.

5 Options and Scenarios

This chapter discusses some alternative options for Sida for the possible continuation of the Initiative.

5.1 Key considerations

5.1.1 Consolidation and focus

For the past few years the Sida Water Resources Management support program in Southern Africa has been in an initial establishment phase during which a wide-ranging group of projects have been supported. This has had a number of advantages for the program in that it has enabled Sida to establish itself in the region as a concerned and credible agency. In considering options for the future of the program, however, it is necessary for Sida to become more focused and to consolidate the work already undertaken. In order for this to happen it is recommended that the objectives of the program are refined and are based on a clear rationale which includes both the objectives of Sida and the needs of the region.

In order to develop options for the future program, several key issues require consideration. These are:

- a clear understanding of the nature of poverty alleviation through different mechanisms and at different levels,
- the need to reassess the political environment and potential impact of the program in the region,
- the meaning and nature of regional projects within the water resources management sphere in the SADC region.

5.1.2 Poverty alleviation

The Evaluation Team has considered the nature and potential of poverty alleviation through the program as presently structured and with regards to recommendations for the future of the program. There are two broad categories of action to address poverty which need to be considered. These are:

A) Direct immediate action which engages directly with poor people and generally has immediate impacts on the quality of life of identifiable individuals and communities. Such action provides immediate localised relief but may not address the root causes of poverty. Water supply schemes are an example of such approaches.

B) Indirect long-term strategic action which addresses the systemic causes of poverty. This is usually more general in nature but has the potential to be more fundamental and produce longer lasting results for a greater number of people.

Different donors chose different strategies depending on their mandates. The impact on poverty of the Sida program under review is by nature indirect and long term. (Sida does however have direct poverty impact projects through its bi-lateral programs in individual countries in the region.)

5.1.3 Relevance and political impact

One of the primary concerns emerging from the evaluation is that although the work done and the project outputs from each project were of a very high standard, their impact within the region is considered to be very little. This tends to reinforce the conclusion that many of the projects were undertaken on the basis that the specific output of each project was an end in itself rather than a means to impact opinion and practice within the region, from the highest political level to officials in government departments and to water users in general. Changing the opinions and practices of key decision-makers is a difficult and complex process which requires specific planning and strategy which is probably beyond the scope of individual projects and beyond the skills and abilities of those who undertake the projects.

Two suggestions are therefore incorporated into the recommendations. The first is that all projects should clarify how the issue being addressed in the project has regional strategic importance and what advocacy procedures will be undertaken to ensure that the output of each project has maximum influence, and the second is the establishment of a specific component within the program which will promote advocacy at key decision maker level within the region.

5.1.4 Regional nature

Projects which are regional in nature may have different interpretations as to what being "regional" means. "Regional" could either mean that projects need to involve more than one country from the region or that issues addressed in a project which involves a single country has applicability in the region as a whole. During the establishment phase of the Sida program most of the projects involved more than one country from the region. It is recommended that the broader definition continue to be used, provided that the regional applicability of the issues involved in single country projects are clearly identified and that strategies for ensuring that the project outputs are adequately disseminated to all countries in the region are incorporated into the projects.

Direct poverty alleviation projects such as water supply and sanitation are by nature local or national projects and should not be included under Sida's regional water resources management program but undertaken at country level through bilateral arrangements.

5.2 Programme options

In considering recommendations for the future program of Sida in water resources management in Southern Africa, the evaluation team developed four possible scenarios. Each option was discussed at length and are presented briefly below.

Option 1: **Thematic projects:** The program would comprise numerous smaller projects on a variety of themes related to integrated water resources management. The projects would all have regional significance but would not necessarily involve multiple countries. Option 1 would essentially mean continuing with the current program but with more focus.

Option 2: **International river basin focus**: The program would concentrate exclusively on the development of joint water resources management projects between two or more countries on international rivers. These would be multifaceted complex projects which would include a variety of issues depending upon the particular basin. Issues could include the development of co-operative institutional frameworks between the involved countries, the establishment of institutional bodies for the joint management of the basins under consideration, stakeholder engagement and the development of water users fora, hydrological and hydrogeological information management systems, water quality and general environmental monitoring, strategic planning for the development and use of water resources, etc. Option 2 would comprise a small number of large complex projects.

Option 3: **Support through SADC WSCU**: This option promotes the channelling of all the program resources towards strengthening the SADC WSCU and the funding of SADC identified and prioritised projects.

Option 4: **Water supply and environmental sanitation projects**: This option promotes direct poverty alleviation for the benefit of specific identified communities through several water supply and sanitation projects.

These options are represented in the table below which provides comments for each option on the basis of several criteria. The criteria are as follows:

Regionality: The degree to which the option fits the criteria of being regional in nature.

Poverty impact: The type of poverty impact which the option will provide.

Effectiveness in poverty impact: A measure of the potential of the option to achieve the poverty impact.

Manageability of the program: A measure of the complexity and difficulty of managing the option from Sida's perspective.

Viability and risk: The impact of external factors on the viability and success of the projects. An example would be the inherent risk involved in engagement in multi-country international river basin projects where the viability and success of the project is dependent upon political issues which are beyond the control of the project.

Leverage of funds: Ability of Sida funds to leverage other funds from government and other donor sources, creating a multiplier effect. Relatively small amounts of Sida funding could, for example, have a direct impact on policy development which may result in significant savings of funds by government throughout the region. The input by Sida may be multiplied by funds committed by other donors and by governments in the region.

Table 14: Options matrix

Criteria	1 – Thematic focus	2 – Basin Focus	3 - SADC WSCU	Option 4 – WSS
Summary of Description	• Numerous smaller projects on a variety of themes related to IWRM • Regional significance but not necessarily involving multiple countries • Continuation of current programme.	• Focus on few specific shared river basins • Full process to enable joint IWRM of shared basins • Process intensive • Discretionary component	• All resources targeted towards support to SADC Water Sector Co-ordinating Unit	• All resources targeted towards physical water supply and sanitation / public health projects aimed at the poorest communities
Regionality	Regional issues	Multi-country by definition	Regional by definition	Primarily national/local
Poverty impact	Long-term & indirect	Long-term & generally indirect	Long-term & indirect	Direct and immediate
Effectiveness in poverty impact	Dispersed	High potential in given basins	Limited	Localised and symptomatic
Manageability (for Sida)	Numerous projects, less complexity	Fewer projects, greater complexity (Little Sida experience)	Single client, management determined by SADC political process	Multiple projects at national level
Viability / Risk	Least risk - dependant on individual projects	Highly dependant on political processes beyond project control - long preparation times	Institutional constraints of SADC WSCU	Limited to risk of individual WSS projects
Leverage of Sida funds	Potentially High	Potentially High	Moderate	Low
Recommend ation	Second choice	Preferred	Not recommended	Not recommended as a regional program

After detailed consideration of the options the following conclusions are drawn:

The current program is a mixture of options 1 and 2 with a wide variety of different small thematic projects together with four basin related projects (ZACPRO 2 Phase II, Pungue, the Okavango basin and Nkomati).

Option 3 should not be considered because it is too dependent upon the administrative and political process of SADC and the WSCU. However, Sida should continue to participate in the co-ordination activities of SADC and may consider financing individual projects proposed by SADC.

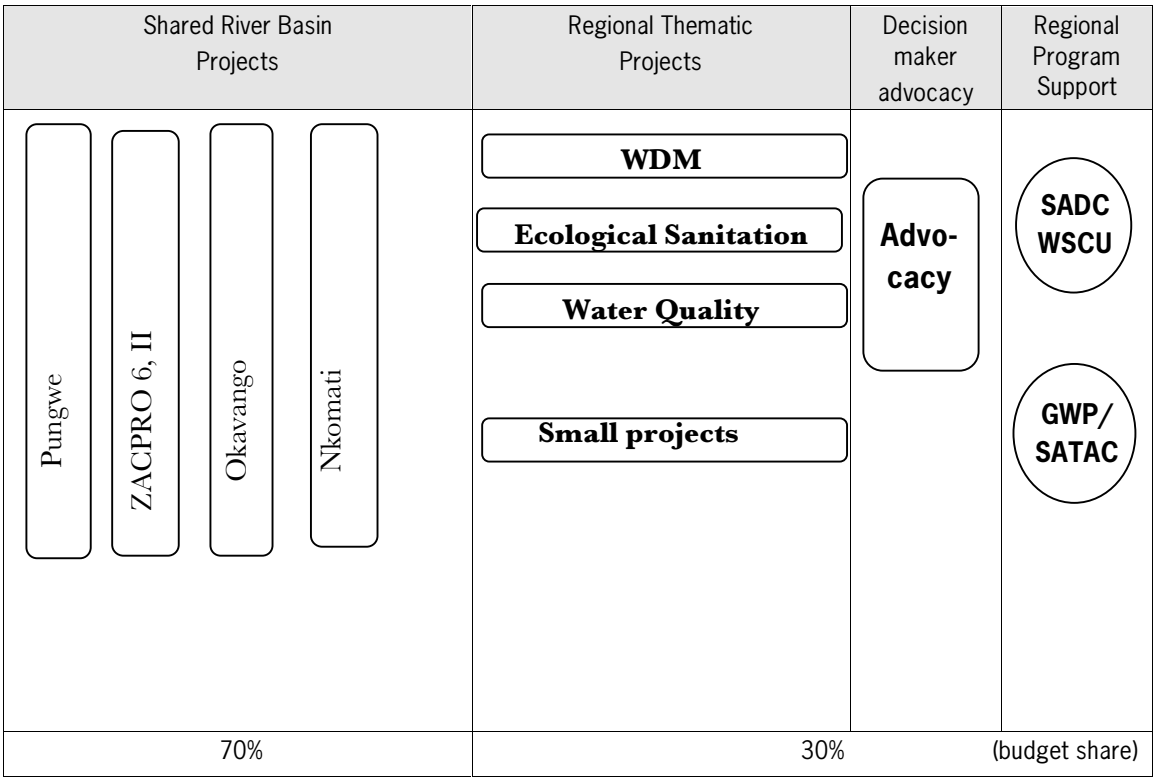
Option 4 should not be considered as water supply and sanitation projects are by nature local and are best handled at national level through bilateral arrangements with Sida. The Sida program may however seek to address common issues such as environmental sanitation through the program in order to develop materials and methodology which will be applicable within the region.

Based on the section entitled "Context" above, the following factors characterise the circumstances within which the Sida program of support to water resources management in Southern Africa is situated:

- The overbearing influence of poverty (both personal and institutional) and the resulting weak economies
- All major surface water resources are shared between two or more countries
- There is an increasing threat of water scarcity in the region as a result of increasing population, and growing demand as a result of development
- The integrated management of water resources in Southern Africa is inadequate due to a lack of professional capacity and financial resources and weak institutions
- Growing but as yet insufficient political understanding of and commitment to best practice in water resources management

Given this context, it is recommended that Sida concentrate its program on the management of shared river basins in a selected number of specific areas. This implies a continuation of the current program but with more focus and greater allocation of resources on issues related to the management of shared river basins. Adopting such an emphasis implies a strategic choice that will enable Sida resources to have the greatest possible impact not only on improving the management of natural resources within the region but also on regional economic factors which go beyond water resources management.

Focus on shared river basins does, however, not exclude complementary activities in thematic areas, to strengthen contacts or for advocacy. It is recommended, therefore, that the Consolidation Phase of the Sida support program focuses on program components as follows and as illustrated in the following diagram.



Programme focus: Shared River Basins

The current basin oriented projects should continue and further projects similar to the Pungue project should be promoted. These are complex projects which take significant time to establish and prepare. Project preparation is often complex and delicate and needs to be undertaken with adequate resources. Many aspects of shared river basin programmes require high-level diplomatic input. Sweden in general and Sida in particular are highly regarded in the region and are well-placed to perform the brokerage role which is required in order to bring such projects to fruition. Such projects can only be conceived and developed with the full involvement of the governments of the countries concerned in shared river basins. A significant element of such programmes involves the "levelling of the playing fields" between different countries involved in the same international river basin. Because of the relative size and complexity of river basin management projects, it is anticipated that these projects will need to be managed by suitable management consultants accountable to the regional office of Sida in Harare. It is advised that the management and administration function separately from technical support input on projects.

Complementary programme activities

Thematic study areas: The focus on river basins can be complemented with a limited number of thematic areas to promote good IWRM practices. The current thematic projects which are supported by Sida should be carefully assessed and the portfolio should be rationalised to concentrate on a limited number of strategic issues. There is an assumption on the part of a number of the current projects that they will be automatically supported for further phases. This will serve to perpetuate the lack of focus which characterises the current program. Possible thematic areas include Water Demand Management, Ecological Sanitation and Water Quality. These thematic areas could be supported in a number of ways in addition to dedicated projects, for example through the specific funding of related research topics through the IWRM Research Fund for Southern Africa.

Decision Maker Advocacy: It is suggested that a focused and well considered program be developed which is aimed at senior political and public service decision makers in order to promote best practice in integrated water resources management in Southern Africa. A program of round table discussions would be planned which address a number of issues of strategic importance to the countries of the region related to water resources management to which such senior decision-makers are invited. The meetings would need to be arranged with due consideration to protocol and would include input from renowned international experts. The objective of such round table discussions would be as follows:

- To disseminate relevant output of work carried out under the thematic study areas,
- To enable ministers and senior government officials to meet together to both build the knowledge and understanding of key issues and to build mutual relationships,
- To promote implementation of best practice in the management of water resources.

This component will require careful design and the engagement of Swedish embassies throughout the region.

Small Projects Discretionary Fund: Although there is a need for greater focus and strategic direction for the program, the flexibility of the Initiation Phase had a number of advantages. It is considered useful to ensure that this flexibility is continued on a limited basis to enable interesting small projects to be supported and funded. It is recommended that the funds allocated to the Small Projects Discretionary Fund be limited to 10% of the total budget. Clear criteria should be drawn

up to assist both the Sida staff in the administration of the funds and potential recipients in their applications. This component could be integrated with the thematic programmes.

Support to Regional Activities (SADC-WSCU and GWP): The activities of the SADC Water Sector Co-ordinating Unit and the Global Water Partnership SATAC should continue to be supported through assisting with specific events which promote the objectives of the Program and best practice in integrated water resources management. This support should be in the region of 5% of the program budget.

5.3 Management model

The future management model must be shaped by the new characteristics of the Initiative. Moving from an initial to a consolidation phase, we foresee fewer and larger projects, longer project preparation periods as well as longer implementation periods. Due to the political nature of international river basin management, process content will be extensive and projects will be complex in terms of both issues and stakeholder relations. Technical assistance is likely to be an important component. Being larger projects, co-financing with other donors (such as for the ZACPRO project) is more likely. The geographical coverage is expected to be more focused to a few sub-regions. The total budget is likely to increase but there will be a continued pressure to limit costs for programme management and an absolute limitation with respect to in-house management in Stockholm. The current and future scenarios are summarised in table 15.

Table 15: Current and future scenarios

	Current	**Future**
Phase	Initial	Consolidation
Number of projects	Many	Few
Size of projects	Small	Large
Lead time for preparation	Short	Long
Project period	Short	Long
Process content	Limited	Extensive
Complexity	Low	High
Variety of Issues	Single issue	Multiple issue
IWRM	Limited	Extensive
Categories of stakeholders	Few	Many
Technical assistance requirements	Limited	Increased
Donor co-financing	No	Possible increase
Geographical coverage	Dispersed	Focused
Risk	Low	Higher
Programme budget	M SEK 20	Increased
Management budget	Unchanged (in absolute terms)	

These proposals imply the continued need for a co-ordinator stationed in the region in the future. Furthermore, given the high cost of a regional co-ordinator, it is important that this person focuses on key tasks such as strategic planning, networking, co-ordination, co-operation with embassies etc.

Should the basin focus be complemented with smaller projects or thematic programmes, structures must be created so that these can be managed by local organisations, similarly to the Research Fund. The co-ordinator (or a local organisation) could for example dispose of a fund for "small projects" similar to those existing at bilateral level.

DNRE Stockholm will continue to have an important role for formal decision-making, quality control, and support of fieldwork. DNRE will also function as a focal point within Sida as other departments are becoming increasingly involved in the Initiative. Procurement of international consultants is another function which may increase.

Recognising the multi-disciplinary nature of IWRM, and assuming that projects will be "multi-issue", greater involvement of other departments of Sida, including INEC and DESO is motivated. Such contacts are also needed to assure that IWRM principles are applied throughout Sida's programmes. However, it should be a specific need for co-operation between different departments at Sida that should motivate such an engagement, not merely the principle that co-operation should take place.

With the Initiative concentrating on a few sub-regions with longer-term basin oriented projects each with different political dimensions, it will need to draw on Swedish embassies in the concerned countries, both during the preparation and implementation stages of projects. The role of the co-ordinator will then increasingly become a genuine co-ordination function.

Consultants are likely to be required both because the Initiative is growing while Sida's management resources are limited, and because increased complexity may require special competence not found within Sida. Arrangements similar to that of SEI may be set up to relieve Sida of routine administration. Consultants may also have an important role – together with embassies and the co-ordinator – to advance processes. Monitoring teams, similar to those used by DNRE in most of its programmes may be considered. It is recommended, however, that the same institution/company is not contracted to provide both administrative and technical support on the same project as this may lead to a conflict of interest or a confusion of functions as has happened to a degree on the existing ZRA Project.

To move ahead with complex projects with many stakeholders, Sida may facilitate processes and act as a "broker" between different stakeholders. This includes both bringing together regional stakeholders and facilitating donor co-funding.

To become a respected party in these processes the professional input of Sida must continue to be high.

The decision making process should follow Sida's general procedures and be guided by more specific criteria than during the first years of the Initiative. However, given the high process content and higher risks inherent in the basin-oriented projects, there must also be room for flexibility.

A reduction in the routine administration activities of the programme is necessary due to Sida's limited management resources. This should be possible by focusing on fewer, larger projects. Furthermore, part of such administration must be delegated by the local co-ordinator to local organisations and consultants. However, the need for professional management input will continue to be substantial given the nature of projects (complex, high risk, process oriented etc.)

Such a "management model" is summarised in table 16.

Table 16: Future management model

Aspect	Characteristics
Regional presence	Continued. Focus on co-ordination, facilitating processes, monitoring and strategic thinking. Less project administration.
Involvement of Sida, DNRE	Formal decision making Contact with Ministry of Foreign Affairs Focal point within Sida Procurement of Swedish consultants Quality control/support of field work
Involvement of other Sida departments	With relevant sector departments (e.g. INEC and AFRA.)
Involvement of Swedish embassies	Intensive in countries with projects, for project preparation and during implementation.
Use of consultants	As required for specific professional tasks, to facilitate processes, project monitoring and project administration.
Relations to project implementing organisations	Facilitative, brokerage role.
Professional input	Continued
Decision making process	Formalised but flexible, according to programme criteria
Management input	Reduced (in relative terms) routine administration. Continued high professional management input.

Given that Sida's management resources are limited, a key question will be: what are the functions that Sida cannot delegate? It may be assumed that Sida must primarily provide directions for the programme, make financing decisions, co-ordinate with other donors, disburse funds and follow-up results. In addition to that, a major future role may develop as the programme grows and additional shared rivers are included: the political dimension. It is likely that the programme and its regional coordinator increasingly will have to focus on preparing the ground for politically sensitive projects and new initiatives, in doing so probably engaging Swedish embassies, senior Sida staff and appropriate regional expertise. Sida may use consultants to participate in project formulation, project appraisal and follow-up, as it does in some other Sida programmes. Arrangements similar to that of the ZRA project, relieving Sida of some routine administration, may be tried also in other projects.[28]

Another key issue is to what extent the regional co-ordinator should be engaged in the bilateral programmes as has sometimes been the case. This may have been a practical measure when the Initiative was of limited size and the co-ordinator had time available. However, as the Initiative grows it is recommended that the co-ordinator engages in bilateral programmes only to assure that the bilateral activities are coherent with the regional programme, that is, not for preparing country strategies or getting involved in national projects.

[28] However, roles and responsibilities must be clearer defined than in this case.

6 Main Conclusions and Recommendations

The following are the team's main conclusions and recommendations:

6.1 Conclusions

Objectives of the Initiative:

- The objectives of the Initiative are directly relevant to Sida's environment objective and have indirect relevance for the poverty reduction objective.
- Considering the large number of international rivers and the similarities of problems in the region, a regional approach is relevant. This should be seen as complementary to local and national efforts.
- Programme objectives are relevant to sector problems but are too broad to effectively guide the programme.

Management model:

- The management model, characterised by a strong local presence, pro-activity and large Sida input has been relevant for a start-up phase of the project.
- More active involvement of other Sida departments and the embassies could have benefited the programme.
- The programme is well managed within the current programme constraints and format. The presence of a regional co-ordinator is highly appreciated by implementing organisations and has been positive for the Initiative.
- Due to the relatively large number of small projects and the fact that the programme is new, management cost in relation to disbursements has been high.

Projects:

- The projects financed are relevant to sector problems as well as the objectives of the Initiative, but the project portfolio lacks a strategic focus and is dispersed. As a consequence the strategic impact of the programme is likely to be limited.
- A broad scope may be appropriate in a start-up phase, but for the next phase increased focus is required to achieve a critical mass, reduce management costs and facilitate co-ordination with other donors.
- With few exceptions, projects have fulfilled their output objectives. It is still too early to make an assessment of impact and sustainability.
- Positive side effects include contacts established between organisations in some of the projects and the increased experience and contact network of Sida.

6.2 Recommendations

For the continuation of the Initiative, four options were considered: thematic projects, international river basin focus, support through SADC Water Sector Co-ordinating Unit and water supply and sanitation.

Having analysed these options with respect to regionality, poverty impact, effectiveness, manageability, viability and risk, and leverage of funds, the team recommends a ***strategic focus on international river basin management****.*

This focus should be complemented by additional activities such as

- thematic activities, networking (GWP), advocacy and support to SADC WSCU.

The management model must be adapted to this new programme focus. This would include:

- continued regional presence through a regional co-ordinator focusing on co-ordination, facilitation of processes and strategic issues,
- continued involvement of Sida, Stockholm for formal decision making, quality control, consultancy procurement and administration,
- increased involvement of Swedish embassies and other Sida departments,
- increased use of consultants in key areas and for project follow-up,
- a brokerage and facilitative role,
- flexibility within clear financing criteria,
- increased focus on hydropolitical issues, diplomacy and international issues.

Annex 1: Terms of Reference

Terms of Reference for the Evaluation of the Swedish Initiative for Support to Sustainable Management of Water Resources in Southern Africa

1. Background

Following the establishment of the new Sida in 1995[29] it was decided that the Department for Natural Resources and the Environment (DNRE) should launch a number of cross departmental initiatives. DNRE focused on three different cross cutting initiatives; Food Security, Coastal and Marine Resources Management and Sustainable Management of Water Resources in Southern Africa. The Swedish Initiative for Support to Sustainable Water Resources Management in Southern Africa (from now on referred to as the Initiative) was launched in 1996 for an initial period of three years and was later on extended for a two year period 1999–2000.

DNRE chose to target Southern Africa because of the emerging water crisis in the region. The water crisis is related to the arid to semi-arid climate, high population growth, industrialisation, urbanisation, improved standard of living, an increasing demand for irrigation for food production, water pollution and to poor management of the water resources. In addition, a significant feature of water in southern Africa is that it is a shared resource. The drainage areas of the 15 major river basins cover as much as 70 percent of the land surface of the region. The shared river basins play a significant role for the development of the region. The water resources are used for example for domestic and industrial uses, agriculture, hydropower, fishing and recreation.

The Initiative is focussing on the regional level because of the transboundary characteristic of water in the region and because management of international and shared water resources in general is a neglected area. Few financial resources either on a national level or through development assistance reach this important domain. Joint management of scarce natural resources build confidence between neighbouring countries and prevents conflicts to develop. Also, in the region the Southern Africa Development Community (SADC), a governmental organisation with 15 member states, is working towards regional integration within several public sectors such as peace keeping, electric power, mining, environment, education, water resources etc. DNRE thus concluded that this region had a basic framework conducive to water resources management on a regional level which could make good use of limited Swedish financial assistance. For further information see annex 1 where a list of relevant literature, assessment memos, information material etc is given.

1.1 Objectives of the Initiative

The development objective of the regional water resources Initiative is to assist in the improvement of integrated water resources management in Southern Africa. The two immediate objectives of the Initiative are to:

- raise awareness and build capacity in sustainable use and management of water resources, and

[29] Sida was created through a merger of four independent Swedish governmental development agencies BITS, SAREC, SIDA and SWEDECORP.

- to support integrated management of international water resources

The overall objective and the immediate objectives of the Initiative are reached through support to regional projects both financially and technically but also through the facilitating role of Sida in the preparation of complex regional projects. This role is executed by the coordinator of the Initiative, based in Harare, with back up from Sida in Stockholm and the Swedish Embassies in the region.

The Initiative is regarded by DNRE as a long term commitment because of two underlying motives. First of all, the support is geared towards capacity building and, secondly, it is designed to prevent conflicts to develop over the use of scarce water resources. A longer term support would eventually result in increased knowledge amongst policy makers and the public at large on how to manage scarce water resources in a sustainable manner. In turn this would lead to carefully prepared water management policies and projects, functioning international and national river basins commissions and water demand management and conservation initiatives in the region. Conflict prevention, in particular, requires long term investments and strategies Even though Sida is a small actor it is anticipated that through strategic investments and partnership with other development organisations, Sida could contribute to a positive development in the region.

1.2 Costs and administration of the Initiative

The Swedish Government allocated 45 million SEK for the first phase (1996–1998) of the Initiative and for the second phase 40 million SEK (1999–2000). Recent progress in project preparation including possible extensions of ongoing projects imply that all the funds are more or less committed even though they will not be disbursed before the end of the extension phase in the year 2000. The projects that Sida agrees to finance during the extension phase will continue beyond this point in time (see annex 2 for a list of all project and related costs).

The Initiative is managed by the Head of the Africa Division, one programme officer part time at DNRE and one regional coordinator based at the Swedish Embassy in Harare since 1 September 1996. The regional coordinator is financed as one of the projects within the Initiative. The role of the coordinator is to identify possible partners, initiate regional projects together with DNRE and to report on water resources issues in the region. The coordinator also acts as an adviser on bilateral water resources project to the Swedish embassies in the region. The coordinator reports progress regularly in the semi-annual reports of the Swedish Embassy in Harare and when needed also in separate reports. An important aspect of the work of the coordinator is to liase closely with other multi- and bilateral funding agencies involved in the sector.

1.3 Activities within the Initiative

The Initiative moved from a planning and project identification phase into an operational phase during the second year. A number of awareness raising projects was agreed upon and started in collaboration with non-governmental organisations in 1997. The progress in relation to the second immediate objective was a bit slower, mainly because joint management of shared water resources involves several parties and the planning process is therefore more complicated. It should be noted that the Initiative in addition to direct support to projects also has supported a number of planning seminars, LFA workshops and short term consultancies in order to move project ideas and concepts further towards implementation. For detailed information on projects and activities the following two references give a good overview: Sida in Southern Africa – Partnership in Water Resources Management, Brochure 1999 and Proposal for an Extension of the Regional Water Resources Programme in Southern Africa: 1999–2000 (see reference list and project list in annexes 1 and 2 respectively).

Programme activities covers all SADC countries, either geographically or through involvement of nationals. However, the Democratic Republic of Congo, Mauritius and the Seychelles are covered to a lesser extent.

1.4 Target groups and partners within the Initiative

The long term target group is the public at large in the region. Initially, the primary target group has been limited to decision makers, planners and trainers in the SADC region involved in the management of water resources on a national and international level. However, it is envisaged that the projects and activities supported through these groups will have an impact on all water users, including poor communities, that will benefit from improved management of water resources in the region.

The Initiative supports projects implemented by government agencies, universities and non-governmental organisations in the region, often in partnership with Swedish university departments.

2. Purpose and Scope of the Evaluation

In brief, the purpose of the evaluation is to assess the management strategy chosen by Sida, to conduct an objective to output analyses of the Initiative and its projects as well as to make recommendations for how the Initiative can be improved.

Originally the evaluation was planned to take place before the Initiative was extended into a second phase. However, it was generally agreed within DNRE and the Africa Department (AFRA) that it was premature to evaluate the programme only after two and a half years. The reason being that DNRE had underestimated the time it takes to move regional projects towards implementation. If the evaluation had been carried out as planned the impact of the Sida support to regional cooperation projects had been missed out completely and only projects in relation to immediate objective one, awareness raising, would have been possible to evaluate.

It was therefore decided by AFRA to extend the Initiative for a two year period and postpone the evaluation to early 2000. The results from the evaluation could then be used in a better way to decide upon how Sida could be engaged in the water resources sector in Southern Africa in the future. The results of the evaluation could also guide other regional Sida undertakings, e. g. the Lake Victoria Initiative. Since the Initiative will be evaluated on both an administrative level and a project level the results will guide Sida both in terms of improving programme management as well as on how to improve already ongoing and future projects.

The principals of the evaluation are the DNRE and AFRA management, the management at the Swedish Embassy in Harare, the Swedish Embassies in the SADC region and the regional coordinator in Harare. Other interested parties to the evaluation are the projects leaders.

3. The evaluation Assignment and methods

The Assessment Memo called "Vattenresurser i södra Afrika (SADC)", which was prepared by DRNE in 1995 and published in the Report series "Rapporter kring vattenresurser: Nr 2", together with the Government decision 1996-01-25 to launch the initiative, serve as the foundation for the Initiative. The evaluation team should use this document as a starting point for assessing the progress made since the start of the Initiative.

In general, the evaluation entails studies of available internal Sida documents, memos and published reports (see annex 1). It comprises interviews with key persons at Sida Stockholm, the

Swedish Embassy in Harare and when necessary with project leaders and key persons at some of the Swedish Embassies in Southern Africa in connection with in-depth project analyses (see annex 3 for list of persons to interview).

Apart from the purpose of and methods for the evaluation as described above the main issues to be covered and approaches to be used by the evaluation team are as follow below.

The relevance of the Initiative

In addition to assess the relevance of the Initiative in relation to available written information, the team should contact and interview the SADC Water Resources Coordination Unit in Maseru to get their opinion on the relevance and impact of the Sida Initiative. The Coordination Unit is responsible for all SADC activities in relation to regional water resources management and has recently completed a SADC strategy for sustainable management of water resources.

The management strategy of the Initiative

The efficiency of the management strategy should be evaluated. The roles and division of responsibilities between DNRE and the Embassy in Harare in general, and between the Programme Officer at DNRE and the regional coordinator in Harare more specifically, should be analysed.

Achieved results of the Initiative as well as of the projects

On a superficial level all activities and projects supported through the programme should be evaluated. This comprises a review of all key decisions, decision memos, project documents and progress reports. The team shall evaluate the *relevance* of the supported activity measured against the trust and objectives in the Sida Assessment Memo of 1995. This include assessing *achievements of objectives, results, efficiency, gender sensitivity, target group impact and sustainability*. See annex 2 for a list of projects and activities supported within the framework of the programme.

In order not to make the evaluation of the programme too complex and comprehensive only a few key projects will be chosen for in-depth analysis. These projects are selected based upon their strategic importance and conceivable key lesson to be learned for the future management of the Initiative. The projects are at different stages. For projects that are about to start the preparatory work and the project document itself should be analysed.

In-depth evaluations should be carried out on four of the projects of the initiative. Two of the projects should be in relation to *immediate objective one* and two should be in relation to the *immediate objective two.* Selection of the projects for in-depth evaluation should be made in close discussion with Sida after the general superficial evaluation of all projects have been made.

The in-depth analyses should comprise in addition to what is stated above a visit to the office responsible for the implementation of the project and if deemed necessary a field visit to meet and interview people directly concerned or involved in the project (see annex 3 for persons to contact). Standard evaluation methodologies should be used such as "before after project", "with – without project", "cost benefit analysis" and "quantitative and qualitative data analysis". It is up to the evaluation team to select the method deemed most appropriate when analysing the impacts and effects of projects and activities.

The composition of the project portfolio

It is important for the team not only to look at the projects separately. The composition should be assessed sector wise as well as the representation regionally in relation to the region's policies, strategies and priorities as well as in relation to the scope of the Initiative.

The impact on target groups

As far as possible it should be assessed to what extent that the target groups have been reached.

Sida's Four Action Programmes

It should be evaluated how the four action programmes of Sida – reduced poverty, human rights and democracy, environment and gender - has been addressed in project preparation, project documentation and reporting.

Recommendations for the continuation of the Initiative

As described above the evaluation is made partially to guide Sida when drawing up guidelines for a possible continuation of the Initiative. Based on the analysis of issues A–F, the team should make recommendations. The recommendations should address gaps, overlaps, adherance to SADC and Sida Policies. The team should also make recommendations on how the management of the Initiative could be improved based on an assessment of the current and future water resources situation in southern Africa.

4. Evaluation Team and Time Schedule

4.1 The Evaluation Team

The evaluation should be carried out by a team of two persons. Their professional experience should include experience in water and natural resources management, socio-economics, regional policy, and Swedish development policies and administration. The team should have documented knowledge in gender issues and the use of logframe analysis. Preferably, the team should include a person with relevant experience from Southern Africa.

4.2 Organisation

The team should begin the evaluation by studying some of the central documents that have guided the Initiative (see annex 1). Following the literature review interviews should be scheduled with Sida staff at DNRE and AFRA at Sida head quarters in Stockholm. The team should then be provided with more internal Sida documents such as travel reports, assessment memos and other key publications for further analysis. Following this preparatory phase, the team should travel to Harare for interviews with staff at the Swedish Embassy and for meetings with project team leaders in charge of the projects selected for in-depth studies and with the SADC Water Coordination Unit. The draft evaluation report should be submitted to Sida for comments and the final report is to be presented at a seminar at Sida.

4.3 Time Schedule

The team shall begin their work in May 2000. It is estimated that the literature review and interviews at Sida head quarters would demand two man weeks per person. The visits in Southern Africa for interviews would demand one man week per person. Another man week per person is deemed necessary for visits to other relevant places, e.g. Lusaka, Maputo, Windhoek, Maseru and possibly Beira. For drafting of the evaluation report one man week per person is deemed necessary. Finally three days per person should be set aside for incorporating comments on the draft version of the report by Sida and for a one day seminar at Sida in Stockholm. Incorporating two days for travelling per person the whole evaluation would claim 14 man weeks altogether.

5. Reporting

The team shall report to the head of the Africa Division at the DNRE at Sida Stockholm who is also responsible for the evaluation. A briefing including preliminary conclusions should be given to the Swedish Embassy in Harare before the team leaves Zimbabwe. The team should begin their work in May 2000 and the first draft evaluation report should be delivered in ten copies to Sida 1 November, 2000. Sida should provide its comments to the draft by 10 November. The Final draft of the report should be delivered to Sida 17 November. The final report should be delivered in ten copies to Sida including a diskette with the report written in Microsoft Word 7.0. The report should be written in English and follow the official Sida format for evaluation reports (annex 4). The final report shall be presented in a way so that it can be immediately published without further editing. The report should not exceed 60 pages, excluding annexes, including an Executive Summary not exceeding 4 pages.

The evaluation is concluded after the team has presented their conclusions and findings at a seminar at Sida Stockholm which will be arranged in November 2000.

Annexes:

List of references
List of projects and associated costs
List of key persons
Sida Evaluation Report - A Standardized Format

Annex 2: People Met

Environmental Council of Zambia	Kwali Mfuni, Senior Environmental Education and Communications Officer Charles Phiri, Natural Resources Unit
Department of Environment, Namibia	Ms. Shirley Bethune, Research Assistant
Department of Water Affairs, Namibia	Mr Piet Heyns, Director
Embassy of Belgium, Zimbabwe	Mr Patrick de Bouck
Environmental Engineering Services, Windhoek Namibia	Mr Ben van der Merwe, Consultant
ERCSA	Elton Laisi, Regional Consultant, Zambezi Project Tom Mpofu, Director Gibson Ndhlela, Head of Programme, Adm. and Finance
DFID, Pretoria	Mark Harvey, Programme officer
DRFN	Dr. Mary Seely, Executive Director Ms. Penelope Orford, NetWise Project Manager
GWP	Tabeth Matiza-Chiuta, SATAC Chairperson
IUCN	Saliem Fakir, Country Programme Co-ordinator, S.A. Misael Kokwe, Ecosystems Programme Co-ordinator, Harare
IWSD	N.R. Mudege, Executive Director J. Ndamba, Manager (Research & Training)
Min. of Water Affairs and Forestry, S.A.	Janet Love, Ministerial Advisor
SADC Water Sector Co-ordination Unit	Palesa Molapo, Senior Engineer, Groundwater Phera Ramoeli, Chief Engineer, Sector Co-ordinator Kolobere Ramosoeu, Principal Engineer
Sida/Ministry of Foreign Affairs	Marie Andresson, AFRA Torsten Andersson, Programme Officer, Zambia Mats Eriksson, Programme Officer, Stockholm Bengt Johansson, Head of Section, Stockholm Jan Olsson, Councellor, Zambia Thomas Nyström, INEC Katarina Perrolf, Regional Co-ordinator, Zimbabwe Göran Larsson, Counsellor, Namibia

SIRDC	Sharon N. Gomez, Research Scientist R Gurajena, Environment Specialist Alleta Musvoto, Research Scientist Patricia Tsorai, Research Scientist
SEI	Helena Forslund, Research Assistant Marianne Kjellén, Project Manager Ulf Pettersson, Associate Expert
UNICEF	Mark Henderson, Project Officer Justin Maeda, Country Representative
WaterNet	Dr. Pieter van der Zaag
Zimbabwe Ministry of Rural Resources and Water Development	E.K. Madamombe, Principal Hydrologist Gilbert Mawere, Chief Hydrologist S. Mtetwa, Principal Water Pollution Control Officer Jefter K. Sakupwanya, Water Resources Strategist (WRMS)
ZRA	P. C. Mwiinga, Engineer, Water Rights C.F.G. Mukosa, Chief Engineer Brenda Mulendema, Engineer Wilson Sakala, Hydrologist Data Processing M.J. Tumbare, Chief Executive

Annex 3: Work Schedule for the Mission

		ABRAMS			PECK			SANDSTRÖM	
	Location	**Institution**	**Re. Project**	**Location**	**Institution**	**Re. Project**	**Location**	**Institution**	**Re. Project**
2	Arr. Harare		Internal work	Arr. Harare		Internal work	Arr. Harare		Internal work
3	Harare	Swedish Embassy IWSD	Briefing Water quality	Harare	Swedish Embassy ERCSA	Briefing State of Env.	Harare	Swedish Embassy ERCSA	Briefing Environment info.
4	Harare To Lusaka	IUCN-ROSA Swedish Embassy	WDM (GWP-SATAC)	Harare To Lusaka	IUCN-ROSA Swedish Embassy	WDM (GWP-SATAC)	Harare To Windhoek	Travel	
5	Lusaka	Swedish Embassy Env. Council of Z.	ZRA	Lusaka	Swedish Embassy Env. Council	ZRA	Windhoek	DRFN Swedish Embassy	NetWise
6	Lusaka to J.B.	ZRA	ZRA (ZACPLAN)	Lusaka To Harare	ZRA	ZRA (ZACPLAN)	Windhoek	Dept. of water affairs Dept. of environment	Netwise
7	Pretoria			Harare			Windhoek		
8	Pretoria			To Maseru			To Maseru		
9	Pretoria	Janet Love DFID IUCN-ROSA	Donor-coordination Regional context WDM	Maseru	SADC WSCU	Regional issues, Donor co-ord. The Initiative	Maseru	SADC WSCU	Regional issues, Donor co-ord. The Initiative
10	Harare	IWSD WaterNet	Research Fund	To Harare	Travel WaterNet		To Harare	Travel WaterNet	
11	Harare	Dpt. of Water Internal work	WDM General	Harare	Dpt. of Water Internal work	WDM General	Harare	Belgian Embassy	Donor co- ordination
12	Harare	Dpt of water SIRDC Swedish embassy	Pungue, ZACPRO ZRA Debriefing	Harare	Swedish Embassy SIRDC Swedish embassy	Management ZRA Debriefing	Harare	Dpt of water Swedish embassy	Pungue, ZACPRO Debriefing
13	Harare Dep.	Internal work UNICEF	Formulation of conclusions	Harare Departure	Internal work	Formulation of conclusions	Harare Dep. 12.30	Swedish Embassy	Debriefing

Annex 4: Brief description of development on international river basins shared between SADC states

River basin	Basin states	Development
Buzi	Mozambique Zimbabwe	• Two smaller hydropower installations in Mozambique. One of the dams also used for irrigation.
Cunene	Angola Narnibia	• Potential hydroelectric power capacity of 2A00 MW. Four dams in Angola (some of them diverting water to Ruacana power station, 240 MW, in Namibia). Feasibility study of Epupa Dam (415 MW, Namibia) initiated.
Cuvelai	Angola Narnibia	• Low and erratic runoff. 40 dams built to provide water for agriculture and livestock to just under half of Namibia's population. Groundwater in the basin is too saline for human or animal consumption. Water diverted from the Cunene to the Cuvelai. No agreement between Angola and Namibia on the Cuvelai.
Incomati	Mozambiqe South Africa Swaziland	• At least six dams in South Africa. Transfer of water to the Olifants in the Limpopo basin for cooling of powerstations in the Eatern Transvaal. Diversions in Swaziland for irrigation. Tripartite commission has not been functioning well, but the bilateral commission between South Africa and Swaziland, as well as the Komati Basin Water Authority (KOBWA) established by the commission are functioning.
Limpopo	Botswana Mozambique South Africa Zimbabwe	• Four dams in Botswana, one in Mozambique, 26 in South Africa, and nine in Zimbabwe.
Maputo	Mozambique South Africa Swaziland	• Five dams in South Africa, four in Swaziland, and one in Mozambique.
Nata	Botswana Zimbabwe	• Partly ephemeral; unimportant as international river system. No agreements.
Okavango	Angola Botswana Namibia	• Very little known about development of Cubango and Cuito in Angola since civil war. One dam in ephemeral Omatako river in Namibia to supply Windhoek. Major diversions from Okavango to Namibia will be necessary by 2005. One dam in Botswana to supply Orapa diamond mine. Proposed development plans in Botswana shelved after critical IUCN report 1992. Permanent tripartite commission established 1994.
Orange	Botswana Lesotho Namibia South Africa	• Most developed river in SADC region. More than 24 large dams in South Africa five in Namibia and two in Lesotho. Largest project the Lesotho Highlands Water Project (LHWD) diverting water to South Africa; royalties to be paid to Lesotho for fifty years. Downstream country Namibia has only approved phase I of the project. Border line conflict between South Africa and Namibia solved recently. Irrigation scheme on Namibian/ South African territory regulated in special treaty. Internal diversions in South Africa via the 85 km (longest in the world) Orange-Fish Tunnel to Eastern Cape Province and other transfers in and out of the basin may become sources of conflict.
Pungue	Mozambique Zimbabwe	• No significant development made or planned.
Rovuma	Malawi Mozambique Tanzania	• No significant development made or planned.

River basin	Basin states	Development
Umbeluzi	Mozambique Zimbabwe	• Two dams in Swaziland, one in Mozambique. No immediate future. Development plans
Zambezi	Angola Botswana Malawi Mozambique Namibia Tanzania Zambia Zimbabwe	• Largest African river flowing into the Indian Ocean. Supports more than 26 Million people. Water availability exceeds demand at present, but may change due to increased population, need for irrigated food production (main reason), higher standard of living and environmental needs. Two dams in Malawi, five in Zambia and twelve in Zimbabwe. Hydropower potential 20,000 MW; about 4,500 MW installed. Largest hydropower works at Victoria Falls, Kafue Gorge, Kariba, Cahora Bassa and the Kamuzu Banrage. Future plans include Katombore (upstream of the Victoria Falls), Batoka Gorge and Devil's Gorge (between Victoria Falls and Lake Kariba), Mupata Gorge (between Kariba and Cahora Bassa). Other development projects: 10,000 ha sugar care project in the Eastern Caprivi in Namibia, Bulawayo Water Diversion Project in Zimbabwe, and diversion at Kazungula to South Africa by 2020. (last projects of questionable economic viability.)
Save	Mozambique Zimbabwe	• One of the most important rivers in eastern Zimbabwe and Mozambique. More than seven major dams for household use, irrigation and mining in Zimbabwe. High silt loads from erosion due to changing land-use patterns. Development plans in Zimbabwe will mean less water for Mozambique. International Water Commission proposed.

(Source: Manuscript draft to SIDA by P. Heyns, Department of Water Affairs, Namibia.)

Annex 5: Project overview

Project	Brief description	Countries Concerned	Institution	Start	End	Status	Budget (SEK)
Major projects	(+ Sida financed activities in connection with these)						
NetWise, DRFN	Enhanced exchange of information regarding natural resource use by the use of new information technology	Namibia Botswana Zambia Zimb Lesotho Mozambique Swaziland RSA	DRFN	1997	2000	On-going	3 300 000
IUCN-ROSA WDM (Phase 1+2)	Research and information dissemination on Water Demand Management (phase 1), Application of Water Demand Management in Southern Africa (phase 2)	Mozambique Zimbabwe RSA Botswana Namibia	IUCN-ROSA	1998 2000	1999 2002	Term. On	3 100 000 6 400 000
Workshop, IUCN Water Demand Manage-ment	*					Term.	82 000
ERCSA	Production and dissemination of information regarding the state of the environment of the Zambezi	Angola Botswana Malawi Mozamb Namibia Tanzania Zambia Zimbabwe	ERCSA	1998	1999	Extend? Planned	4 600 000 1 500 000
ZRA	Elaboration of an environmental policy and strategy, and establishment of environmental monitoring programme	Zimbabwe Zambia		1998	2001	On-going	6 000 000
Visit to Sweden, ZRA	Project preparation					Term.	88 370
Swedish	Project preparation					Term.	175 595

Delegation to ZRA							
IWSD Water Quality	Establishment of a pilot water quality management system in Zimbabwe	Zimbabwe	IWSD	1998	2001	On-going	3 400 000
UNICEF	Funding of senior regional advisor at UNICEF to support education policies and programmes on sanitation and hygiene	Whole SADC region	UNICEF	1997	2000	Term.	3 000 000
GWP-SATAC	Support to establishment of Southern Africa Technical Advisory Committee by IUCN-ROSA	Whole SADC region	IUCN-ROSA/ GWP-SATAC	1998	2000	Term.	5 600 000
Workshop GWP-SATAC	Formulation of objectives and working mechanisms of GWP-SATAC					Term.	190 408
IWSD, Research Fund	Establishment of a regional water research fund to support research and development in water management	Whole SADC region	IWSD	1999	2001	On-going	9 100 000
Every River Programme, Okavango	Peoples participation in the management of Okavango River basin, Kalahari Conservation Society (KSC)	Botswana Namibia (Angola)	KSC	2000	2002	On-going	6 950 000
Workshop Every River, Okavango	Project preparation					?	210 000
Nkomati River Research phase 1+2	Regional Research Program on Nkomati River	RSA Mozambique Swaziland	INR U. of Swazi IUCN-Moz	July 1999	July 2000	Term. Planned	1 000 000 4 000 000

Planned projects

Joint Pungue River Basin Study	Development of management strategy for Pungue River Basin	Mocambique Zimbabwe	Dir de Aguas Dpt of Water	2000	2003	Planned	21 450 000
ToR for the Pungue Study						Term.	222 917

Workshop on Pungue Study						Term.	275 000
ZACPLAN/ ZAMCOM	Co-financing with NORAD and DANIDA					Planned	9 000 000
Prep. ZACPRO 6.2 Proposal	Funding of ZACPRO 6 phase 2; revised project proposal for the Zambezi River Action Plan	Angola Botswana Malawi Mozamb Namibia Tanzania Zambia Zimbab	SADC Water ZRA	1998	1998	Term.	280 000
LFA Workshop, ZAMCOM	Post-financing of South African Consultant + LFA Workshop for agreement on Zambezi Basin Commission			1998	1998	Term.	440 000
OKACOM	Partly financed by Sida. GEF main donor					Planned	
Support to SADC Roundtable						Planned	1 000 000 ??
Possible Interventions in Malawi						Planned	2 000 000

Minor projects

Publication						Term.	79 115
Film Water in Namibia						Term.	936 000
SADC Water Book						Term.	300 000
Country Report Angola, Round Table						Term.	400 000
LFA Support to SADC-Water						Term.	139 265
Workshop Research Fund & WaterNet						Term.	157 561
Water & Security, Sida/ MISTRA						Term.	725 813

Study on groundwater in Namibia				2000	2000	On?	72 000
LFA regional course IWSD						Term.	42 000
Water Demand Mgmt Book						Term.	128 811
Sustainable Rivers Workshop						Term.	164 763

Programme Management

Regional Programme Officer	Co-ordination of programme for sustainable use of water resources in Southern Africa			1996 1999	1998 2000	Term. On	3 600 000 1 834 000

Annex 6: Objectives, expected output and reported results[30]

ERCSA

General: A second phase of project is under discussion. Additional funding of gap between phase 1 and 2 of SEK 198 000 for the period July–September 2000 has been approved. Last biannual report available ends in June 1999. Final report of Phase 1 to be completed after the extension period (ending September).

The outcome presented below taken from "status-to-date" report in the Annual Meeting Minutes of Oct 1999.

PROJECT DESIGN
Development Objective
Enhance the quality of life of the people of the riparian states, especially women, through better access, use and management of natural resources and regionally shared water resources of the Zambezi Basin
Project Objectives
Overall: An effective and efficient production, analysis and dissemination process of accurate environmental information on the Zambezi Basin is initiated, promoted and maintained. Specifically: 1. Building of both human and institutional capacity in State of the Environment reporting. Document and highlight the ecological and economic importance of the Zambezi River Basin to Southern Africa 2. Promote and strengthen community participation in the sustainable management of resources in the Zambezi Basin, paying attention to gender, particularly women's role as natural resource managers 3. Highlight the ecological and economic importance of the Zambezi in Southern Africa 4. Identify and communicate water pollution *hot spots* 5. Identify and communicate potential areas of conflict in terms of water resources availability and demand as well as its management. 6. Communicate the biodiversity of the Zambezi Basin and potential impact of human activities 7. Promote the concept of managing shared water course systems in the Zambezi Basin 8. Promote inter-institutional co-ordination, collaboration and co-operation in *State of the Environment Reporting* in the Zambezi Basin in particular and in the southern African region in general.
Expected Output
1. Production of Inception Report on the environmental and socio-economic issues in the Zambezi Basin 2. Regional Workshop on information capturing, consolidation and sharing, and production of report 3. Establishment of National Collaboration Centres Network (NCCN) 4. Production of Briefing Fact-sheets and Educational Posters 5. Production and Distribution of Newsletters 6. Production of a total of 5760 photographs of the Zambezi Basin 7. Establishment of a Zambezi Internet website 8. Production, publishing and distribution of The State of the Environment Report for the Zambezi River.

[30] Reporting available at Sida at the time of the evaluation.

REPORTED OUTCOME
▪ The Inception Mission Report has been completed by IUCN-ROSA and submitted to IMERCSA ▪ The Writing of the Regional Workshop Report on the State of the Environment Reporting Programme for the Zambezi Basin continued up to the end of 1998. During the first quarter of 1999, the report was designed, printed and published. ▪ The establishment of a National Collaborating Centres Network started with the identification of possible collaborating partners of such a network during the Inception Mission. A workshop in March 1999 with representatives for those organisations consolidated the plans for the partnership. Activity completed. Ahead lies the introduction of the collaborating partners to future activities of SOEPROZ I. Contracts have been signed with IUCN and NCCs are collecting more information on the basin. ▪ All the required Factsheets, Educational Posters and Newsletters required for 1998 and 1999 produced. ▪ All Factsheets produced up to date had been uploaded on the internet. ▪ Various experts within the Basin States were identified as contributors to chapters of the book *State of the Environment in the Zambezi Basin*. More than 20 contributors submitted material that resulted in 12 chapters that made the First Draft Manuscript submitted to the Scientific Advisory Committee. During the Scientific Advisory Meeting and the Trends and Scenarios Workshop, experts provided comments on the work and developed a chapter on Trends and Scenarios for the Zambezi Basin. This chapter was written after the workshop. The Final Report will include 14 chapters and was published by April 2000. ▪ 2 Steering Committee meetings have been held up to date, to review progress made under the Programme. Representatives of the organisations that form the Partnership for the Programme were present. ▪ The Photographic Database established and continuously up-dated. ▪ Establishment of a Contacts Database to be updated continuously. ▪ Establishment of Website for the programme, which has been updated continuously. ▪ Establishment of Scientific Advisory Committee.

Every River

General: Project started in May 2000. No reports available.

PROJECT DESIGN
Development Objective
Promote the sustainable management of natural resources in the Okavango River Basin for the benefit of basin residents and states through promoting and facilitating the effective participation of basin stakeholders in natural resource decision making and management, particularly related to water resources
Project Objectives
1. To **increase the capacity** of communities and other local stakeholders to participate in decision-making about natural resources of the Okavango River Basin, particularly those related to water resources, at local, national and regional levels 2. To **develop mechanisms** to promote and facilitate the participation of communities and other local stakeholders in natural resource management and decision making, particularly those related to water resources, at local, national and basin-wide levels
Expected Output
▪ Relationship between communities and the Okavango defined, e.g. water use, food collection, income generation ▪ Development of educational and training materials necessary to build the capacity of communities and other stakeholders ▪ Residents of at least ten communities in Namibia and Botswana (each) gain better understanding of Okavango River Basin ▪ Communities make decisions and take action on natural resource issues: ten communities in Botswana and Namibia (each) who participate in project define process to make decisions and articulate views on natural resource issues ▪ Partner organisations identified and strengthened to continue to develop and disseminate information: at least one govt. institution and one NGO in Botswana and Namibia work with project in information development and dissemination to communities ▪ Institutions identified, gaps and needs assessed, structures developed where necessary to facilitate local decision-making and two-way flow of information related to natural resource management issues ▪ Mechanisms developed for community participation in management and decision-making processes affecting the Okavango ▪ Collection, analysis and synthesis of relevant information from 15 riparian communities in Botswana and Namibia each ▪ Production of at least three updates, one booklet, one map, one poster, one radio programme, two basin models and one training manual.

GWP-SATAC

General comments: Project termination extended 6 months from June to December 2000. An independent consultant has conducted an institutional assessment in December 1999. The LFA presented in the institutional assessment not identical to LFA in project document (see below), although identical project objectives. Brief comparison suggests that there are no major differences in project profile.

Intervention Logic	**Reported outcome (according to institutional appraisal by People Systems Inclusive, January 2000)**
Development Objective	
Sustainable Water Resources Development & Management is achieved by translating the Dublin-Rio principles into operational instruments for addressing key water issues in the region	
Project Objectives	
1. Facilitation of the development of conceptual approaches for operational implementation of Dublin/Rio principles in Southern Africa, drawing on the emerging international experience and adapting options to the realities of Southern African countries 2. Encouragement and facilitation of improved exchange of experience by networking expertise within the region as well as establishing contacts to other regions and international expertise 3. Providing professional and technical advice to the implementation of IWRM within the SADC region at regional, country and local level. The assistance may include identification of regional and local expertise.	▪ The development of conceptual approaches is being conducted by GTAC. No evidence of such development has been noted at a regional level. Hence, for project objective 1 little or no achievement or progress is evident. ▪ For project objective 2, some evidence of achievement is evident. There has been facilitation and attendance at regional seminars, workshops and meetings for networking expertise and establishment of contacts. ▪ For project objective 3, significant evidence of achievement is evident. Provision of professional and technical advice to scientific papers, to project proposals and also sourcing consultants.
Expected Output	
1. To assist the newly created SADC Water Sector Co-ordination Unit meet it's regional mandate 2. To facilitate the co-ordination of the diverse and growing donor interests in the region's water sector 3. To provide an institutional framework for sharing information among the various stakeholders in the water sector 4. To create opportunities for interactive forums at national and regional levels	▪ There is significant evidence of achievement with regard to intended output 1. There have been frequent meetings and communications. Much assistance with the round table events and visioning process. ▪ Little evidence of co-ordination of donors concerning project proposals etc. ▪ Some evidence of progress in relation to expected output 3. Ongoing projects such as SAWINET and a stakeholder database. ▪ Some evidence of achievements in relation to output 4. 3 stakeholder meetings organised in Gaborone. Other meetings organised by other actors.

Nkomati

General: Sida supported development of project proposal (Feb 1999) and later decided to support a first phase of a regional research project on the Nkomati River (including South Africa, Mozambique and Swaziland) between July 1999–July 2000. A second phase is planned (implementation of research programme).

PROJECT DESIGN
Development Objective
Researcher capabilities are enhanced through trans-disciplinary and trans-boundary collaboration and learning
Project Objectives
Researchers, focussing on environmental sustainability of the Incomati river system, increase their capacity to contribute to integrated river basin management. Researchers will develop: ▪ An integrated (trans-disciplinary and trans-boundary) understanding of environmental man. of shared river systems ▪ A systematic approach (information, processes, procedures, model etc.) to understand and inform environmental management of shared river systems, ▪ An enhanced research capability, ▪ A dynamic and proactive network for sharing information and developing understanding, ▪ An enhanced ability to communicate with stakeholders and to contribute to integrated management of river systems.
Expected Output
▪ Regionally based teams with complementary understanding ▪ Informed and committed team members ▪ Inception reports on four areas: River health, Socio-economics, Decision support and Institutional support. ▪ Synthesis report ▪ Research Programme Proposal
Activities
▪ Set up of Core Team comprising the Project Manager, the Task Team leaders and one additional member from each participating University. ▪ Core team prepares briefs for Task Teams ▪ Set up of task teams. ▪ The River health task team produces a Protocol for Environmental Health, a Protocol for Desired State and an Instream Flow Protocol. These are later brought together for an evaluation of procedures, current status and research needs. Production of the River Health Inception Report. ▪ The Socio-economic Task Team produces a Protocol for establishing the socio-economic state and the Socio-economic state situation Inception report. ▪ The Decision Support Task Team establishes philosophy, principles and protocols before producing the Decision support current situation inception report. ▪ The institutional support Task Team establishes philosophy, principles and procedures before producing the Institutional support current situation Inception report. ▪ The tasks of the Core Team are to co-ordinate and monitor the work of the Task Teams. ▪ All Inception reports come together in a Synthesis report which is developed into a research proposal, containing a research framework and a management framework.

REPORTED OUTCOME
▪ In September 1999 a Core Team was set up, comprising three members from Mozambique, three from Swaziland and two from South Africa. ▪ Provisional lists of Task team members were drawn up and Convenors for Task Teams were identified. ▪ Deadlines for products were identified. The most imminent being the Draft Inception Reports which should be completed in April 2000. ▪ There have been tensions and problems in solving the budget, financial control, the management and communication within the project. Progress has been slower than anticipated and delays are anticipated. However, quite complex and sensitive issues have been resolved and there is an emerging maturity. ▪ The administrative problems have been solved and the process should run smoothly now. ▪ Communication is an ongoing issue and will be addressed explicitly. **Task Team Progress as of June 2000:** ▪ The Institutional Task Team had nearly completed draft report and was to present paper on the Stockholm Water Symposium ▪ The Socio-Economic Task Team has had two meetings and a draft report on "a component of the project" has been produced. ▪ In the Decision Support Task Team, team members would hold a workshop at the end of the month (June 2000) to "finalise output". ▪ The River Health Task Team has produced a literature review in Portuguese and a summery of ecological issues and concerns. ▪ In the 3rd Core Team Meeting held 2000-06-07 it was decided that the Task Teams draft Reports should be finalised by mid July and circulated for comments. Final Task Teams reports should be available by Sept. ▪ The Stakeholder Workshop was planned for October.

Research Fund

General: Research fund was launched in Harare in March 1999.

PROJECT DESIGN
Development Objective
To contribute to the sustainable development and management of water resources in the SADC region in order to ensure the availability of water required for social and economic development
Project Objectives
1. To promote and facilitate the implementation of multidisciplinary research projects in integrated water resources management in the region 2. To promote the utilisation of research results for decision making aimed at ensuring sustainable development of water resources in the region
Expected Output
▪ At least 20 research projects funded from the SADC countries and final reports received ▪ At least 48 researchers trained in research proposal development by year three of the establishment of the Research Fund ▪ Research results available and accessible for use in decision making ▪ Research results published and disseminated to relevant individuals and institutions

REPORTED OUTCOME
▪ Twelve renowned regional and international researchers in the water sector were chosen to be board members for the Water Research Fund. ▪ A first board meeting was held in connection to the launching of the Fund in Harare in March 1999. ▪ Operational guidelines for the Fund, application form, guidelines to researchers on how to prepare a project proposal and the letter of agreement between researchers and the Water Research Fund Board have been finalised. ▪ A brochure on the Fund addressing sustainable utilisation of water resources in Southern Africa was produced in April 1999, including a call for submission of proposals and was sent out to various individuals and institutions within the SADC region. The Fund has also been advertised in local press, newspapers within the SADC region, major international newspapers, on the Africa Water page and SOURCE page on the Internet as well as the IWSD home page. Also J Ndamba presented the Fund at a World Bank organised conference in Nairobi and an article on the Fund was published in the IWSD Newsletter. ▪ Advertisement of the Fund continued through the participation of the Fund Secretariat in the SADC Water Weeks. The Fund has now been advertised in all the mainland SADC member countries including Angola and Mozambique. Efforts are underway to translate the WARFSA brochure in Portuguese for distribution in the Portuguese-speaking members of the SADC. ▪ A total of **663 enquiries** had been received in December 1999, mainly from Zimbabwe, South Africa, Malawi, Tanzania, Namibia and Zambia. A total of **53 project proposals** had been received by December 1999 and are being processed before being brought before the Research Board. ▪ Proposals were sent to various reviewers nationally and internationally and assessment should include relevance, scientific quality, budget and other necessary factors, as well as recommendations. ▪ At the second Board meeting in Harare in October 1999, the proposals submitted before July 31 were screened (31). Only **five** projects received funding and the rest were referred back to the investigators for corrections before resubmission. ▪ In December $36 675 had been disbursed. ▪ A researcher officer was employed in April 1999 and some furniture, a computer and some stationary has been bought. The Fund manager is paid for the time he spends on Fund related activities from the Fund.

UNICEF

General: Activities in project prolonged until December 1999. Program start delayed from September 1996 to November 1997. Activities ended December 1999. Final Report provided June 2000.

PROJECT DESIGN
Development Objective
To strengthen capacity in the SADC sub-Region in the design and implementation of sanitation, hygiene education and related behavioural change programmes in order to advocate for, and facilitate the realisation of children's rights to a safe living environment and to, at least, basic levels of sanitation, hygiene and water services.
Project Objectives
To recruit a sub-regional Sanitation and Hygiene Advisor in order to: 1. Provide guidance and support in sanitation and hygiene policy development , programme planning and technical support to UNICEF Country Programmes in the SADC sub- region (as well as in ESAR) by fostering institutional networking and research & development for Sanitation and Hygiene, including Water and Environmental Sanitation Network (WES-Net) in ESAR and by providing advisory support to the ESAR Regional Planning and Management Team (RPMT) 2. Enable the UNICEF Country Programmes in SADC (and ESAR) to adapt and operationalize gender balanced and community empowering strategies for sanitation and hygiene 3. Foster regional network, especially ESAR "WESnet" and among local and regional institutions in support of the above programmes 4. Liaise with all sections and divisions of UNICEF (in ESARO and NYHQ), with strategic partners, institutions, donors (especially Sida) and governments in all pertinent policy and operational matters related to the sector 5. Plan and facilitate regional and sub-regional level meetings/workshops in SADC (and ESAR) to promote sanitation and hygiene. Participate in key regional and global meetings. 6. Provide support to the Water Supply and Sanitation Collaborative Council through NYHQ, especially promotion by the Africa Working Group 7. Undertake critical analyses of country programmes, annual and donor reports and funding appeals. 8. Assist UNICEF Country Programmes and the Regional Office in mobilising funds for the sector
Expected Output
1. Stronger capacity in SADC countries to develop and implement appropriate gender balanced and empowering policies and strategies for sanitation and hygiene 2. Contribute to efforts to bring about a substantial increase in access to sanitation and hygiene information and improvements in behavioural practises in this area 3. Improved co-ordination, collaboration and exchange of information between a wide range of international and national agencies, institutions and partners in the SADC-countries (especially under the UN System-wide Special Initiative on Africa) 4. More effective school programmes for sanitation and hygiene that enhance lifeskills in safe practises 5. Stronger capacity in sanitation, hygiene promotion and communication in the SADC sub-Region 6. Better capacity in UNICEF Programmes to take advantage of and provide support to intra- and interregional transfer of strategies, research results, techniques and technologies for promoting safe sanitation and good hygiene practises.

REPORTED OUTCOME
▪ **Networking:** Establishment of important networks to promote sharing of experiences and technical change, including the "Participatory Approaches in Hygiene & Sanitation/PHAST Africa Support Network", which was a result of the 1998 Regional Workshop. Local and regional institutions are directing the network. Network currently comprises over 90 people in 18 countries across Africa, and is expected to grow. Includes electronic dialogue on ecological sanitation. Another network for ecological sanitation well on its way. This sub-regional SADC interest has expanded to include other regions as well as contacts with Latin America and South Asia on programming and research issues. Mvuramanzi Trust has taken over as co-ordinator. Both networks closely allied to WHO Africa Initiative on Water & Sanitation. ▪ **Partnerships:** The programme has brokered a broad based partnership and linkages between UNDP-World Bank (WSP-ESA), WHO, UNESCO, UNICEF, key regional institutes (IWSD, SARDC and NETWAS) and NGOs (Mvuramanzi Trust, CARE, Africare, EcoEd, Mvula Trust, RELMA and CSIR) to collectively promote and support regional and country specific programmes for sanitation, hygiene and behavioural change. ▪ **Gender Issues:** The programme has continued to ensure that gender issues are promoted and mainstreamed in all UNICEF supported water and sanitation programmes in the region. In follow up to the 1997 "Gender Participation in Water and Sanitation Regional Workshop" in Pretoria, all countries in the region have received guidelines on gender. ▪ **Policy Development:** Continued support (technical advice and networking) for development of national policies for sanitation and hygiene in Lesotho, Swaziland, Botswana, Zambia, Zimbabwe, Malawi, Mozambique, Namibia and South Africa. Zambia's policy for sanitation shared with all countries in the region. ▪ **3 workshops held in Zimbabwe: (I)** PHAST (Participatory Hygiene and Sanitation for Transformation) Africa Support Network; **(II)** Ecological Sanitation – Exploring Options for a Better Future; **(III)** Africa 2000 Co-ordination & Networking. ▪ **Advocacy:** Planning and organisation of "Sanitation/Hygiene Weeks" held in several countries in 1999. Guidance and input to SARDC, especially in their advocacy materials (e.g. newsletters and other research publications) to strengthen Water Resource Management in the region. Inputs to various reports from the three workshops in Zimbabwe and different allied brochures. ▪ **Ecological Sanitation (promotion, research, development):** Regional sharing of experiences with Mvuramanzi Trust facilitated and brokered. Formation of strong interest group. ▪ **Support to programming:** Continued technical support to Water Supply and Sanitation Collaborative Council, specifically for sanitation, hygiene and water supply in emergencies. Senior Regional Advisor provided support to the Africa Working Group as a member of its steering committee and assessed UNICEF assisted programmes, annual and donor reports and funding appeals for UNICEF WES programmes. Through the AWG, special effort was made to adapt the GESI (Global Environmental Sanitation Initiative) to Africa. ▪ **Emergencies:** Continued advisory to all UNICEF country programmes in Eastern & Southern Africa on emergency preparedness for countries affected or prone to emergencies including drought and floods. Completion of TOR for Drought/Flood Assessment for use by SADC Food Security Training Project and the Joint Mission for Drought Assessment in SADC countries. ▪ **Monitoring and Evaluation:** Continued support through development of TORs for several evaluations for UNICEF assisted sanitation and hygiene programmes in the SADC region. Senior Regional Advisor continued involvement in evaluation of the India UNICEF country programme, which provided wider links in programmes, research and policy development for the SADC region, including practical measurable indicators for program impact and behavioural change.

IWSD Water Quality

General: National Pilot Project. Uncertain how project experiences could be applied on regional level.

PROJECT DESIGN
Development Objective
To contribute to the establishment of a sustainable water quality management system in Zimbabwe
Project Objectives
1. To develop, test and validate a water quality framework in the Mupfure catchment 2. To develop an information system providing readily accessible water quality information 3. To improve the Department of Water Resources' capacity to implement water quality management systems 4. To learn from the application of the water quality monitoring system in Mupfure and make recommendations for its application in other catchments
Expected Output
1. Development of a water quality framework 2. Development of an information system 3. Improvement of DWR capacity 4. Learning from application of system for other catchments

REPORTED OUTCOME
▪ All necessary equipment purchased, in place and functional ▪ Catchment mapping and characterisation conducted ▪ A literature survey on water quality and its monitoring in other countries was conducted. Examples drawn from South Africa, Zambia, Morocco, Pakistan, India and Sweden. ▪ A consultant was engaged to carry out catchment characterisation and digitisation. The digitised coverages are available and project team using them in their reports. ▪ Consultant identified the major quality problems in the area to be agricultural activities, unsewered sanitation and mines. ▪ Three programmes, namely river, groundwater and dam monitoring programmes have been planned. 51 possible river sampling sites were identified on the detailed map of the catchment before field trips were made to locate them. Sampling and analysis conducted. ▪ Project team established two points in river area with heavy fertiliser applications. Both points monitored weekly with emphasis on nutrient variation. Study has been extended to cover bigger area including weekly monitoring of eight new points. ▪ The samples from the river sites were analysed for 25 parameters and results compared to waste water standards of 1972. Parameters out of range were highlighted. A big database for all the points is in place and is updated on monthly basis. ▪ All potential polluters in the area were visited to see how their activities could contribute to water quality. ▪ Project team members attended subcatchment meeting and Sanyati monthly meetings. ▪ Pamphlets on the effect of water quality parameters on human health have been produced for subcatchments 1–4. ▪ Project team embarked on radio programme targeted at school pupils to spread message on water pollution countrywide. Programme run every Monday on Radio 4 during Dec-Jan holidays. ▪ Project team members and DWD personnel trained in course in Arcview. ▪ In 1998, project staff visited the Institute of Water Quality Studies in South Africa to get an overview of water quality monitoring systems in SA. ▪ A situation analysis of the Water Quality Section of the Department of Water Resources made. ▪ Two members of the project team attended the diffuse conference in Perth, Australia. Mr Mtetwa attended the International Water Association conference in September 1999 in Argentina. Workshop results used in the development of the research theme. ▪ Eight personnel from the PCU held workshop in December 1999 in order to finalise the inputs and harmonise the Waste Discharge and Disposal Regulations and to report on seminars and workshops attended by officers. The regulations and guidelines have been finalised incorporating all suggestions from the workshop. ▪ Project team has designed a database with the analytical results of all the river points so that water quality maps. Project team members still learning new concepts in manipulation of GIS and linking it to the obtained results. ▪ At second steering committee meeting, an Agritex official based in Chinhoyi suggested co-operation to try and address the problems in Nemakonde District. Water from this area has been collected and tested. ▪ Stakeholder workshop held in June of 1998 in order to make the people in the Mupfure catchment aware of the project. ▪ Meeting held with the urban, industrial and mining sectors of the catchment in order to further make them aware of the project. ▪ Four stakeholder workshops held at ward levels in Chihota in October 1999. Objectives included to bring awareness of project objectives to people, create a warteness of water pollution and highlight importance of conservation of all natural resources and discuss on ways of doing so. ▪ The project team has sought permission from regional authorities to interact with all schools in the province. ▪ Until December 1999, two steering committee meetings had been held (a third has been held in Aug 2000).

IUCN Water Demand Management, Phase 1

General: Phase 1 has been completed (Jan 98–June 99) and a final narrative report has been delivered (March 2000). A second phase has been approved and initiated (July 2000–June 2003).

PROJECT DESIGN, Phase 1
Development Objective
▪ Integrated basin-wide water resource management strategies ▪ Sustainable management strategies for water resources i.e balancing limited water resources with increasing national and regional demands for water ▪ Learning to live with aridity i.e. ensuring that water resource management plans are sustainable in the context of a region with sustainable arid areas ▪ The development of environmentally sustainable water-use regimes
Project Objectives
▪ **Encourage the systematic practise of water demand management in the Southern African region** ▪ Improve understanding and knowledge of water demand management among decision makers and practitioners in the Southern African region ▪ Influence national and regional water policy and strategy in demand water management ▪ Investigate the need and opportunities for pilot projects in a second phase
Expected Output
▪ A better understanding of the role and potential for WDM as an aspect of regional water management and the conveyance of this knowledge to key decision-makers ▪ Creation of human resource capacity in water management; enhance research capacity; establishing a methodological approach of direct applicability to policy development; ensure that the region has a policy analysis capacity ▪ Improved water management in the region (secondary effect)

PROJECT DESIGN, phase 2
Development Objective
Promote the adoption of the efficient, equitable, integrated and sustainable approaches to water resource management in Southern Africa
Project Objectives
To promote the adoption of water demand management approaches to the extent that their use precedes traditional supply options at national and regional levels. To be supported by specific objectives set out below: 1. To increase the awareness of WDM by politicians, professionals and the public as demonstrated by the adoption of WDM policies at regional and national level (includes networking) 2. To collect and disseminate sound information from research and other studies on WDM and assess benefits accruing (includes networking) 3. To improve the capacity of technical, educational and policy professionals to promote and implement WDM (including promotion of curricula reform) 4. To document the application and testing of WDM measures in pilot case study areas and facilitating or supporting the implementation of guidelines in different sectors in selected countries of the region
Expected Output
▪ No of dam building projects delayed due to the adoption of WDM measures ▪ SADC and country policies on WDM effectively introduced in the region ▪ 5 new Country teams formed and working together on WDM ▪ WDM measures being implemented at country level

- Ministerial conference successfully held
- 2 regional workshops held during the course of the project
- 12 Research reports placed on the web-site and 6 information sheets or policy briefs distributed
- A list of research material is compiled
- 5 countries agree to have studies conducted and research teams for each are established
- 12 Priority research papers are commissioned and selected
- 4 guidelines are developed and used by national governments in the region, and IUCN is requested to facilitate the implementation of these guidelines in at least 3 countries and 3 sectors
- A meeting with regional tertiary institutions is convened to engage issues of curricula reform
- 2–3 Tertiary institutions agree in writing to adopt WDM curricula
- A consultant is selected to develop module
- A training workshop for trainers held
- 4 case study areas are identified by the steering committee and criteria developed
- 3 countries and sectors are chosen for implementation support of guidelines

REPORTED OUTCOME, phase 1
▪ A reference group comprising six experts was established to bring together important stakeholders linked technically & politically to WDM so that they could influence the project, advise on issues, make sure there is no duplication of work being done by others in the region and give technical support by reviewing the country studies. ▪ Research teams were identified and team leaders selected. The five research team leaders would represent their teams at regional level and they would form the Technical Team. ▪ Contracts were issued to research teams from Zimbabwe (Institute of Water and Sanitation Development), Mozambique (Fernanda Gomes & M. R. Marques through IUCN Mozambique), Botswana (University of Botswana), South Africa (Centre for Scientific and Industrial Research) and Namibia (Department of Water Affairs/Municipality of Windhoek). ▪ Both advisory group and external reviewers were identified and established in each country. Two international reviewers were established (DR. Anna Blomqvist (Sweden) and Dr. Donald Tate (Canada)). ▪ Draft findings were presented at various regional for a, e.g. the annual conference of the Agricultural Economics Association of South Africa in Namibia in October 1998. ▪ At the second Reference Group Meeting in October 1998 the country reports were reviewed and recommendations on questions to incorporate in the reports were made. ▪ The various country teams conducted both desk and field work research in order to produce the first final country reports. Comments by the project manager, the reference group, national and international external reviewers and the national advisory groups. From the process it was clear that the Mozambique and South Africa reports were weak and needed considerable revision. ▪ During the first half of 1999 the country case reports were finalized and submitted by the country teams. The reports were generally of good standards and adequately covered the major issues. The studies focused on different elements of water use and were presented at the Water Demand Management Conference. ▪ The country studies revealed that WDM measures are not systematically practised in Southern Africa despite the scarcity of freshwater resources. Where WDM measures are being applied, this is being done in an ad hoc manner and the measures not shared among stakeholders. Water is generally allocated to ensure both equity and economic efficiency but the allocation systems are usually dysfunctional. ▪ The country reports and other information were presented and distributed widely in an effort to convey knowledge and to build capacity in water management. Specifically, information was distributed at the initial SADC meeting, to members of the country teams and their organizations, at the South Africa country meeting involving about 100 people at the March 1999 regional WDM conference and at the October 1999 World Meteorological Conference. However, in general there was a greater focus on advocacy and less on information dissemination in phase 1 because the reports were not finalised early in the project. There is a need for further information dissemination in phase 2. ▪ A regional conference was hosted by IUCN ROSA and held in Johannesburg in March 1999 on the theme "Towards Developing Effective Water Demand Management Strategies for Southern Africa". 90 representatives from 10 Southern African countries attended the conference as well as several international speakers. ▪ The conference participants formulated a declaration on Water Demand Management for Southern Africa. Also, the participants undertook to advocate for the inclusion of WDM as an essential component of developing planning. The major outcome of the conference was the consensus by all stakeholders to implement a second phase of the project. ▪ A synthesis report has been produced as a key document that captures the essence of 5 country study reports and also charts out a new vision for WDM in the region.

Zambezi River Authority

General: The proposed timing of project according to project proposal; *phase 1*: 13 months (Dec 98–Dec 99) and *Phase 2*: 20 months.

PROJECT DESIGN
Development Objective
▪ To maintain the water resources of Kariba and the Zambezi River in an acceptable condition suitable for sustainable utilisation by power utilities, domestic, industrial, agricultural and environmental users. ▪ To provide timely, accurate information on the environmental status of the Zambezi River and Lake Kariba to stakeholders and interested parties.
Project Objectives
▪ ZRA has an effective environmental monitoring system for the Zambezi River and Lake Kariba
Expected Output
1. ZRA will have its own Environmental Policy and Strategy for the Zambezi River and Lake Kariba which will guide the implementation of present and future projects 2. The ZRA and Contracting States will have access to adequate water quality information for the Zambezi to be able to make timely decisions to maintain water Quality standards for primary and secondary users. The impact of siltation on the storage of the Lake Kariba will also be determined. 3. Present and future pollution risk identified form point and non point sources to water of Lake Kariba 4. Development of an effective monitoring system to assess the impact of water hyacinth and its control on the environment of Lake Kariba.

REPORTED OUTCOME
▪ Two stakeholder workshops were planned and held as scheduled (March and October 1999) ▪ The Scientific & Industrial Research Development Centre (SIRDC) submitted the final draft version of the Policy and Strategy document in December 1999. The ZRA Board adopted the document with comments at the meeting held on 18 March 2000. The comments will be incorporated in the Final Report. ▪ A final Revised Version (1.3) for a Water Quality Monitoring Programme was submitted in January 2000 ▪ ZRA worked in conjunction with the Water Quality Consultant on the documentation of pollution loads. Details of the work and outputs have been submitted to ZRA in the Water Quality Consultants Third Mission Report. ▪ All the Laboratory Equipment identified so far has been ordered and is expected to be in place by the beginning of August 2000. Delays were experienced due to delayed responses from suppliers. ▪ Following the recommendations of the two stakeholder workshops in 1999, Water Quality Guidelines for the Zambezi River under the ZRA jurisdiction were to be designed. The editing committee had its first meeting in March 2000 and a second meeting has been scheduled to June 2000 (with possible postponement due to unrest in Zimbabwe) ▪ Sub-project 3: The Monitoring System to Assess the Impact of Water Hyacinth and its Control, is expected to be initiated in the second half of 2000. Draft Term of Reference for this project has been prepared by ZRA and submitted to SEI for input. ▪ Ms Mulendema and Mr Kaniki underwent a one-month training in analytical procedures at the Swedish Agricultural University in August/September 1999. ▪ Most of the training programmes for the year 2000 have been deferred to 2001 due to the lack of sufficient counter part funds from ZRA. However, the 2-week course on Limnology and Ecology of Lake Kariba is going ahead as planned and will take place in November 2000 in Kariba. ▪ Mr Ulf Pettersson, a Swedish national, was recruited as an Associate GIS Expert and should start at ZRA Head Office in Lusaka in May 2000. ▪ ZRA has approached several local Internet service providers for assistance in designing the web page. Documentation for the web site is also being drafted. ▪ ZRA is still awaiting the input from SEI on gender emphasis in ZRA.

Annex 7: Cases

Environment Monitoring Programme – ZRA

Background

The project originated through contacts between the former regional co-ordinator and the management of ZRA, in connection with preparation of ZACPRO 6.2. Discussing the environmental situation in the Zambezi basin, the regional co-ordinator asked ZRA to present a proposal for co-operation. A draft document was submitted to Sida. Sida responded by financing an LFA workshop and a study visit to Sweden for the ZRA management to acquaint itself with the Swedish resource base in this area. This led to a revised project proposal being submitted to Sida[31].

In 1998-09-23 Sida took the formal financing decision with a budget of SEK 6 million for disbursement 1998–2001.

The Swedish "liaison" consultant, Stockholm Environment Institute (SEI) was contracted through a tendering process facilitated by Sida. Project activities were initiated in November 1998.

Objectives

The development goal of the project is defined as:

"To maintain the water resources of Kariba and the Zambezi River in an acceptable condition suitable for sustainable utilisation by power utilities, domestic, industrial agricultural and environmental users"

"To provide timely, accurate information on the environmental status of the Zambezi River and Lake Kariba to stakeholders and interested parties."

To this end, three sub-projects with the following immediate objectives were defined:

"Design of an environmental policy and strategy for the ZRA for the Zambezi River and Lake Kariba."

"Establishment of a Water Quality Monitoring Programme for the Zambezi"

"Monitoring System to Assess the Impact of Water Hyacinth and its Control on the Environmental of Lake Kariba"

The planned activities and expected outputs to reach these objectives were outlined in the project proposal.

Stakeholders and target groups

According to Sida's decision memorandum[32], the target group is broad, as ZRA is an international entity working with a number of actors. However, the immediate target group is the staff at ZRA. In a longer perspective, the beneficiaries of improved environment, is the public at large.

Relevance

The co-operation with ZRA is clearly relevant to the objectives of Initiative. Focus is not on integrated water resources management as such, but adding an environmental component to ZRA's generally production-oriented activities (power generation) implies a step towards increased integration. Being concerned with shared water resources (Zimbabwe and Zambia, and indirectly down-stream country Mozambique) the project lies closest to the objective 2 of the Initiative. However, it also involves awareness raising and capacity building in sustainable use and management of water resources, i.e. objective 1. The two objectives do not seem very distinguishable from each other in this project.

The project is also relevant to the water sector. An environmental policy and strategy is a first step to protecting the Zambezi environment and monitoring information is required to determine what action to take. What remains to be seen is how the policy and strategy, and the monitoring information will be used. This largely depends on the commitment of ZRA.

Even though ZRA recognises the importance of environment, this issue is not at the centre of the organisation's work. Certainly, Swedish support to ZRA could have been provided in other areas

[31] Environmental Monitoring Porgramme for Zambezi River Authority, Project proposal submitted to SIDA, Revised April 1998.

[32] The project proposal is not explicit in respect to the target group. It is limited to a description of ZRA and its partner organisations.

of water resources management, possibly even more welcome by ZRA. However, choosing an area which so far has received limited attention by ZRA, may have made the contribution even more valuable.

The co-operation is in line with regional (SADC) policies. The project was elaborated before the existing SADC water strategy. Nonetheless, project objectives basically correspond to the objectives of the SADC strategy.

Relating the project to Sida's four action programme, it is clearly most relevant to the environment objective. Protection of water resources may also have indirect effects on poverty, on the lives of men and women and may be presented as a human rights issue. However, these linkages are not quite clear and the project has definitely no poverty, gender or rights focus.

Activities and output

The first sub-project (formulation of an environmental policy and strategy) has been completed. A Zimbabwean consultant, Scientific and Industrial Research and Development Centre (SIRDC) was contracted for preparation of the policy document. SIRDC made an inventory of the legislation in Zambia and Zimbabwe as well as an analysis of the different water uses on each side of the dam. Apart from consultations with ZRA, two major consultative workshops, one primarily awareness making and the second primarily consensus making, were held with representatives of the government, the private sector, NGOs, traditional chiefs and other stakeholder. The early drafts were clearly a consultancy product written *for* ZRA and the fact that ZRA did not participate actively in the policy and strategy formulation gives some reason for concern. However, in the final version it is stated that this is the policy and strategy *of* ZRA and in March 2000 it was adopted by the board of ZRA.

The Swedish support to this component was limited to financing of the regional consultant, advising on the consultancy procurement and participation in the consultative workshops.

Sub-project two (environmental monitoring) has produced a water quality-monitoring programme and procurement of equipment is under way. Procurement is done by ZRA itself with advice from SEI, which has implied some delays but the long-term advantages of local procurement (establishing supplier contacts, procurement experience etc.) are considered more important. The delays in procurement have also caused some delays in advisory services. New water quality guidelines are under preparation.

Sub-project three (water hyacinth) should have started July 2000 and draft ToR for this component have been exchanged and revised. According to managers at ZRA there has been some uncertainty as to who has actually had the initiative, causing additional delays.

The three sub-projects involve various opportunities for on-the-job training. Staff members of ZRA mention LFA and policy design and strategy formulation among things they have learned so far. However, they also express a concern that the Swedish consultants are visiting ZRA to short to transfer knowledge effectively.

Two staff members of ZRA were offered a one-month training session in Sweden in August 1999. Other training events have been planned but as ZRA have lacked the sufficient funds for daily allowances to the participants, training has been postponed.

An associate expert strengthening the GIS capacity of ZRA was recruited by SEI during the spring of 2000. Though making an important contribution to the ZRA his work seems to have limited linkages to the other sub-projects.

Both the project proposal and Sida's financing decisions include statements regarding gender, gender roles, the impact on men and women, that gender issues will "be tackled" etc. The only activity carried out to address gender issues was a half-day seminar on gender issues held at ZRA during the autumn of 2000. The policy and strategy document merely repeated statements that both men and women have to be considered and consulted. In the consultative workshops, there was minimal representation of women.[33] This gives reason to believe that the inclusion of gender issues in the project document was a top-down requirement from the donor. A possible lesson to be learned is that successful inclusion of gender issues must be based on a real commitment of the implementing agency and that project documents must be more explicit in respect to *how* gender issues should be considered.

[33] In the first 2 out of 42 and in the second 4 out of 50 participants, not including the representatives **of SEI, Sida and SIRDC.**

The half-day gender seminar is said to have been an eye-opener for many at ZRA. Had it been held earlier, it is possible that it would have had a greater impact on the project.

Effects

It is still too early to assess the effects of the project, particularly for the environmental monitoring (start-up stage) and water hyacinth (planning stage).

As noted above, the effect of the policy and strategy depends on how it will be used. The evaluation mission notes that the documents contain some quite broad policy statements and that the programme of action is very brief. Is there capacity – human and financial – to operationalise it? It is a strength of the document that there was a broad consultation in its preparation. However, ZRA still has to prove that it is its own policy and strategy.

Regardless how the document is used, the process of elaborating it may have been of value in itself. It included an inventory of key issues and differences between Zambian and Zimbabwean interests and gave an opportunity for a broad range of stakeholders to meet. This ought to have increased awareness regarding the environmental issues. The policy exercise is also likely to have given the environment a more prominent place at the agenda of the board of the ZRA.

It is too early to make any assessments of the other two sub-projects. However, only preparations, formulation of work plans, procurement of equipment and contacts with the Swedish liaison consultants have probably been a useful experience for ZRA.

Management

The co-operation with Zambezi River Authority is the only one where there has been an involvement of a Swedish company. SEI has been functioning as so-called "liaison consultant", assisting ZRA to elaborate work plans, budgets and reports, channelling funds and facilitating in the recruitment of consultants. SEI is formally contracted by ZRA and their invoices should be approved by ZRA.

The management of ZRA appreciates this arrangement, as compared to a traditional technical assistance provided by a donor. It gives a greater sense of ownership and places ZRA in the "drivers seat". A benefit is also that it gives access to Swedish consultancy services but does not exclude use of regional consultants such as SIRDC. ZRA aims at establishing long-term relations and has found that this is often easier with local than with international consultants.

However, the arrangement has not been all without complications. First, being the client, ZRA should instruct SEI what to do. At the same time SEI functions as advisor to ZRA. Second, while SEI has a facilitating role towards their client, it also has a certain controlling role towards the financing agency, Sida. Third, SEI is responsible for recruitment of consultants but not for the performance of these consultants. SEI may further recruit consultants either from their own organisation and externally, something that potentially may create conflicts of interests. This evaluation does not go deep enough to analyse these issues at depth but notes the lines of accountability under the current arrangement are somewhat vague, and that it has not always been clear who has had the initiative.[34] If anything can be learned from this, it is that roles and responsibilities must be clearly defined and transparent.

Correspondence indicates that the dialogue between ZRA and SEI has not always been smooth. A hypothesis is that this kind of arrangement requires a stronger local presence of the Swedish consultant, i.e. more time spent in Lusaka. During the latest annual review, the dialogue was said to have been open and constructive.

As a financing agency, Sida has played an active role since the very formulation of the project. Without the first LFA workshop and visit to Sweden the project may never have materialised. Apart from the standard involvement of Sida (annual review etc.) the regional co-ordinator has participated in two consultative workshops. The protocols from the annual reviews show that the Sida co-ordinator has been well informed even of relatively detailed project issues.

In general terms, and an in comparison with other countries, the Swedish co-operation is characterised by ZRA as "open". The fact that funds are administered locally gives ZRA a greater influence. ZRA describes Sida's

[34] This has also been observed and discussed in the annual reviews.

management as pro-active. However, Sida is not felt to be controlling or imposing.

The Embassy in Lusaka[35] has not been involved in the project, something that ZRA describes as "strange". At the same time, ZRA recognises the advantage of communicating with one person and greatly appreciates that this person is stationed in the region. Harare is relatively close to Lusaka, but ZRA management would even prefer the programme to be managed even from Maseru than from Stockholm. This, states ZRA, still increases the chances of meeting at seminars etc. and gives the person a better understanding of the developments of the region. Participation in the consultative workshops would hardly have been possible without the co-ordinator being stationed in the region.

The responsible officer at the Swedish Embassy in Zambia would welcome more information regarding the Initiative and in particular the co-operation with ZRA. He notes that capacity for a greater involvement is limited but also that capacity could be increased, should there be a need for this.

[35] Neither the new nor the former programme officer.

State of the Environment of Zambezi – ERCSA

Background

Sustainable management of natural resources in the Zambezi basin has been a major concern to international donors since the mid 1980s. Many activities have been initiated and are currently funded by international donors. Sida is involved in the ZACPLAN programme, Environmental Monitoring of Lake Kariba, and, in recent years, in a support to SARDC (Southern Africa Research and Documentation Centre) and its unit ERCSA (Environment Resources Centre for Southern Africa) to promote environmental information in the basin. The Sida support to the Zambezi basin is long-term, process-oriented, and multi-disciplinary.

The ERCSA project was initiated in 1997 when a concept note was developed and shared among several donors. Sida acknowledged the relevance of the proposal and gave some initial support in order for a project formulation meeting to take place in Lusaka at ZRA, together with SADC Water. The intention of the meeting was also to ensure that duplication of efforts would be avoided.

In 1997-12-01 Sida took the formal financing decision to support ERCSA to undertake the mentioned project with a budget of SEK 4,6 million for disbursement 1998-1999.

Objectives

The sector objective of the project is

"The quality of life of the people of the riparian states, especially women, is enhanced through better access, use and management of natural resources and regionally shared water resources of the Zambezi basin"

Project purpose is defined as:

"An effective and efficient production, analysis and dissemination process of accurate environmental information on the Zambezi basin is initiated, promoted and maintained"

Project objectives are defined as:

"Promote and strengthen community participation in the sustainable management of resources in the Zambezi basin, paying attention to gender, particularly women's role as natural resources managers"

"Highlight the ecological and economic importance of the Zambezi in southern Africa"

"Identify and communicate water pollution hot spots"

"Identify and communicate potential areas of conflict in terms of water resources availability and demand as well as its management"

"Promote the concept of managing shared water course systems in the Zambezi basin"

"Promote inter-institutional co-ordination, collaboration and co-operation in the state of the environment reporting in the Zambezi basin in particular and in the southern African region in particular"

"Build SARDC-IMERCSA as a regional centre with the technologies and resources capacity to effectively communicate information on water issues in the SADC-region"

Stakeholders and target groups

It is difficult to identify the direct or indirect stakeholder and target groups from reading ERCSA's original project proposal (dated November 1997). Although is not stated under any particular heading or section, it seems to be the people of the basin in a rather undefined way. However, in Sida's decision dated 1997-12-01 one can read that the project will share environmental information about the Zambezi basin to the public, planners, decision-makers, NGOs, authorities, the private sector, and the mass media within the eight basin states. But again, it is stated that the general public is the ultimate target group, a group that has to be "well-informed in order to contribute to sustainable use of natural resources in the basin".

The stakeholder and target groups are if not undefined, at least very wide. This may have a detrimental effect on the project's output. Without being precise on whom the receivers are, the activities may not support a particular group's needs.

Relevance

Information sharing and making the public more aware about environmental issues is practically always relevant. The question is maybe how relevant, and to whom the relevance is focused. This is further discussed below.

The project is very relevant according to the programme objectives. The first component of the programme's first objective is specifically about

sharing information and awareness, and this project satisfies those requirements very well.

The project is also relevant to problems facing the sector and southern Africa. At the regional level, SADC in 1996 defined as one of six objectives "increased information sharing to the public, and training and participation in environmental and development issues". And in the recent SADC Protocol on Shared Rivers it is also stated that the public has to be informed about water-related issues.

The project is by definition relevant to Sida's policy on environment, somewhat to the policy on democracy and rights (a better informed public is also better able to claim their rights), but even less on gender issues. Some of the statements on gender in Sida's decision from December 1997 seem to be there simply because they have to.

Activities and output

The project has been highly productive. It has:

- Identified major environmental issues in the Zambezi basin,
- Completed several workshops,
- Carried out a literature review,
- Organised a set of national collaboration centres,
- Established a web site,
- Produced the Zambezi Newsletter,
- Produced 12 information sheets and a large number of posters,
- Established a photographic and a bibliographic database; and,
- Produced the State of the Environment Zambezi Basin 2000, together with its shorter summary report. The later report is intended for use by politicians. These reports are both available in English and Portuguese.

The main report is written in a comprehensive and simplified language, nicely presented, and is targeting researchers, professionals and the informed public. The shorter version, aiming at politicians, summarise the main report, chapter by chapter. But there is no apparent focus of these summaries in order to satisfy the particular needs that politicians may have.

The thematic level represents the current state of knowledge of the environment in Zambezi basin. There is little new information included, i.e. taken from recent research reports or projects.

The professional work that has been carried out is impressive. The standard of is high, both in terms of content and presentation. The reports are interesting to read, up to date, and provide useful information. However, most likely, it is difficult to order a copy of the main report since it is not distributed through an established international publisher. It would greatly benefit the public in the region and outside if a well-known publisher were given that task.

It can be stated that this kind of information should be available to all major basins of the region, in the same format, and easily obtained from an international publisher.

Part of the reason to why ERCSA's work has maintained such a high standard is the frequent use of university specialists, the involvement of relevant organisations to write reports or to share their knowledge, and the existence of a Steering Committee with representatives of some major stakeholders in the region. These included SADC Water Sector, SADC ELMS, IUCN-ROSA, ZRA, and SARDC-IMERCSA.

Effects

At the moment it is far too early to assess any effect of this project on the state of the environment in the Zambezi basin. As the project is concerned with long-term changes of public awareness and environmental issues, it takes time before the effects show. But apparently, at least the posters have been popular, and the project "brings the region together", as stated by some staff members of ZRA in Zambia.

Even though this evaluation lacks data, it may be assumed that the process of producing the document, involving organisations in the different countries of the Zambezi region, has been valuable in itself.

The various results of the project – posters, Newsletter, main report etc. – have been distributed in the basin states to e.g. government agencies, projects, NGOs, and National Collaboration Centres (although the mix apparently varies from country to country). However, there is no knowledge to what extent the ultimate receivers are using this material. ZRA (itself a National Collaboration Centre) had received some feedback from primary receivers (all government agencies) but nothing from the final receivers. In addition, there is no information available on who these are, since the

material was distributed to National Collaboration Centres, and these in turn have distributed it within their own countries.

It would have been an advantage if the project at an early stage had developed a communication strategy, identifying the different user-groups, their needs and how the material could satisfy those needs. Collaboration with DRFN of Namibia – a partner project in the programme – could have helped in that regard since DRFN is very skilful in developing and publishing material aimed at specific groups of people and to address their particular needs (e.g. the decision makers guide on water resources in Namibia). However, no collaboration of that kind has occurred. In a proposed phase II it is suggested to study who the users of the material are, how the material is used, and what effect it has had. It seems like this should have been done at the beginning of phase I.

Management

ERCSA management was very positive of having the programme's regional co-ordinator located in the region, and in particular in Harare. Not only because communication was easy and it was easy to arrange with meetings etc., but also because a person in that location learns much about the region, pertinent issues, what's going on, and what to focus on.

Water Demand Management Study – IUCN-ROSA

Background

The Water Demand Management project comprises two phases. Phase 1 has been completed (Jan 98–June 99) with the delivery of a final narrative report in March 2000. A second phase has been approved and was initiated in July 2000. The second phase will last from July 2000 to June 2003. The budget for Phase 1 was SEK 3 100 000 – for Phase 2 it is SEK 6 400 000.

The Water Demand Management project was initiated over a period of time and with the involvement of several organisations. The initial concept originated in the Land and Agricultural Policy Unit (LAPC) in South Africa. The LAPC was an NGO which was established in the early 1990s as a policy think-tank, largely with the support of the ANC. The LAPC was unable to follow through with the research plan however, and it was passed on to the IUCN.

Meanwhile, Sida had identified WDM as a priority area and the regional co-ordinator had initiated a dialogue with IUCN regarding what could be done in this area.

The project arose from the needs expressed within the Southern African region and was prepared by the IUCN with the assistance of Sida in order to ensure that the project met Sida's requirements.

Objectives

The objective of the project is to encourage the systematic practise of water demand management in the Southern African region through improving the understanding and knowledge of water demand management amongst decision makers and practitioners in order to influence national and regional water policy and strategy.

The specific objective of the second phase is to promote the adoption of water demand management approaches in preference to traditional supply options at national and regional levels.

This overarching objective will be achieved through the following specific objectives:

1. *To increase the awareness of WDM by politicians, professionals and the public as demonstrated by the adoption of WDM policies at regional and national level.*
2. *To collect and disseminate sound information from research and other studies on WDM and assess benefits.*
3. *To improve the capacity of technical, educational and policy professionals to promote and implement WDM (including promotion of curricula reform)*
4. *To document the application and testing of WDM measures in pilot case study areas*
5. *To facilitate and support the implementation of guidelines in different sectors in selected countries of the region*

Stakeholders and target groups

At the broad level, the beneficiaries of the project are the peoples of Southern Africa – with improved efficiency in the use of water, the threat of water scarcity is partially addressed leading to greater food security and other benefits. The specific target groups of the project are policy and decision-makers at regional, national and municipal levels. Through public awareness components of the project, outreach is also made to influence opinion and behaviour in the general public regarding the need for water conservation.

Relevance

The relevance of the project will be assessed in terms of Sida's four action programs, Sida's Southern African IWRM Program, the SADC Water Sector Co-ordinating Unit, and national governments

The project has direct relevance to the program objectives of the improvement of integrated water resources management in Southern Africa and the two immediate objectives of the Initiative. Improving the efficiency with which scarce resources are used and achieving a shift in policy and application towards demand management and away from traditional supply oriented approaches would mark a significant improvement in integrated water resources management practice in Southern Africa.

With regards to how the project promotes the objectives of the four action programmes of Sida – reduced poverty, human rights and democracy, environment and gender – the effects are potentially significant but indirect. The research and promotion of water demand management has potential to indirectly effect poverty in ensuring

that greater quantities of water are available to the poor, which potentially has an effect on the daily lives of a great many people in the region. This will potentially improve the rights of the poor in the region and will have direct benefits to the environment.

The notion of water demand management is recognised within the activities and documents of the SADC Water Sector Co-ordinating Unit although not very strongly. It is identified as a component for study in 3 of the 31 Projects which form the Regional Strategic Action Plan (RSAP) of the SADC WSCU. These are:

- Project 12. Economic accounting of water use,
- Project 30. Pre-feasibility study of future developments and management options on the Lower Orange River,
- Project 31. Integrated Basin Management Plan for the Okavango River.

WDM has increasingly been adopted as policy in a growing number of the countries of the region but implementation is generally poor. The reasons for this are numerous and relate to:

- Lack of political will to make difficult decisions which would result in an increase in the cost of water and the abolishment of direct and indirect subsidies,
- Lack of technical capacity to properly analyse and implement WDM practices,
- Lack of understanding amongst engineers and other professionals regarding WDM and the persistence of traditional supply oriented approaches,
- Pervading public perception that there is sufficient water.

Activities and output

A *Reference Group* comprising six experts was established to bring together important stakeholders linked technically and politically to Water Demand Management issues so that they could:

- steer the project,
- advise on technical and political issues,
- ensure that there is no duplication of work being done by other groups or organisations in the region, and
- give technical support by reviewing the country studies.

Research Teams were identified and team leaders selected in South Africa, Namibia, Zimbabwe, Botswana, and Mozambique. The five research team leaders represented their teams at regional level and together formed the Technical Team.

Contracts were issued to research teams from Zimbabwe (Institute of Water and Sanitation Development), Mozambique (IUCN Mozambique), Botswana (University of Botswana), South Africa (Centre for Scientific and Industrial Research) and Namibia (Department of Water Affairs/Municipality of Windhoek).

An *Advisory Group* and *External Reviewers* were identified and appointed in each country. Two international reviewers were appointed – Dr. Anna Blomqvist of Sweden and Dr. Donald Tate of Canada.

Draft findings from the project were presented at various regional fora, for example the annual conference of the Agricultural Economics Association of South Africa in Namibia in October 1998.

The various country teams conducted both desk and fieldwork research in order to produce the country reports. Comments on the reports were made by the project manager, the reference group, national and international external reviewers and the national advisory groups. This resulted in the identification of various weaknesses in the Mozambican and South African reports and the need for considerable revision.

During the first half of 1999 the country case reports were finalised and submitted by the country teams. The reports were generally of good standards and adequately covered the major issues. The studies focused on different elements of water use and were presented at the Water Demand Management Conference. The country studies revealed that WDM measures are not systematically practised in Southern Africa despite the scarcity of freshwater resources. Where WDM measures are being applied, this is being done in an ad hoc manner and the measures not shared among stakeholders. Water is generally allocated to ensure both equity and economic efficiency but the allocation systems are usually dysfunctional.

The country reports and other information were presented and distributed widely in an effort to convey knowledge and to build capacity in water management. Specifically, information was distributed at the initial SADC meeting, to members of the country teams and their organisations, at the South Africa country meeting involving about 100 people at the March 1999 regional WDM conference and at the October 1999 World Meteorological Conference. However, in general there was a greater focus on advocacy and less on information dissemination in phase 1 because the reports were not finalised early in the project. There is a need for further information dissemination in phase 2.

A regional conference was hosted by IUCN ROSA and held in Johannesburg in March 1999 on the theme "Towards Developing Effective Water Demand Management Strategies for Southern Africa". 90 representatives from 10 Southern African countries attended the conference as well as several international speakers.

The conference participants formulated a declaration on Water Demand Management for Southern Africa. Also, the participants undertook to advocate for the inclusion of WDM as an essential component of developing planning. The major outcome of the conference was the consensus by all stakeholders to implement a second phase of the project.

A synthesis report has been produced as a key document that captures the essence of 5 country study reports and also charts out a new vision for WDM in the region. This report has been published in booklet form under the title "Water Demand Management – Towards Developing Effective Strategies for Southern Africa".

Effects

In assessing the effects of the project it must be noted that it is still too early to fully assess the project's impact. It appears as though the booklet produced by Phase 1 has been fairly widely disseminated but more attention could have been given to this, particularly in strategically targeting key policy and decision-makers.

A weakness of the project – both from the perspective of certain national experts who were engaged in the project as national consultants and in the opinion of the evaluation team – is the inadequate attention given to water demand management as it relates to agricultural water use. Although this is addressed to some extent in the synthesis report, given the proportion of water which is used by agriculture in the region, greater benefits will be derived from the successful implementation of water demand management in agriculture than in other sectors.

Phase 2 will also be important in creating broad public awareness of the value of water and the need to conserve it. Again, it is too early to assess the effects of the project on public opinion.

The work done during Phase 1 will be rendered more worthwhile if the outputs are strategically disseminated during Phase 2. It is critical that Ministers and senior public servants in the region begin to understand, embrace and implement the concept of water demand management. Without an understanding of the importance and potential benefits of WDM, politicians are unlikely to promote the difficult steps which need to be taken to implement WDM measures.

A trend was noted in discussions with senior project management in IUCN in South Africa towards greater intellectual rigour in the project. While this is to be commended in order to ensure that the concepts are well founded, it would be a problem if the project became limited to an academic intellectual exercise. The project will have little lasting impact if it does not address the real-life political realities of the day and the region.

Management

IUCN South Africa provides overall management of the project. It facilitates project team and reference group workshops and co-ordinated the country studies for South Africa, Botswana and Namibia during the first Phase.

The country studies were conducted using teams of national researches which enabled a number of professionals in each country to benefit directly through the project, both through the work done in each country and through the interaction with their counterparts in other countries engaged in the project.

IUCN ROSA provided financial management and administration. They co-ordinated the country studies for Mozambique and Zimbabwe. IUCN South Africa was also responsible for the synthesis and finalisation of reports and the publication, with the assistance of the IDRC, of the booklet entitled "Water Demand Management – Towards Developing Effective Strategies for Southern Africa".

Advocacy tasks have been jointly undertaken by IUCN ROSA and IUCN South Africa.

During the course of interviews and discussions with IUCN ROSA and IUCN South Africa, appreciation was expressed for how the project was managed. This was in terms of the importance of having direct local (regional) contact with the Program Officer based in Harare, and in terms of the supportive and non-directive approach which Sida has taken to the financial and administrative aspects of project management.

NetWise – DRFN

Background

The project's concept was formulated in 1996 and 1997 following several events and meetings in the region and in Sweden. While the Swedish Ambassador to Namibia, wanted to engage additional support to the Desert Research Foundation of Namibia (DRFN), Dr Mary Seely, Executive Director of DRFN, received positive signals at Sida in Stockholm of establishing "something regional dealing with Human Resources Development" (HRD). The resulting project proposal was shared among several international donor agencies plus SADC ELMS in Maseru, with an interest subsequently expressed by Sida's regional co-ordinator in Harare to support NetWise.

In 1997-10-14 Sida took the formal financing decision with a budget of SEK 3,3 million for disbursement 1997-2000.

NetWise as a project was initiated in February 1998, with the recruitment of three staff.

Objectives

The development goal of the project is defined as:

"Enhanced potential for interaction, co-ordination and dissemination related to research and research training activities and results for sustainable use of natural resources in southern Africa"

The project objectives are defined as follows:

"Enhanced dissemination concerning relevant research and research training potential in southern Africa"

"Enhanced communication and interactions among researchers working in southern Africa"

"Enhanced potential for relevant research training in southern Africa and for southern Africa"

"Enhanced dissemination of relevant information in support of decision making"

The planned outputs to reach these objectives are outlined in the project proposal.

Target groups

Target groups are researchers, students and decision-makers in the SADC-region concerned about broad environmental issues. Other target groups are relevant SADC units (SADC ELMS and SADC Water), and other concerned regional and national organisations.

Relevance

The project is relevant to the programme objectives. In regard to the first programme objective, on capacity building, it clearly supports the intentions of building long-term research capacity in the region. This is good. The current research capacity is far below what is needed, and many students are being sent to Europe, North America and Australia for graduate studies. This is not only expensive, but it also produces professionals trained in atypical (compared to southern Africa) physical environments, and formed by concepts and principles that are not applicable in the region. In regard to the second programme objective, on integrated watershed management, the relevance of the project is less clear.

One aspect that may reduce the project's programme relevance is a perceived project bias towards issues related to desertification. This is the result of both a long-term involvement of DRFN in such issues, and because DRFN has been appointed a focal point for training in desertification as part of SADC ELMS support to national initiatives to address the Convention to Combat Desertification. It is still an open issue if NetWise will be able to expand its thematic focus from desertification issues mainly and into broad-based natural resources management.

It is, as always, difficult or even impossible to argue against enhanced networking capacity, more dissemination of information and knowledge, stronger ties being established between people and institutions, etc. Such activities are always good. And there is clearly a need in the region for more research training, improved sharing of research results, and to make better use of information already collected. However, is more of the same needed? The question is asked because there already exist various Internet-based networks in southern Africa focusing on environmental issues. For example, the networking need of "water" is already provided by GWP and in a forthcoming Regional Water Partnership.

NetWise management acknowledges that the network so far has mainly connected those already connected, i.e. people already knowing

each other and communicating. Such a situation is (probably) not providing additional benefits to the region and is not relevant to the identified problems in the region. As a result of this, NetWise expressed its intention to shift focus from building horizontal linkages between already established partners, to vertical linkages reaching out to so-far unconnected and probably unknown groups of people in need of being part of a network. This shift, if implemented, would certainly make the project more relevant to the region's problems.

Some uncertainty concerning the project's relevance could be a result of an originally weak problem analysis. The beginning was shaky, a re-focus from horizontal to vertical integration is planned, and how to relate to other networks is still an open issue. But supported by DRFN and its commendable experience of focused and well-packed information campaigns, NetWise has the potential to become a useful network in the field of research, training and the dissemination of new knowledge and information.

In regard to Sida's overall objectives, NetWise has some limitations. It is without doubt very relevant to the environment objective. On the other hand, the project hardly at all addresses Sida's objectives on gender, human rights and democracy, and poverty alleviation. Although it can be argued that in the long-term perspective those objectives are also addressed, indirectly, such a perspective is not appropriate in this case. It is not the poor that are connected through NetWise; it is a small, well-established group of academics, students, university researchers, and similar people.

The project is relevant to SADC WSCU policies. PCN number 3 and 22 includes a need to address capacity building in the field of water resources management, and there is an often stated need in the region to learn more about IWRM and Integrated Watershed Management.

Activities and output

Key results of the project are:

- the establishment of a partnership of "primary partners". These partners provide those (often smaller) partners lacking networking facilities an access to participate in NetWise;
- several training workshops have been conducted. These focused on the conceptual framework, how to search for information on the web, and on general computer skills;
- a conceptual development of terms such as "network", "primary partners" and what the network consists of and how it will function;
- a common home page;
- contacts taken with SADC ELMS;
- a searchable directory of information, people etc. established, and
- a project office

The impact of the project and scale of networking is still very limited. However, that said, concrete results from a networking project should not be expected after only a few years time. Networking is a long-term process, where positive results emerge after several years of focused work. Hence, it is too early to state if NetWise provides additional and useful benefits to the region or not.

An indication of the projects' modest impact in the region is the lack of co-operation between this project and other and similar projects. No co-operation has been established with e.g. ERCSA despite its related mandate. NetWise seems to be working on its own with little exchange with other networks and projects dealing with dissemination of information. The management is not aware of more than one or two other programme projects. Finally, some senior "water" people in Namibia did not know about the existence of NetWise.

The lack of co-operation between ERCSA and NetWise is noteworthy; two projects with similar (albeit not the same) objectives, participating in the same regional initiative, and receiving financial support from the same source, are still not communicating with each other despite potentially gaining from that. It is an indication of the separateness of the programme's various projects.

Effects

As discussed above, the effects of this project are so far very modest. However, with time given, this may change. It is not likely that there are any negative side effects.

Management

NetWise belongs to DRFN and is managed as a project within DRFN. As such, the Executive Director of DRFN, Dr Mary Seely, is the most senior manager responsible for the project. The current Project Manager, Ms Penelope Orford,

was appointed in 1999, replacing the former Project Manager. It has been stated that the project's management improved with that exchange.

NetWise was clearly positive about having Sida's programme co-ordinator located in Harare. They may not meet more frequently than if such a person is located in Stockholm, but he or she is more aware of issues and development in the region than if located in Sweden.

The Swedish Embassy in Windhoek is not involved in NetWise. It is rather unaware of the programme, and the projects that belong to the programme. At the same time, the embassy bilaterally funds several other water-related projects, some having a rather close familiarity with programme projects. For example, the embassy supports the introduction of demand management practices in small towns in Namibia, practices that are in great need throughout the region.

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